

NEST International

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Have you checked out the new designs and functions on our website?



COA/COC Download



Documents Download



Missed out specific details? Scann the QR codes above to experience NEST online services.



Cross-Reference Tool



PCR Product Compatibility Reference Tool



Closed System Customization

You can also visit https://www.cell-nest.com/

Contents

I Cytology

Cytology	10
Cell Culture Plate	11
Cell Culture Insert	13
Glass Bottom Cell Culture Dish / Plate	15
Cover Glass	16
Cell Culture Dish	17
Cell Culture Chamber Slides	18
Cell Culture Flask	19
Cell Culture Flask Closed System Solution	21
Cell Scraper / Cell Strainer / 50mL Min	
Bioreactor	22
Ultra-low Attachment Surface	23

II TriSteri™

TriSteri™		25
-----------	--	----

TriSteri [™] Ultra-low Particulat	e Collection ······ 26
--	------------------------

III Bioprocessing Solutions

Large Scale Cultivation ----- 29

Erlenmeyer Flask	30
Erlenmeyer Flask, High Efficiency	34
Erlenmeyer Flask Closed System Solution	36
Erlenmeyer Flasks Accessories	40
BioFactory	41
Biofactory Closed System Solution	45
BioFactory Accessories	48
Square Bottle & Closed System Solution	50
Square Storage Bottle Closed System Solution	52
Carboy	55
General accessories for biop)-
harmaceutical processes ··· \$	56
Sterile connector	58
Quick Connector Collection	60

TC Flange Reducer Collection	62
Luer Connector Collection	64
Tube Connector Collection	65
Tube Clamp & Quad Coil Clamp	66
Generic Accessories	67

IV Liquid Handling

Biobank System 68

Cryogenic Tubes	69
SBS Format Cryogenic Tubes	73
Cap Inserts / Cryogenic Box	75
Defrosting Device	76
Vertical Freezer Racks	77
Sample Freezing Recommendations	78

Liquid Transfer 79

Automation Tips	80
Pipette Tips	83
Stackable Tip Refill	85
Rainin LTS Pipette Tips	87
Low-Retention Pipette Tips	88
Vacuum Filtration System	89
Adaptor for Vaccum Filtration System	91
Syringe Filter	92
Microcentrifuge Tube / Micro Tube Box	93
15 / 50 mL Centrifuge Tube	94
Peripheral Blood Lymphocyte Separation Tube	95
250 / 500 mL Centrifuge Tube ·····	97
Centrifuge Tube Closed System Solution	98
Pasteur Pipette	101
Serological Pipette	102
Reagent Reservoir / Reservoir	103
Round Storage Bottle	104
Sample Vial	105
Cluster tube	106

V Biological Testing

Molecular Biology 1	07
ELISA Plate	108
Deep Well Plate ·····	109
8-Strip PCR Tube & Tube & Cap	112
PCR 96 Well Plate	114
PCR Adapter Table	117

Bacteria ····· 121

Petri Dish	122
L-Spreader & Inno-culating Needle / Loop	123

VI Medical Consumables

Disposable Swab	125
Viral Transport Medium / Inactivation	
Transport Medium	126
Disposable Intranasal Atomization Device	127
Dry Saliva Collection Kits	129
Saliva / gargle Collection Kit	131

IX Pharmaceutical Packaging

Pen Injector	133
AccureVial [™] COP Bottle ·····	136
Disposable Pre-filled Glass Intranasal	
Atomization Device	137
COP Pre-filled Syringe	139

X Other

Lab Safety		143
------------	--	-----

Nitrile Examination Glove	144
Individually Packaged Nitrile Examination	
Gloves	146
Latex Examination Glove	147
Nonwoven Mask ·····	149
Mushroom Cap & Non-woven Shoe Cover ····	150

Lab Instruments 151

Centrifuge 152
Mini Dry Bath 152
7° Digital Nutating Mixer 153
Mini Vortex Mixer 153
Variable Speed Tube Revolver with Digital
Display 154
CO ₂ Orbital Shaker
Standard Mini Roller 156
Automatic Decapper Instruction manual 157
Label Printer 158
Sample Management Software159
Single-Rack Reader 160
Multi-Rack Reader 161
Handheld Decapper for Cryogenic Vials 162
Cell Thawing Device163
Pipette164

XI Cell Culture Product

GelNest™ Matrix	167
Organoid culture kit	171
Serum free supplement	172
Growth Factor	173

A leading life science plastic consumables manufacturer.

Established in 2009, Wuxi NEST Biotechnology Co., Ltd. (NEST) is renowned for its brand "NEST" and is dedicated to the research, development, and manufacturing of high-quality life sciences products. As our International business expands, our products have been successfully exported to numerous countries such as North America, Europe, Japan, Korea, India, and more.

2011, NEST passed the standard of the quality management system of ISO 9001.

2014, NEST passed the standard of the quality management system of ISO 11137.

2016, NEST passed the standard of the quality management system of ISO 13485.

2020, NEST obtained the medical device production license.

In addition to these certifications, we also gained CE and FDA standards.

NEST Scientific Inc. (USA)

With the development of the business, we have established deep cooperation and built strong relationships with overseas customers in order to send the products to customers in North America more quickly. Nest Scientific Inc., a branch of Wuxi NEST Biotechnology Co., Ltd., was established in New Jersey, the USA in 2013. Composed by a professional team with rich experience in training and sales skills, NEST Scientific USA can provide professional training as well as great communication with customers in-depth in order to understand customers' demands better and quicker. In 2022, NEST is opening a new 48,000ft² warehouse located in Phoenix, AZ. This new warehouse allows for more space to receive in and stock items as well as lower shipping costs for distributors on the west coast.

To further expand our footprints globally, and to respond the request for more timely service from NEST's accumulating industrial customers including CDMOs, vaccine plants and third-party testing companies, etc., we are setting up subsidiaries in Netherland, UAE and Japan to duplicate our US successful experience.



Overseas Branches

NEST brand is continuously expanding its overseas market. With a steady increase in overseas business volume, NEST's presence has extended to the Americas, Europe, the Middle East, and East Asia. In 2013, the US branch was officially established, and a new warehouse was completed in the US in 2022. Additionally, NEST has subsidiaries in Rotterdam, the Netherlands; Sharjah, the United Arab Emirates; and Tokyo, Japan. These subsidiaries have successfully provided integrated storage, transportation, and sales services, ensuring NEST brand's supply in overseas markets. Currently, NEST products are sold in many countries worldwide, including North America, Europe, Japan, South Korea, and India.

Customized Consumables

NEST offers a wide range of consumables, including plates, bottles, dishes, tubes, and other cell culture consumables. You can freely choose our standardized products in specific packaging or request customized solutions such as closed systems. Should you have any requirements, please feel free to contact us.



Wuxi NEST Biotechnology Co., Ltd.



Development History



2009

The brand "NEST" was established and the supplies for cell cultivation were under development.



We offered: Cell Culture Plates: 6/24/ 96 well Cell Culture Flask: T25/T75 Cell Culture Dish: 35mm/60mm/90mm

2010

Exploring Overseas Markets Attended impactful events including Analytica and Pittcon, ready to release Liquid Transfer collection.



New Releases:

- Centrifuge Tube collection: 0.6mL/1.5mL Micro-centrifuge Tube, 15mL/50mL Centrifuge Tube
- PCR collection: Single PCR Tube/8-tube PCR Strip/96-well PCR Plate

2011

Successfully obtained ISO 9001 certification.

2012

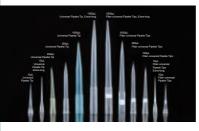
Preparations were made for the new site.

2013

The new site was put into operation. NEST USA was officially established. The Molecular Biology collection was introduced. Additionally, the development of BioFactory was initiated.

2014

The newly constructed workshop, covering an area of 27,000 m², was officially inaugurated. Introduced the Reusable Pen Injector Incorporated RhodotronTT200 E-beam irradiation equipment from Belgium Sterilization Center obtained ISO11137 certification.



2010-2014

Carefully preparing for Cell Culture and Liquid Handling collection.

- Cell Culture Plate: 48/384-well Plate,
- 96-well U-shape/ V-shape Bottom Plate • Pipette Tips with comprehensive
- specifications ranging from 10 to 1000uL
- Cryogenic vials, both internal and external threaded, with comprehensive specifications ranging from 0.5-4.8mL

Eagerly pioneering

2015

The Irradiation Center was officially operational.

2016

Successfully obtained ISO 13485 certification. BioFactory collection was verified and released.

2017

Enhanced the product portfolio for industrial clients.



2015-2017 Continued to elevate the product portfolios We released collections of BioFactory, Erlenmeyer Flask, and Reusable Pen Injector.

2018

Pioneered the medical device field by developing

China's first nasal spray delivery device for vaccines, and initiated the application for Class Il Medical device certification.



Obtained the Medical Device Production License Surpassed a sales volume of one billion



suspension culture and accelerated the development of pharmaceutical containers.

Erlenmeyer Flask: PETG Erlenmeyer Flask and High Efficiency Wide-Mouth Erlenmeyer Flask.

Vacuum Filtration System with PES and PVDF membrane.

Automation Pipette Tips

Pharmaceutical containers: the program for the Pre-filled Intranasal Atomization Device.

Engaged in the front line of epidemic prevention and continuously elevated our collections of laboratory consumables



We developed: Sterile and disposable swabs, Disposable samplers with VTM, ITM, UTM and a comprehensive collection of Deep Well Plates.

Proactive innovation

Crafting the Plan for a Global NEST Added a 3300m² Warehouse and R&D Center in New Jersey, USA



Bio-processing collection was officially launched.

New Arrivals: PETG Square Storage Bottle and PC Erlenmeyer Flask. Closed System Solutions: The Transfer Cap collection was released, along with Generic accessories, including Quick Connector and Aseptic Connector.



Crafting the Plan for a Global NEST Added a 4500m2 Warehouse in Arizona, USA Established subsidiaries in the Netherlands. UAE, and Japan.

2023

Elevated the entire portfolio Committed to building a comprehensive solution system of tools and services



Including:

Biobank collection: Cryogenic Tubes, **Biobank Sample Management** Software, Vertical Freezer Rack, and related equipment.

Pharmaceutical Containers: Pre-filled Syringe, Pre-filled Intranasal Atomization Device, and Disposable Pen Injector.

Reagent: GelNESTTM Matrix, Fetal Bovine Serum (FBS), and regular medium for Cell Culture, etc.

Embracing A Brighter Future 2024

To established our position as a renowned self-owned brand

and outline the product development scheme We anticipate:

- Cell Culture Precoated Products Collection.
 Super-hydrophilic Cell Culture Products Collection. NEST Pro Collection.
- Generic Accessories.Pharmaceutical Containers.
- Pharmaceutical Containers for the Medical Aesthetics Industry.

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Organoid Culture Solution

NEST Biotechnology is dedicated to offering customers high-quality products and reliable technical services. Recognizing that each customer has distinct needs, we provide a variety of options to meet diverse requirements.

Core Services



Organoid Culture and Validation: With our extensive expertise and cutting-edge technology, we offer professional and efficient organoid culture and verification services, ensuring the precision and reliability of the experimental results for our clients.

Core Products



We offer a wide range of reagent products, including membrane matrix, culture medium, growth factors, ensuring customers

the best support and reliability during the research procedures.

- Membrane matrix
- Recombinant growth factors
- Maturation and maintenance mediums
- Culture supplements
-



Differentiation Kits

We offer a wide selection of differentiation kits designed to cater to specific needs across various fields, providing customers with convenient and efficient solutions for their research needs.

- Cerebral Organoid Kit
 Liver Organoid Kit
- Intestinal Organoid Kit
- intestina organo
- ••••



Our organoid collection offer cutting-edge solutions that elevate customers' research experiences and expertise.

- · Cerebral organoids derived from iPSCs
- Bile duct cancer organoids
- Lung cancer organoids
- Breast cancer organoids
- Recombinant growth factors
- Culture supplements

••••



Surface pretreatment consumables: By pretreating the surface of consumables, make them more suitable for 3D culture. • Ultra-low attachment Cell Culture Plate • Ultra-low attachment Cell Culture Flask • Ultra-low attachment Cell Culture Dish

....

Your best choice for medical laboratory consumables.

NEST is dedicated to researching and developing innovative plastic consumables suitable for life sciences research and medical establishments. There are more than 600 plastic consumables that can be widely used for cell culture, molecular biology, immunoassays, liquid handling, and storage such as cell culture plates, Erlenmeyer flasks, BioFactory, pipette tips, etc. More than 100 medical plastic consumables and reagents can be used in molecular diagnosis and vaccination, such as disposable samplers, transport media, swabs, nucleic acid extraction kits, and disposable intranasal atomization devices. In order to provide a more comprehensive and convenient service, we work closely with our affiliated company Wuxi Tech-star Technology Co., Ltd. We also provide lab instruments such as centrifuges, metal baths, BioBank, etc.



Quality Guaranteed Experienced team & a complete plastic consumables production line.

A complete plastic consumables production line is in NEST's possession, where all the procedures from mold-making, injection molding to sterilization, are done efficiently in our own factory. Precision molds, high-quality raw material, and advanced equipment are in position to manufacture products and perform quality testing under strict and comprehensive rules, ensuring our products meet the highest quality and performance standards expected by hospitals, research institutions, and industrial, clinical laboratories, to which we supply products.

• Excellent mold-making ability.

With over 30 years' experience, our senior R&D team utilize high-quality mold-making equipment imported from Germany in combination of professional mold analysis software to accomplish precision molds development tasks.

Injection molding in Class 10,000 and Class 100,000 cleanroom in strict quality control.

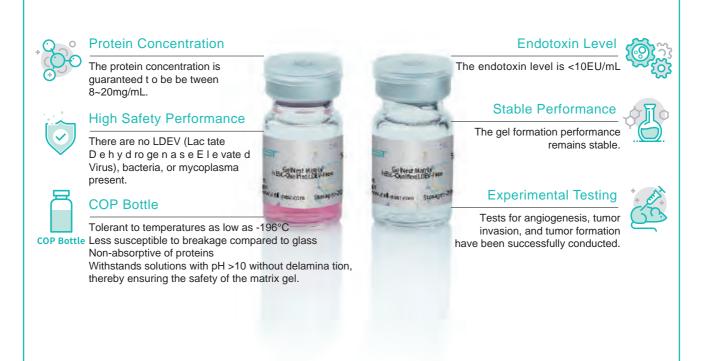
Owing to the 2700 m² Class 10,000 cleanroom and 6800 m² Class 100,000 cleanroom, all-electric high-speed injection molding machines imported from Japan and the raw material which is in line with USP Class VI requirements, production and quality control are performed strictly in accordance with the corresponding SOP.

Sterilization by electronic beam irradiation.

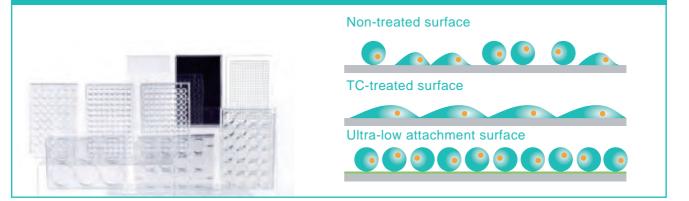
The Rhodotron TT200 electron accelerator, whose sterilization process has been certified by the ISO 11137 quality system, was imported from the IBA company, a world leader in the E-Beam sterilization industry in Belgium. Compared with sterilization by cobalt 60 or ethylene oxide sterilization, sterilization by electronic beam irradiation is more efficient and safer which requires less time and will not produce any chemical residue.

2024 New Arrival

GelNest™ Matrix Quality Assurance



Ultra-Low Attachment Surface





General Accessories for Biopharmaceutical Processes





无锡耐恶生命料技服份有限公司: 你单位被认定为2022年度江苏省专精特新中 小企业,有效期为2022年至2025年。 特发此证。

Certification for Specialized and Sophisticated Enterprises with Innovative Products

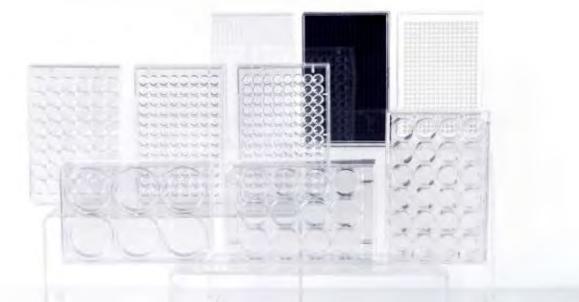


Medical Device Registration Certificate of PRC

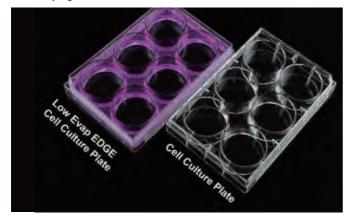




Cell Culture Plate



- Sterilized by E-beam, SAL=10⁻⁶.
- High clarity, 100% virgin polystyrene.
- The configuration complies with the ANSI-SBS format.
- The plate lid is designed with cut corners and a condensation ring, reducing the risk of contamination.
- Non-Pyrogenic, DNase/Rnase free.



Low Evap EDGE Cell Culture Plate

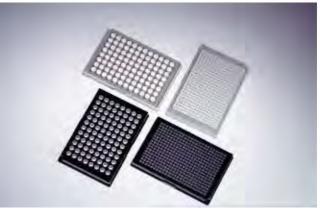
Grooves are designed at the edge of the culture plate to help cells maintain their optimal state during cell culture. They provide a stable temperature and balanced humidity environment for the plate, which reduces or eliminates edge effects and ensures uniformity in cell growth.



Individually Packaged



- The bottom is flat and clear, with each hole labeled for easy differentiation.
- The plate features a non-slip ridge on the side for easy gripping, while the protruding points on the bottom help to prevent noise during transfer.
- *The TC-treated ones are intended for adherent cell culture, while the non-treated ones are suitable for suspension cell culture.



Black/White Clear Bottom Cell Culture Plate

• The bottom of the wells is made of high-transparency PS material, ensuring uniform thickness and excellent light transmission performance. This material avoids optical distortion even under high magnification microscopy. On the other hand, the well walls are made of light-shielding PS material to prevent cross-contamination.

• Plates with a black frame are commonly used for fluorescence detection, while plates with a white frame are typically used for luminescence detection. Occasionally, white-framed plates are also used to enhance fluorescence signal intensity.

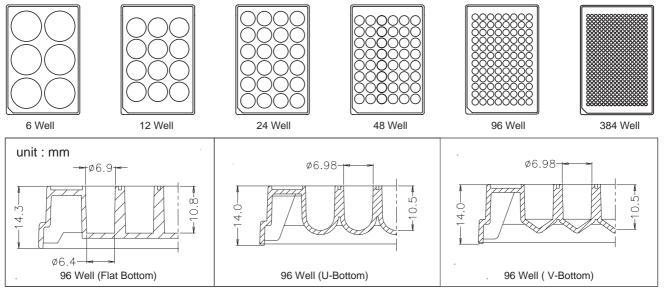
Product	Recommendation Experiment- Bottom Reading	Notes
White, transparent bottom	Colorimetric Assay/ Absorbance Chemiluminescence Method	Cellular visualization operations permitted in cell detection
Black, transparent bottom	Fluorescence Intensity Method (FI) Fluorescence Resonance Energy Transfer (FRET)	and analysis and confocal microscopy experiments.

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Cell Culture Plate

	Cell Growth	Recommended	Bottom			/Pack		Cat. No.	
Well Number	Area (cm²)	Medium Volume(mL)	Туре	Colour	lour Packaging /		/Case	TC Treated	Non-Treated
0.14/ 11					Individually Packaged	1	50	703001	703011
6 Well	9.5	1.9-2.9			Plastic Bag Package	10	50	703002	703012
6 Well Low Evap EDGE Plate					Individually Packaged	1	50	714011	714001
	2.0	0.70.4.44	Ц	Clear	Individually Packaged	1	50	712001	712011
12 Well	3.6	0.76-1.14			Plastic Bag Package	10	50	712002	712012
0414/-11	4.0	0.00.0.57	1		Individually Packaged	1	50	702001	702011
24 Well	1.9	0.38-0.57			Plastic Bag Package	10	50	702002	702012
40.14/211	0.99	0.10.0.285			Individually Packaged	1	50	748001	748011
48 Well	0.88	0.19-0.285			Plastic Bag Package	10	50	748002	748012
					Individually Packaged	1	100	701001	701011
	0.32		Ц		Plastic Bag Package	10	100	701002	701012
96 Well	0.66		U	Clear	Individually Packaged	1	100	701101	701111
	0.41	0.1-0.2	V		Individually Packaged	1	100	701201	701211
	0.00	0.1-0.2	Ц	White	Individually Packaged	1	100	701301	701311
	0.32			Black	Individually Packaged	/	/	/	/
96 Well	0.32	0.1-0.2		White, transparent bottom	Individually Packaged	1	30	701701	/
Clear PS Bottom	0.32	0.1-0.2		Black, transparent bottom	Individually Packaged	1	30	701401	/
96 Well Low Evap EDGE Plate	0.32	0.1-0.2	Ш	Clear	Individually Packaged	1	100	713011	713001
				Clear	Individually Packaged	1	100	761001	761011
				Clear	Plastic Bag Package	10	100	761002	761012
				Black	Individually Packaged	1	100	761301	761311
				White	Individually Packaged	1	100	761601	761611
384 Well	0.11	0.025-0.05	Ц	White, transparent bottom	Individually Packaged	1	30	/	/
				Black, transparent bottom	Individually Packaged	1	30	/	/

Technical Drawing of Cell Culture Plates



Cytology

0

Cell Culture Insert

Cell and tissue culture technologies have an increasing importance in the fields of basic and applied life science. New culture vessels and new surfaces for cell adsorption are continuously emerging, in order to simulate the internal environment as much as possible for culture of some special cell lines. Logically, using permeable supports with a microporous membrane becomes the basic method for culturing these cells. Permeable supports may effectively improve the culture of polar cells, because these supports allow cells to secrete on and absorb molecules from their basal and apical surfaces to metabolize in a more natural way, as well as to stimulate the in vivo environment to the maximum extent for culturing of some special cell lines.

Features

- Sterilized by E-beam, SAL=10⁻⁶.
- Vacuum Plasma tissue culture treatment.
- Non-Pyrogenic, DNase/Rnase free.
- A rich selection of matching plates: 6-well, 12-well, 24-well.
- Passed the USP VI toxicity test.

- Cell culture plates are made of high clarity, 100% virgin polystyrene.
- Clear lot number for batch traceability.
- · Innovative edge design for convenient sample loading.
- · Low protein binding to ensure accurate results.
- · Compatible with most solvents used for fixing and staining.



Application Directions and Types

Applications	Cells	Pore size of Membrane
ADME (transport and permeation of compounds through the enterocyte barrier)	Caco-2, MDCK	0.4 µm
Co-culture and cell differentiation, cell imaging	Primary cells, tumor, stem cells	0.4 µm, 1.0 µm
Cell migration and invasion (angiogenesis)	Endotheliocytes	
Cyto-chemotaxis (migration) or endothelial migration	Leukocytes	3.0 µm
Axonal hyperplasia	Neurons	
Tumor cell migration and invasion	Tumor-derived cells	
Hematostaxis or migration through endotheliocytes	Leukocytes	8.0 µm
Co-culture	Tumor stem cells	
Transport and secretion of macromolecules or viruses		1.0 µm, 3.0 µm

Product Specification

	Specifications	Insert (Pcs/Plate)		Diameter mm)	Volume of Each Well (mL)	Inner Volume of Insert (mL)	Membrane Growth Area of Insert (cm ²)
	6 Well Plate	6	:	24	2.6	1.5	4.67
	12 Well Plate	12		12	1.5	0.5	1.12
اللو المتولا بالوقين	24 Well Plate	12	6	6.5	0.6	0.1	0.33
	100mm Dish	1	-	75	13	9	44
C. S. S. S. S. S.	Pore Size of Men	nbrane (µm)	0.4	1.0	3.0	5.0	8.0
Cell Culture Insert	Membrane Density (Well/cm ²)		1x10 ⁸	2x10 ⁷	2x10	⁶ 4x10 ⁵	1x10⁵

Order Information (Insert+Plate Configuration)Note: The inserts are TC-treated. Please refer to the table below to check if the plates are also TC-treated.

Pore Size	Pore Size Description			PC I	PC Membrane			PET Membrane		
(µm)	Description	/Pack	/Case	Transparence	TC Treated	Non-Treated	Transparence	TC Treated	Non-Treated	
	6 Cell Culture Inserts + 6 Well Plate	6	24	Opaque	723101	723111	Opaque	723121	723131	
0.4	12 Cell Culture Inserts + 12 Well Plate	12	48	Opaque	724101	724111	Opaque	724121	724131	
	12 Cell Culture Inserts + 24 Well Plate	12	48	Opaque	725101	725111	Opaque	725121	725131	
	6 Cell Culture Inserts + 6 Well Plate	6	24	Opaque	/	/	Opaque	723421	723431	
1	12 Cell Culture Inserts + 12 Well Plate	12	48	Opaque	/	/	Opaque	724421	724431	
	12 Cell Culture Inserts + 24 Well Plate	12	48	Opaque	/	/	Opaque	725421	725431	
	6 Cell Culture Inserts + 6 Well Plate	6	24	Translucent	723001	723011	Translucent	723021	723031	
3	12 Cell Culture Inserts + 12 Well Plate	12	48	Translucent	724001	724011	Translucent	724021	724031	
5	12 Cell Culture Inserts + 24 Well Plate	12	48	Translucent	725001	725011	Translucent	725021	725031	
	100 mm Cell Culture Insert-Dish	1	10	Translucent	726001	/	Translucent	/	/	
5	12 Cell Culture Inserts + 12 Well Plate	12	48	Translucent	724201	724211	Translucent	/	/	
5	12 Cell Culture Inserts + 24 Well Plate	12	48	Translucent	725201	725211	Translucent	/	/	
	6 Cell Culture Inserts + 6 Well Plate	6	24	Translucent	723301	723311	Transparent	723321	723331	
8	12 Cell Culture Inserts + 12 Well Plate	12	48	Translucent	724301	724311	Transparent	724321	724331	
	12 Cell Culture Inserts + 24 Well Plate	12	48	Translucent	725301	725311	Transparent	725321	725331	

Cell Culture Inserts (Individual Blister Package)

Pore Size	ore Size (µm) Specification Description		Packaging	PC Memb	orane	PET Membrane	
(µm)	Specification	Description	Fackaying	Transparence	TC Treated	Transparence	TC Treated
	6 well	Cell Culture Inserts	1 pc/blister, 8 pcs/plate, 48 pcs/case	/	/	Opaque	723122
0.4	12 well	Cell Culture Inserts	1 pc/blister, 8 pcs/plate, 48 pcs/case	/	/	Opaque	724122
24 well	Cell Culture Inserts	1 pc/blister, 8 pcs/plate, 48 pcs/case	/	/	Opaque	725122	
8	24 well	Cell Culture Inserts	1 pc/blister, 8 pcs/plate, 48 pcs/case	Translucent	725302	/	/

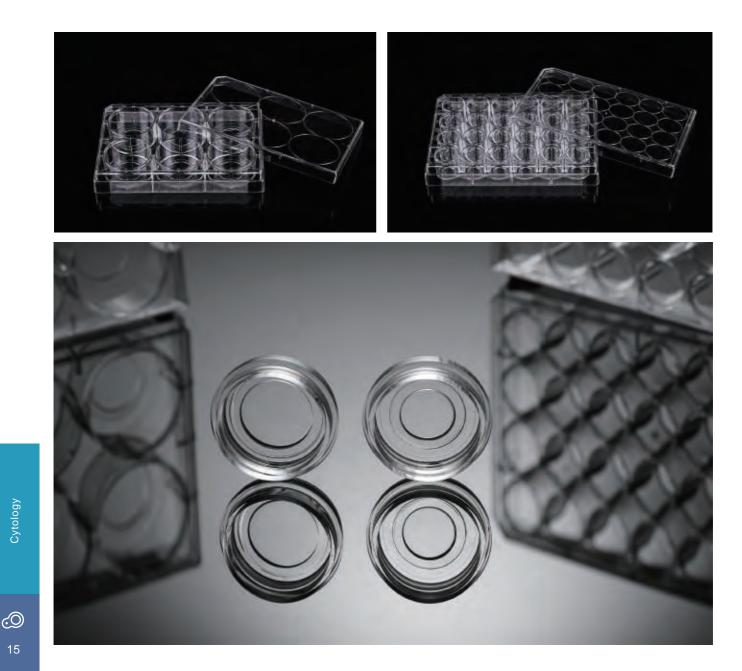
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Glass Bottom Cell Culture Dish & Plate

NEST glass bottom series are applied in confocal microscope, high resolution microscope, differential interference contrast microscope, polarized light microscope and phase contrast microscope for cell observation.

Features

- Can be used for live cell observation.
- Special bottom design for easy grip.
- · Round cover glass inserts for good appearance.
- · Medical adhesive glue to guarantee non-cytotoxicity.
- Sterilized by E-beam, SAL=10⁻⁶.
- Made of high clarity, 100% virgin polystyrene and high clarity glass as bottoms.
- High quality cover glass of standard thickness.

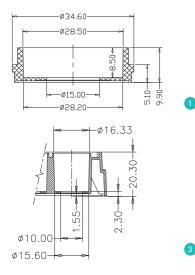


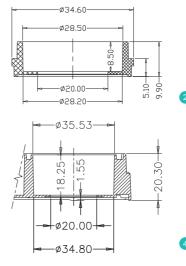
Glass Bottom Culture Dish

Type (mm)	Glass Diameter (mm)	Cultivation Area (cm²)	тс	/Pack	/Case	Cat.No.	
28.2	15	6.2	Yes	10	200	801002	\odot
28.2	20	6.2	Yes	10	200	801001	\bigcirc
28.2	20	6.2	Yes	1	20	801021 👸 🖳	
28.2	15	6.2	Yes	1	20	801022 🏻 🍇 💆	

Glass Bottom Culture Plate

Spec (Well)	Glass Diameter (mm)	Cultivation Area (cm²)	тс	/Pack	/Case	Cat.No.	
6	34.8	9.5	Yes	1	10	801004	
24	15.6	1.9	Yes	1	10	801006	





Unit: mm

Φ15 Glass Bottom Dish
 Φ20 Glass Bottom Dish

3 24 Well Glass Bottom Plate

4 6 Well Glass Bottom Plate

Cover Glass

Features

- High quality glass, non-cytotoxic.
- Sterile, non-treated.
- Manufactured in class 100,000 clean room.
- Resistant to organic solvent.
- Autoclavable.
- Suitable for used in confocal experiment.



Glass Diameter (mm)	Thickness (mm)	/Pack	Application	Cat.No.
14	0.17	100	24 Well Cell Culture Plate	801010
15	0.17	100	24 Well Cell Culture Plate	801007
18	0.17	100	12 Well Cell Culture Plate	801011
20	0.17	100	12 Well Cell Culture Plate	801008
25	0.17	100	6 Well Cell Culture Plate	801009

Tips:

terilization: If the glass needs to be sterilized after a long period of non-use, it is recommended to wrap it in tin foil and sterilization it at 180°C in a metal container for two hours.

Coating: Coating can be done with polylysine, collagen, extracellular matrix, and some commercially available reagents containing layer adhesive protein, fibronectin, and proteoglycan, which can improve cell adhesion.

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Cell Culture Dish

NEST cell culture dishes are ideal for all types of culturing where microscopic examination is required. Numeric indicators on the bottom of each plate allow users to identify the location of cells.

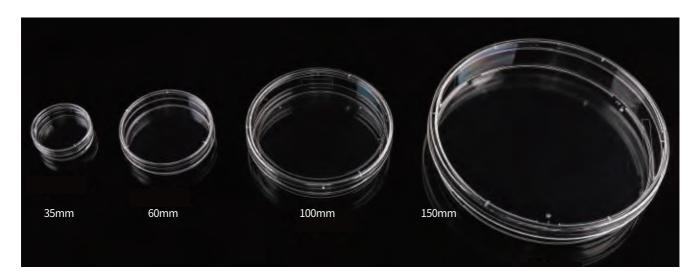
Features

- High clarity, 100% virgin polystyrene.
- Flat transparent surface for distortion-free observation.
- Vacuum plasma TC treatment, excellent cell adsorption.
- Stackable for easy storage and handling.
- Sterilized by E-beam, SAL=10⁻⁶.
- Non-Pyrogenic, DNase/Rnase free.





Feature









Cell Culture Dish

		leight (mm) Cell Growth Area Rcommended Types		Turses	Pac	king		
Specification (mm)	Height (mm)	(cm ²)	(mL)	ime Types -		/Case	Cat.No.	
0.5	10	0.5	4007	Regular	20	25	706001	
35	12	8.5	1.8-2.7	Easy Grip	20	25	706201	
<u> </u>	45		4.2-6.3	Regular	20	25	705001	
60	15	22.9		Easy Grip	20	25	705201	
						5	60	704004
		57.6		Regular 1-16.5	10	30	704002	
100	20		11-16.5		20	15	704001	
		50.2			E	10	30	704202
		59.3	Easy Grip		Easy Grip	20	15	704201
150	25	150.1	30.4-45.6	Regular	5	20	715001	

Actual diameter is smaller than the indicated

35 mm dish bottom inner diameter: 35.0 mm

60 mm dish bottom inner diameter: 54.0 mm

100 mm dish bottom inner diameter: 85.6 mm

150 mm dish bottom inner diameter: 138.2 mm

100 mm easy grip dish bottom inner diameter: 86.9 mm

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Cell Culture Flask

NEST's Cell Culture Flasks whose cell growth areas ranging from 25cm² to 225cm² are available. These flasks are available as issue culture treated or non-treated as well as with a vent cap or plug seal cap to meet your requirements.

Features

- Made of high clarity, 100% virgin polystyrene.
- Sterilized by E-beam, SAL=10⁻⁶.
- Non-Pyrogenic, DNase/Rnase free.
- Frosted writing and clear graduations.
- Notched bottom for slip free slip stacking.
- Clear lot number for batch traceability.Packaged in sterile, zip-sealable bags.
- Made of high clarity, 100% virgin polystyrene.
 Sterilized by E-beam, SAL=10⁻⁶.

3 / 5 - Layer Cell Culture Flask

- Non-Pyrogenic, DNase/Rnase free.
- 3-Layer Cell Culture Flask Growth area: 520 cm².
 5-Layer Cell Culture Flask Growth area: 870 cm².
- Individually packaged in sterile bag.



T150 U-Shaped Canted Neck Cell Culture Flask



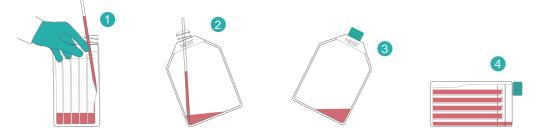
Yellow caps for non-treated flask



Vent caps with 0.22 μm hydrophobic filters to eansure gas exchange without contamination

Feature

User guide for seeding cells into a 5-layer Cell Culture Flask



1. Prepare cell suspension of the required concentration, then mix it with medium evenly in a container. A volume of 30-50 mL per layer is recommended .

2. Slowly add the mixed solution into the 5-layer Cell Culture Flask with a serological pipette. To avoid foam or bubbles, it is recommended to set the pipette firmly against the wall, enable the stream to flow along the slope, and save a little liquid in the pipette each time.

Notes: While a 10 ml pipette can disperse the medium at the bottom, a 25 ml pipette will only reach up to the NEST mark to disperse the medium. 3. Position the Multi-layer Flask upright with the NEST mark facing you, tilt it 45° clockwise and let stand in this position for a while to level the liquid in each layer.

4. Gently lay it flat onto the workbench with NEST mark facing upwards.

5. Gently shake it from side to side to distribute cells evenly onto culture surfaces.

Notes: be careful to shake gently to avoid foam or bubbles and spilling liquid from each layer.

6. Transfer the flask to the incubator for incubation

Culture medium removal

1. Aspiration

Tilt the flask 45° clockwise with the NEST mark facing you. counter-clock wise to a 45° angle while inverting the Multi-Flask toward you. Then reach the serological pipette into the bottom for fully aspiration.

2. Pouring

Tilt the flask 45° counterclockwise with the NEST mark facing you, pour the spent media from the flask.

Tips: A NEST 10mL serological pipette is suggested for fully aspiration.

Cell harvesting

- Rinse off the residual serum with buffer, add digestion solution (≥5mL per layer) and mix evenly. Then, follow Steps 3-4 to distribute to dissociating reagent to each layer.
- 2. Let stand for 2 min, then neutralize and mix with inactivating solution following steps 3-4. Gently swirl to dislodge cells completely.
- 3. Transfer the solution in a centrifuge tube or other containers by aspiration or pouring.
- 4. Rinse the flask with buffer for three times, then transfer the buffer into the centrifuge tube for passage and counting.

Tips: Search "NEST Multi-layer Flask" video on YouTube(@nest-wuxi4075).

Cell Growth	Maximum Graduated	Rcommended Medium		Size(mm))	Pac	king	TC T	reated	Non-T	reated
Area (cm²)	Volume (mL)	Volume (mL)	Base Height	Width	Length	/Pack	/Case	Plug seal caps	Vent caps	Plug seal caps	Vent caps
25	30	5-7.5	25.9	53.8	97.13	10	20	707001	707003	707011	707013
75	225	15-22.5	35.7	89.56	160.01	5	20	708001	708003	708011	708013
150	375	30-45	40.3	110.75	203	5	8	720001	720003	720011	720013
175	400	35-52.5	39.1	120.51	217.9	5	8	709001	709003	709011	709013
225	700	45-67.5	46.05	137	238.5	5	5	721001	721003	721011	721013
520 (3-layer)	50	60-100	60.1	120.5	203	1	12	731301	731302	/	/
870 (5-Layer)	50	100-150	84.3	120.5	203.6	1	8	731001	731002	/	/

Cell Culture Flask



Precautions:

It is important to handle multi-layer Cell Culture Flasks with caution to avoid the formation of bubbles. The presence of bubbles can lead to the creation of siphon bridge at the baffle, resulting in the upper layer of culture medium flowing down to the bottom.

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Cell Culture Flask Closed System Solution



1 Filter

The Pre-installed filter on the cap facilitates gas exchange during liquid transfer, and allows for subsequent cell culture.

2 Clamp

Clamp should keep open for gas exchange during liquid transfer. After the transfer is complete, it can be closed for the growth of anaerobic cells and viruses.

3 Thermoplastic Elastomer Tube (TPE Tube)

TPE tube can be connected to the tubing system via a tube sealing machine under non-sterile conditions.

4 PTFE Tube

PTFE tubing is placed inside the bottle below the filter to facilitate gas exchange during liquid transfer.



The range of T-flask Closed System allow for aseptic transfer of liquids, during which culture media or cells can be transferred into or out of bioreactors or Biofactory without the need to open the cap. After the transfer, the culture media and cells can be directly cultured inside the flask, eliminating the exogenous contamination risk for drug development and other production processes. In addition, it also reduces the unnecessary time wasted for tubing designing, assembly, and sterilization, thereby improving production efficiency.

Removal of culture media

- Allows for cell culture and liquid transfer without the need to open the cap and hence minimizes the risk of contamination during liquid transfer.
- Intended for both aerobic cells (by opening the clamp) and anaerobic cells (by closing the clamp).
- Liquid transfer can be achieved by gravity without the need for peristaltic pumps.
- The one-piece injection moulding for bottle and cap reduces the risk of leakage and media residue.
- The TPE tube can be sealed in non-sterile environments.
- The high-quality materials makes smooth inner wall of the tube and ensures excellent transfer performance.
- Sterility assurance level (SAL)= 10⁻⁶.
- Free from endotoxins and animal-derived components.

C routh A roo (am^2)	Tubing Measureme		ients	Membrane Area	/Case	Cat.No.	
Growth Area (cm ²)	Diameter	Length	Joint Connection			outrio.	
25	1/4" ID, 3/8" OD					C92032-BZB040A	
75	φ 9.53mm φ 6.4mm	40cm	aseptic welding	4.5cm ²	4	C92131-BZB040A	
225	φ <u>υ</u> πητ		/heat sealing			C92231-BZB040A	

Cell Scraper



Features

- · Free rotating blade, makes the blade twist to the right direction.
- Two sizes are available.
- Easy-tear sterile packing.
- Sterilized by E-beam, SAL=10⁻⁶.
- Non-Pyrogenic, DNase/Rnase free.
- Individually packaged.

Spec	:(mm)	Colour	Sterile	/Case	Cat.No.
Total Length	Blade Width	Coloui	Sterne	/Case	Gal.NO.
220	13	Blue handle + transparent blade	Yes	100	710001
280	20	Blue handle + transparent blade	Yes	100	710011

Cell Strainer



Features

- · Ideal for stem cell and tissue-derived primary cell preparation.
- Fits nearly all 50ml conical tubes.
- Tab molded within upper ring enables easy sterile handling.
- Sterilized by Gamma ray.
- Non-Pyrogenic, DNase/Rnase free.
- · Individually packaged.

Spec (µm)	Mesh Count	Color	/Pack	/Case	Cat.No.
40	360	Blue	1	50	258366
70	220	White	1	50	258365
100	150	Yellow	1	50	258364

50mL Min Bioreactor

Features

- USP VI Polypropylene.
- High transparency, easy to observe.
- Vent caps with 0.22 μm hydrophobic filters for gas exchange without contamination.
- Packaged in sterile, zip-sealable bags.
- Sterilized by E-beam, SAL=10⁻⁶.
- Non-Pyrogenic, DNase/Rnase free.
- Suitable for used for centrifugation.

Volume (mL)	/Pack	/Case	Cat.No.
50 mL Vent caps Sterile	10	10	788211



Cytology

Ultra-Low Attachment Surface

NEST ultra-low attachment surface efficiently allows cells to form suspended 3D spheres, addressing the problems of abnormal flattening, division, and loss of differentiation phenotype that occur when cultured in vitro on a flat culture surface.

The ultra-low attachment surface is coated with a special hydrogel that inhibits specific and non-specific solidification. It is biologically inert, non-cytotoxic, and non-degradable, making it an ideal material for various culture vessels.

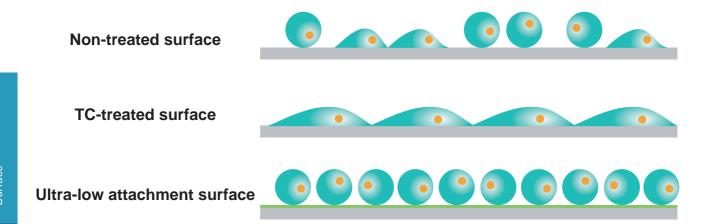
Features

- Facilitates the formation of 3D multicellular spheres.
- Keeps cells suspended and non-adherent.
- Prevents specific stem cell differentiation induced by adhesion.
- Inhibits anchorage-dependent cells division.
- Reduces binding of attachment proteins and serum proteins to substrates.

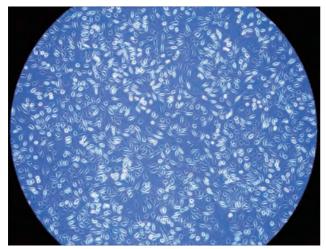
Application

- Formation of 3D multicellular spheres, such as embryoid bodies and tumor spheroids.
- Formation of neurospheres in neurobiological research
- Formation of embryoid bodies in stem cell research
- Research on activation and deactivation mechanisms in lymphocytes, monocytes, macrophages, and other phagocytic cells.
- Suspension cell-based screening.
- Culture of cells, tissues, or organ fragments.
- Formation of multicellular spheres in tumor research.

Schematic Diagram of Different Treatment Methods

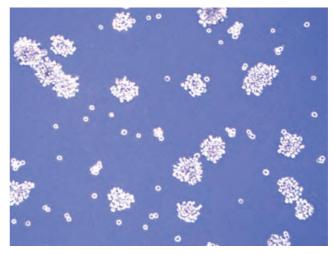


TC-treated surface (L-929 cells)

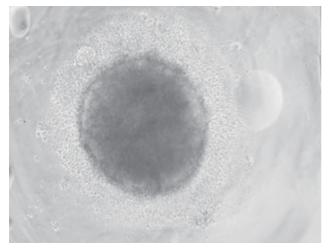


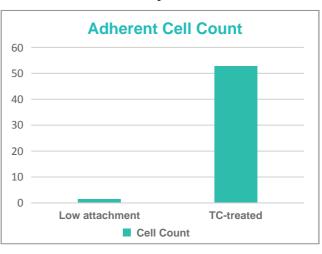
Multicellular spheres after 24 hours of culture

Ultra-low attachment surface (L-929 cells)



Compared to the TC-treated product, cell attachment on the ultra-low attachment surface is reduced by 98%.





	Specific	cations		Packaging	g (Bagged)	Cat Na	
Well	Well Bottom		Sterile	Pcs/Pk	Pcs/Cs	Cat.No	
6	6 Clear, flat Bottor		Yes	1	20	70301B01	
12	Clear, flat E	Bottom	Yes	1	20	71201B01	
24	Clear, flat I	Bottom	Yes	1	20	70201B01	
96	Clear, flat E	Bottom	Yes	1	20	70101B01	
96	Clear, U-b	ottom	Yes	1	20	70111B01	
	Spoo	ifications		Packagin	n (Baggod)		
Cell Growth	· · · · ·		Sterile	/Pack	/Case	Cat.No	
25	cm ²	Vent caps	Yes	4	24	70711B01	
75	cm ²	Vent caps	Yes	4	24	70811B01	
	Spec	ifications		Packaging	g (Bagged)		
Spec	Specification (mm)			/Pack	/Case	Cat.No	
	35 mm		Yes	5	20	70601B01	
60 mm			Yes	5	20	70501B01	
100 mm			Yes	5	20	70401B01	
	6 12 24 96 96 Cell Growth 25 75	Well Botton 6 Clear, flat E 12 Clear, flat E 24 Clear, flat E 96 Clear, flat E 96 Clear, U-b Spec Cell Growth Area (cm²) 25 cm² 75 cm² Spec Spec	6 Clear, flat Bottom 12 Clear, flat Bottom 24 Clear, flat Bottom 96 Clear, flat Bottom 96 Clear, flat Bottom 96 Clear, flat Bottom 96 Clear, U-bottom Specifications Cell Growth Area (cm²) 25 cm² Vent caps 75 cm² Vent caps Specifications Specifications Specification (mm) 35 mm 60 mm	Well Bottom Sterile 6 Clear, flat Bottom Yes 12 Clear, flat Bottom Yes 24 Clear, flat Bottom Yes 96 Clear, U-bottom Yes 96 Clear, U-bottom Yes 25 cm² Vent caps Yes 75 cm² Vent caps Yes Specifications Specification Specification Yes 60 mm	Well Bottom Sterile Pcs/Pk 6 Clear, flat Bottom Yes 1 12 Clear, flat Bottom Yes 1 24 Clear, flat Bottom Yes 1 96 Clear, U-bottom Yes 1 Specifications Packaging Cell Growth Area (cm²) Caps Sterile /Pack 25 cm² Vent caps Yes 4 75 cm² Vent caps Yes 4 Specifications Specifications Specifications Specifications Specifications Specifications Specifications Specification Yes Specification Yes </td <td>WellBottomSterilePcs/PkPcs/Cs6Clear, flat BottomYes12012Clear, flat BottomYes12024Clear, flat BottomYes12096Clear, flat BottomYes12096Clear, flat BottomYes12096Clear, flat BottomYes12096Clear, U-bottomYes120SpecificationsPackaging (Bagged)Cell Growth Area (cm²)CapsSterile/Pack25 cm²Vent capsYes42475 cm²Vent capsYes424SpecificationsPackaging (Bagged)SpecificationsPackaging (Bagged)SpecificationsPackaging (Bagged)SpecificationsPackaging (Bagged)SpecificationsPackaging (Bagged)SpecificationsPackaging (Bagged)SpecificationYes520</td>	WellBottomSterilePcs/PkPcs/Cs6Clear, flat BottomYes12012Clear, flat BottomYes12024Clear, flat BottomYes12096Clear, flat BottomYes12096Clear, flat BottomYes12096Clear, flat BottomYes12096Clear, U-bottomYes120SpecificationsPackaging (Bagged)Cell Growth Area (cm²)CapsSterile/Pack25 cm²Vent capsYes42475 cm²Vent capsYes424SpecificationsPackaging (Bagged)SpecificationsPackaging (Bagged)SpecificationsPackaging (Bagged)SpecificationsPackaging (Bagged)SpecificationsPackaging (Bagged)SpecificationsPackaging (Bagged)SpecificationYes520	

Order Information

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TriSteri™

TriSteri[™] Ultra-low Particulate Collection

Product overview

Regular packaging may unintentionally introduce pollutants into the cleanroom area if pollutants adhere to the outside of the packaging bag. However, triple packaging of TriSteri TM Ultra-low Particulate Collection are designed to meet the higher demands of cleanrooms. The outer packaging acts as a barrier, preventing pollutants from entering sensitive production areas and greatly enhancing the safety of samples in a sterile environment.

Product Quality Inspection

- Each batch of products undergoes insoluble particle testing according to the Chinese Pharmacopoeia.
- All products undergo two visual inspections to ensure that every product leaving the facility is free from visible foreign substances.
- Each minimum packaging is labeled with a batch number for easy quality inquiries.

Accreditation Certifications

- Compliant with ISO 13485 (Medical Device Quality Management System) and ISO 9001.
- Sterility Assurance Level (SAL) reaches 10-6, free from DNase/R Nase, endotoxins, and cytotoxicity.

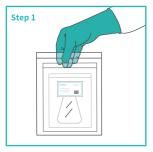
Production Environment

- Products are produced and packaged in Class 100,000 cleanroom and partial Class 1000,000 cleanroom.
- Packaging materials are produced in Class 10,000 cleanroom.

Raw Material Verification

• All injection molded components are made from medical-grade materials.

Instructions for Use



Inspect the product's appearance and packaging integrity. Check the information on the label, such as expiration date and batch number.



For unsterile environment In a non-clean environment, open the outermost packaging and transfer the two inner bags to the Material Delivery Window for sterilization.



For sterile environment Open the second inner bag carefully in the cleanroom. Remove the innermost packaging from the second inner bag, transferring it to the sterile operation table.



For sterile operation station Open the final layer of packaging in the sterile operation table and remove the required consumables.

Triple Packed Products for clean room applications

Triple packed products are used where sterile transfer of products is essential. Contamination adhering to the outside of the bag can be carried into clean room areas with single packaging. Therefore, all single packed materials must be wiped clean with 70 % alcohol or other disinfectant. Triple packed products eliminate the need for such cleaning procedures. It prevents contamination from reaching highly sensitive production areas, simplify handling and reduce processing time.

Order Information

	Des	cription (sterile, Tri	Steri™)	Т	riple Packagi	ng	
Product	Specification	Сар	Other	Pcs/Pk	Pk/Cs	Pcs/Cs	Cat.No.
	6 Well	/	Clear, Flat Bottom, TC	1	40	40	703009
Cell Culture Plates	24 Well	/	Clear, Flat Bottom, TC	1	40	40	702009
Cell Culture Plates	48 Well	/	Clear, Flat Bottom, TC	1	40	40	748009
	96 Well	/	Clear, Flat Bottom, TC	1	100	100	701009
	100*20 mm	/	TC	1	60	60	704009
Cell Culture Dish	150*25 mm	/	TC	1	60	60	715009
	75 cm ²	Vent Cap	TC	1	50	50	708009
Cell Culture Flask	175 cm ²	Vent Cap	TC	1	40	40	709009
Cell Culture I lask	225 cm ²	Vent Cap	TC	1	25	25	721009
	2000 mL	Seal Cap	PC, Flat Bottom	1	4	4	785109
	3000 mL	Seal Cap	PC, Flat Bottom	1	4	4	786109
	3000 mL	Seal Cap	PC, Flat Bottom	1	4	4	786509
	5000 mL	Seal Cap	PC, Flat Bottom	1	4	4	787009
	2000 mL	Vent Cap	PC, Flat Bottom	1	4	4	785119
	3000 mL	Vent Cap	PC, Flat Bottom	1	4	4	786119
	3000 mL(Wide Mouth)	Vent Cap	PC, Flat Bottom	1	4	4	786519
High Efficiency	5000 mL	Vent Cap	PC, Flat Bottom	1	4	4	787019
Erlenmeyer Flask	2000 mL	Seal Cap	PC, Baffled	1	4	4	785129
	3000 mL	Seal Cap	PC, Baffled	1	4	4	786129
	3000 mL(Wide Mouth)	Seal Cap	PC, Baffled	1	4	4	786529
	5000 mL	Seal Cap	PC, Baffled	1	4	4	787029
	2000 mL	Vent Cap	PC, Baffled	1	4	4	785139
	3000 mL	Vent Cap	PC, Baffled	1	4	4	786139
	3000 mL(Wide Mouth)	Vent Cap	PC, Baffled	1	4	4	786539
	5000 mL	Vent Cap	PC, Baffled	1	4	4	787039
	2 Layer	Two wide mouths	TC	1	8	8	771109
BioFactory	5 Layer	Two wide mouths	TC	1	4	4	771209
	10 Layer	Two wide mouths	TC	1	6	6	771309
	1.0	External Thread	/	5	40	200	618909
Cryogenic Tubes	1.5	External Thread	/	5	40	200	606909
	2.0	External Thread	/	5	40	200	607409
Contrifuence Turk	15	/	/	5	50	250	601009
Centrifuge Tube	50	/	/	5	50	250	602009
250/500mL	250	Vent Cap	/	2	16	32	622009
Centrifuge Tube	500	Vent Cap	/	2	12	24	623009

Coming soon.....

Declarat		Description (sterile, TriSteri	тм)
Product	Specification	Сар	Other
Cell Culture Flask	25 cm ²	Vent Cap	TC
Cell Culture Flask	150 cm ²	Vent Cap	TC
Multi-layer Cell Culture Flask	5-layer	Vent Cap	TC
	125 mL	Seal Cap	PC, Flat Bottom
	250 mL	Seal Cap	PC, Flat Bottom
	500 mL	Seal Cap	PC, Flat Bottom
	1000 mL	Seal Cap	PC, Flat Bottom
	125 mL	Vent Cap	PC, Flat Bottom
	250 mL	Vent Cap	PC, Flat Bottom
	500 mL	Vent Cap	PC, Flat Bottom
Erlenmeyer Flask	1000 mL	Vent Cap	PC, Flat Bottom
	125 mL	Seal Cap	PC, Baffled
	250 mL	Seal Cap	PC, Baffled
	500 mL	Seal Cap	PC, Baffled
	1000 mL	Seal Cap	PC, Baffled
	125 mL	Vent Cap	PC, Baffled
	250 mL	Vent Cap	PC, Baffled
	500 mL	Vent Cap	PC, Baffled
	1000 mL	Vent Cap	PC, Baffled
Cryogenic Tubes	4.0	External Thread	/
Gryogenic Tubes	5.0	External Thread	/

Bioprocessing Solutions



OptiFlask[®] Erlenmeyer Flask

NEST Erlenmeyer Flask collection is designed for suspension cell culture, and is ideal for small-scale research and industrial production of vaccines, proteins, monoclonal antibodies and biopharmaceuticals.

NEST provides Erlenmeyer Flasks in sizes ranging from 125 to 3000mL, as well as High Efficiency Erlenmeyer Flasks in sizes of 2-5L. Each size option comes with a choice of a seal or vent cap, as well as the option of a flat bottom or a bottom with baffles. The Erlenmeyer Flasks are available in both PC and PETG.

Accordingly, NEST offers customized transfer caps that are compatible with our Erlenmeyer Flask collection. These caps come in various sizes and can also be tailored to accommodate diverse requirements, allowing for liquid transfer and cultivation in a closed environment.

Strict product quality supervision

Production environment--Class 10,000 clean production workshop

NEST FactoryTM is produced in a dedicated 10,000-class clean room, and other products are produced in a 100,000-class clean room.

Production material--Strictly selected polystyrene conforming to USP Class VI standard

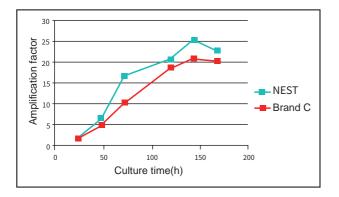
Quality Assurance from Professional Testing Agencies

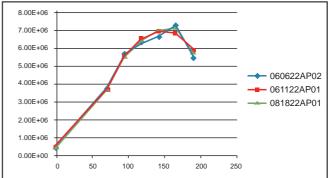
NEST ensures top product quality, stability, safety, applicability, and effectiveness through the implementation of state-of-the-art production technology and a strict quality control system. All our product ranges have undergone rigorous validation by professional testing institutions possessing national testing qualifications (CMA, CNAS). The internationally recognized testing results provide further assurance.

Performance Testing

Relevant performance testings include sealing test, pressure resistance test, inter-batch stability, endotoxin, nucleic acid enzyme, and cell culture comparative experiments.

Sample batch	Culture time(h)	72	76	120	144	168	192
	Cell count	3.82×10 ⁶	5.78×10 ⁶	6.46×10 ⁶	6.79×10 ⁶	7.48×10 ⁶	5.59×10 ⁶
060622AP02	Amplification factor	12.72	19.25	21.53	22.63	24.94	18.62
0044004 D04	Cell count	3.69×10 ⁶	5.67×10 ⁶	6.66×10 ⁶	7.09×10 ⁶	7.05×10 ⁶	5.95×10 ⁶
061122AP01	Amplification factor	12.30	18.91	22.19	23.62	23.51	19.83
0818224P01	Cell count	3.72×10 ⁶	5.60×10 ⁶	6.58×10 ⁶	7.13×10 ⁶	7.32×10 ⁶	5.88×10 ⁶
0010224P01	Amplification factor	12.40	18.66	21.93	23.78	24.40	19.59





Biosafety testing

Refer to <<State Food and Drug Administration National Standards for Packaging Materials and Containers in Direct Contact with Drugs (Series 6)>>, The product is tested for cytotoxicity, sensitization, intradermal irritation, acute systemic toxicity and hemolysis.

Physical and chemical safety testing

Refer to <<State Food and Drug Administration National Standards for Packaging Materials and Containers in Direct Contact with Drugs (Series 6)>>, The products are tested for insoluble particles, ignition residues, metal elements, and dissolved substances (clarity, color, pH, UV absorbance, non-volatile matter, easy oxides, heavy metals).

Testing item	Detection limit (mg/L)	Test result (mg/L)
Lead	0.05	N.D.
Tin	0.04	N.D.
Cadmium	0.02	N.D.
Chromium	0.03	N.D.

Testing item	Requirement or detection limit	Testing result
Reducing substances (consumption of c(1/5KMnO4)=0.01mol/L)	≤0.5 mL	0.12
Acid-base pH (compared with blank solution)	<1	0.22
Evaporated residue, mg/50mL	<2.5 mg	0.9
UV absorbance 230nm~360nm	<0.05	0.0070
Appearance	Colorless and transparent	Colorless and transparent
Lead content , µg/mL	<0.05	Below the detection limit
Tin content, µg/mL	<0.04	Below the detection limit
Cadmium content, µg/mL	<0.02	Below the detection limit
Chromium content, µg/mL	<0.03	Below the detection limit

Sterility and particle guarantee

NEST ensures thorough testing of its products through examinations of the irradiation process, packaging, and insoluble particles. The verification of the irradiation dose distribution is conducted in accordance with ISO 11137-1:2015, meeting the necessary requirements for sterilization irradiation dose (SAL=10⁻⁶).

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OptiFlask[®] Erlenmeyer Flask





- Erlenmeyer Flask collection is suitable for suspension cell culture or bacterial culture, and can also be used for medium preparation, mixing, and storage.
- The body is made of PETG/PC, and the cap is made of PP.Both materials comply with USP Class VI.
- Qualified by the USP Class 6 Standard, PC bottle with high transparency, is resistant to strong impact, oxidation and high temperature up to 121 °C.
- Vent caps with 0.22 μm hydrophobic filters for gas exchange without contamination.
- The baffled bottom can improve gas exchange efficiency and ensure better oxygen dissolution in the culture medium, but it also increases cell shear force.

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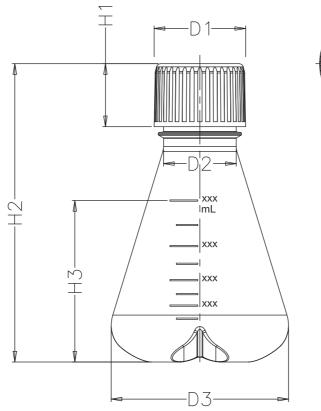
Feature

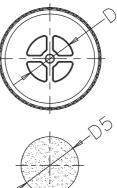
Individually packaged in sterile bags
There's a scale made by injection molding on the flask body to facilitate observing the filled liquid volume.
Non-Pyrogenic, DNase/Rnase free.

• Sterilized by E-beam, SAL=10⁻⁶.

Erlenmeyer Flask

Volume	Bottom Type	D1	D2	D3	D4	D4	H1	H2	H3	Pacl	king	PETG		PC	
(mL)		וט	02	03	Seal Cap	Seal Cap			пз	/Pack	/Case	Seal Cap	Vent Filter Cap	Seal Cap	Vent Filter Cap
	Flat-bottom	38.00	29.30	65.80	14.85	22.50	29.50	115.00	59.20	1	24	781001	781011	781101	781111
125	Baffled	38.00	29.30	65.80	14.85	22.50	29.50	113.00	57.20	1	24	781301	781311	781201	781211
050	Flat-bottom	42.80	34.00	82.50	21.65	27.00	29.50	137.30	73.10	1	12	782001	782011	782101	782111
250	Baffled	42.80	34.00	82.50	21.65	27.00	29.50	137.30	73.10	1	12	782301	782311	782201	782211
	Flat-bottom	48.00	39.00	101.00	21.65	27.00	29.50	179.00	104.50	1	12	783001	783011	783101	783111
500	Baffled	48.00	39.00	101.00	21.65	27.00	29.50	178.00	103.50	1	12	783301	783311	783201	783211
1000	Flat-bottom	48.00	39.00	128.00	21.65	27.00	29.50	207.70	142.40	1	6	784001	784011	784101	784111
1000	Baffled	48.00	39.00	128.00	21.65	27.00	29.50	204.20	138.90	1	6	784301	784311	784201	784211
0000	Flat-bottom	54.00	46.90	162.00	19.00	27.00	25.00	285.50	152.30	1	6	/	/	785001	785011
2000	Baffled	54.00	46.90	162.00	19.00	27.00	25.00	285.50	152.30	1	6	/	/	/	/
2000	Flat-bottom	75.50	72.50	230.00	36.00	44.00	25.00	253.50	97.00	1	4	/	/	786001	786011
3000	Baffled	75.50	72.20	230.00	36.00	44.00	25.00	253.50	97.00	1	4	/	/	786005	786015





OptiFlask[®] Erlenmeyer Flask, High Efficiency





High-efficiency, large-volume culture flasks allow cells to show strong viability with large expression amount of proteins in the culture of mammalian cells and insect cells. During the culturing process, the use rate of the shaker is significantly increased, and the survival rate and viability of cells are both dramatically elevated. NEST culture flasks also provide high repeatability, which allows highly inter-batch consistency of cell growth and yield.

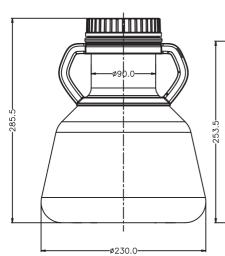
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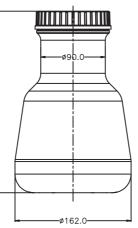
Feature

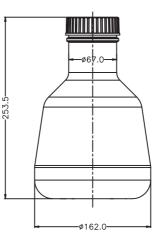
- Qualified by the USP Class 6 Standard, PC bottle with high transparency, is resistant to strong impact, oxidation and high temperature up to 121 °C.
- Obvious and accurate scale.
- The vent cap is covered with a 0.2 μm vent membrane, watertight but not airtight.
- Equipped with transfer Cap, more safe and convenient operation.
- Individually packaged in sterile bag.
- Non-Pyrogenic, DNase/Rnase free.
- Suitable for suspension cell culture or bacterial culture, as well as for medium preparation, mixing, and storage
- Sterilized by E-beam, SAL=10⁻⁶.

		Dimension (r	nm)			Cat.No.		
Volume (L)	Height	Bottleneck Dia	Bottom Dia	Cap Style	/Case	Flat-bottom	With Baffles	
2.0	213.5	67	162	Seal Cap	4	785101	785105	
	213.5	67	162	Vent Filter Cap	4	785111	785115	
0.0	253.5	67	162	Seal Cap	4	786101	786105	
3.0	253.5	67	162	Vent Filter Cap	4	786111	786115	
20 (Mide mouth)	253.5	90	162	Seal Cap	4	786501	786505	
3.0 (Wide-mouth)	253.5	90	162	Vent Filter Cap	4	786511	786515	
5.0	253.5	90	230	Seal Cap	4	787001	787005	
5.0	253.5	90	230	Vent Filter Cap	4	787011	787015	

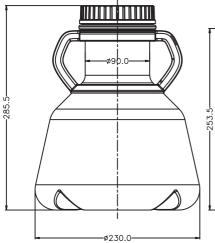
Erlenmeyer Flask, High Efficiency

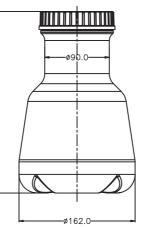


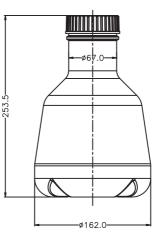














Erlenmeyer Flask Closed System Solution

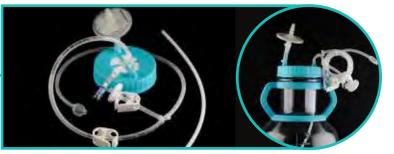
- · Closed system reduces the risks of contamination during liquid transfer.
- One-piece construction of caps and connectors reduces the risk of leakage and media residue.
- · Caps of various diameters are available and aseptic welding of liquid inlet tubing under normal conditions is supported.
- · High-quality materials and smooth inner wall of the tubing provide an excellent transfer performance.
- Sterilized by E-beam, SAL=10⁻⁶.
- · Endotoxin-free, and no ingredients of animal origin.
- Individually packaged in sterile bag.

- Use peristaltic pump
- For aseptic transfer of culture medium and cell culture solution.
- One end of the pipeline is connected to the MPC series connector, which increases the convenience and safety in use. The male connector and the sealing cap are tightly connected to prevent accidental disconnection, and the connector can be rotated to reduce pipeline distortion.



Use gravity to decrease damage to cells

- No need for other equipment, and no damage to cells.
- Invert the bottle to transfer the liquid by gravity.
- Available with regular tubing or wide-mouth tubing.



Compatible with 2/3/5L high efficient Erlenmeyer flasks. Different from bi-directional liquid transfer cap, the multifunctional transfer cap can be directly placed in an incubator for culture after the liquid transfer is completed. It can reach a large air flux. The quick sampling connector is composed of a sampling nozzle and a one-way valve, which can prevent the liquid from flowing backwards during the sampling process and ensure the aseptic sampling. The liquid inlet tubing is provided with a PTFE needle filter, which solves the issue of liquid remaining in the tubing during the feeding process.

When liquid transfer, sampling, and culture functions are required in one unit, a multifunctional transfer cap could be used.

Can only transfer liquid;

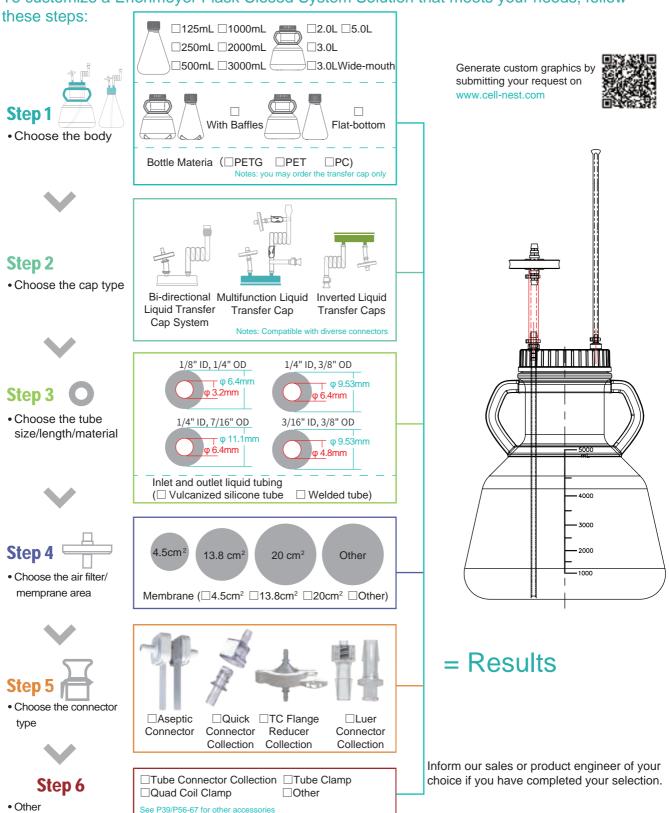
for incubation

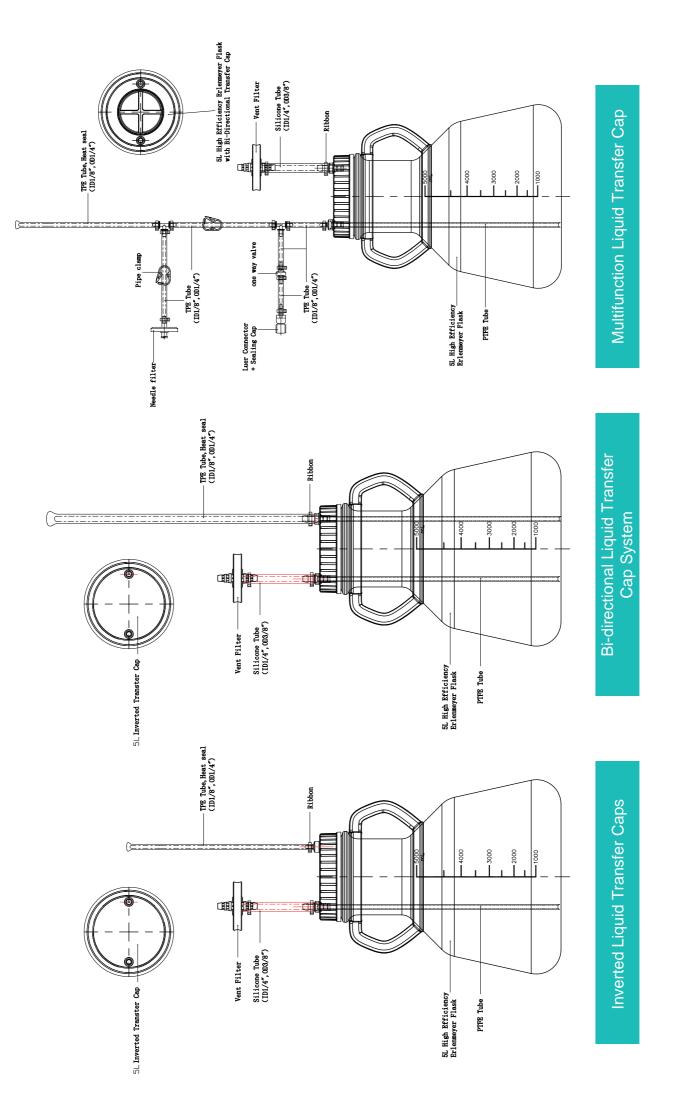
Use a breathable vent lid

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Erlenmeyer Flask Closed System Solution

To customize a Erlenmeyer Flask Closed System Solution that meets your needs, follow





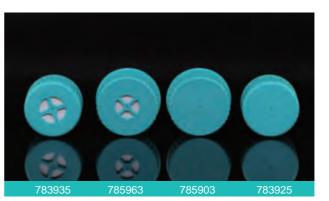
Bioprocessing Solutio

High Efficient Erlenmeyer Flask Closed System

			Trans	<u> </u>	n Efficient Erlenmeyer F	lasks		Closed	System	
Volume (mL)	Cap Style				e Material	0.2µm		Cat	.No.	
(111)		External Material	Liquid Length	Transfer Tube Dia.	Connector	Filter Membrane	Cat.No.	Flat-bottom	With Baffles	
		Material	(cm)	Dia.	MPC Male Connector	area	C30821-EAC050B		With Ballies	
125 mL					Male Luer Connector		C30821-EAC050B			
					MPC Male Connector		C30921-EAC050B			
250 mL	Bi-				Male Luer Connector		C30921-EAC050B			
	directional		50		MPC Male Connector	¢10mm	C31021-EAC050B			
500 mL	Liquid	Silicon Tube	Silicon Tube	50	1/8" ID, 1/4" OD	Male Luer Connector	Ф42mm	C31021-EFC050B		
	Transfer				MPC Male Connector	-	C31121-EAC050B			
1000 mL					Male Luer Connector		C31121-EFC050B			
2000 mL					Heat Seal		C30121-AZCO50A			
2000 1112	N As ald for some	TPE Tube	52	1/8" ID, 1/4" OD	(Supports sampling) Heat Seal	Φ50mm	C10111-AJE052B			
	Multifun- ction	TPE Tube	50	1/4" ID. 7/16" OD	(Supports sampling) Heat Seal	Ф24mm	C10111-DZB050B			
	Liquid Transfer	Silicon Tube	100	3/16" ID, 3/8" OD	MPC Male Connector	Φ24mm	C10111-GBB100B			
2L	Tansier	TPE Tube	50	1/8" ID, 1/4"OD	Heat Seal	Φ24mm		C10122-AZB050A		
	Bi-	TPE Tube	50	1/4" ID, 3/8" OD	Heat Seal	Φ42mm		C10122-AZB050A C10123-BZC050A	C20122-AZB050A	
High Efficiency	directional Liquid	Silicon Tube	50	1/4" ID, 3/8" OD	MPC Male Connector	Φ42mm	C10123-B2C050B	C10123-B2C050A		
LINCIENCY	Transfer	Silicon Tube	50	, ,	MPC Female Connector	Φ42mm	C10123-FDC050B			
	Inverted	TPE Tube	50	1/4 ID, 3/8 OD 1/8" ID, 1/4" OD	Heat Seal	Φ42mm	C10123-FDC050B			
	Liquid	TPE Tube	50	1/4" ID, 7/16" OD	Heat Seal	Φ42mm	C10131-A2C050B			
	Transfer Multifun-	TPE Tube	52	1/8" ID, 1/4" OD	Heat Seal	Φ42mm	C10133-D2C050B			
	ction	TPE Tube	50	1/4" ID, 7/16" OD	(Supports sampling) Heat Seal	Ф24mm	C10211-AJE052B			
Т	Liquid Transfer	Silicon Tube	100	3/16" ID, 3/8" OD	MPC Male Connector	Φ24mm	C10211-D2B030B			
	Transfer	TPE Tube	50	1/8" ID, 1/4"OD	Heat Seal	Φ24mm		C10222-AZB050A	C20222 AZD050A	
3L	Bi-	TPE Tube	50	1/4" ID, 3/8" OD	Heat Seal	Φ24mm		C10222-AZB050A C10223-BZC050A	C20222-AZB050A	
High	directional Liquid	Silicon Tube	50	1/4" ID, 3/8" OD	MPC Male Connector	Φ42mm	C10223-B2C050B	C10223-B2C030A		
Efficiency	Transfer	Silicon Tube	50	. ,	MPC Female Connector	Φ42mm	C10223-FBC050B			
	Inverted	TPE Tube	50	1/4" ID, 3/8" OD	Heat Seal	Φ42mm	C10223-FDC050B			
	Liquid	TPE Tube	50	1/4" ID, 7/16" OD	Heat Seal	Φ42mm	C10231-A2C050B			
	Transfer	TPE Tube	52	1/8" ID, 1/4" OD	Heat Seal	Φ42mm	C10233-D2C050B			
	Multifun- ction	TPE Tube	50	1/4" ID, 7/16" OD	(Supports sampling) Heat Seal	Ф24mm				
	Liquid Transfer	Silicon Tube	100	3/16" ID, 3/8" OD	MPC Male Connector	Φ24mm	C10311-DZB050B			
3L	Tansier			,	Heat Seal		C10311-GBB100B	C10322-AZB050A	C20222 A78050A	
Wide-	Bi-	TPE Tube TPE Tube	50 50	1/8" ID, 1/4"OD 1/4" ID, 3/8" OD	Heat Seal	Ф24mm Ф42mm		C10322-AZB050A C10323-BZC050A	C20322-AZB030A	
mouth	directional Liquid	Silicon Tube	50	1/4" ID, 3/8" OD	MPC Male Connector	Φ42mm				
High	Transfer		50	, , , , , ,	MPC Female Connector	Φ42mm	C10323-FBC050B			
Efficiency	Inverted	Silicon Tube TPE Tube	50	1/4" ID, 3/8" OD 1/8" ID, 1/4" OD	Heat Seal	Φ42mm	C10323-FDC050B C10331-AZC050B			
	Liquid		50	,	Heat Seal	Φ42mm				
	Transfer	TPE Tube TPE Tube	30	1/4" ID, 7/16" OD	Heat Seal		C10333-DZC050B	C10442-AKA060A		
	Multifun-	TPE Tube		1/8" ID, 1/4" OD	Heat Seal (Supports sampling)	No Filter Φ50mm	/ C10411 A IE002B	C 10442-ANA000A		
	ction Liquid	TPE Tube	92 90	1/8" ID, 1/4" OD 1/4" ID, 7/16" OD	(Supports sampling) Heat Seal		C10411-AJE092B			
	Transfer	Silicon Tube	100	3/16" ID, 3/8" OD	MPC Male Connector	Ф24mm Ф24mm	C10411-DZB090B			
5L		TPE Tube					C10411-GBB100B	C10422-AZB090A		
High	Bi-	TPE Tube	90 90	1/8" ID, 1/4"OD 1/4" ID, 3/8" OD	Heat Seal Heat Seal	Ф24mm Ф42mm	C10422-AZB090B			
Efficient	directional Liquid	Silicon Tube	90 90	1/4" ID, 3/8" OD	MPC Male Connector	Φ42mm				
	Transfer		90 90	,	MPC Female Connector	Φ42mm	C10423-FBC090B			
	Inverted	Silicon Tube TPE Tube	90 90	,	Heat Seal	Φ42mm	C10423-FDC090B			
	Liquid		30	1/8" ID, 1/4" OD	i ical Ocal	Ψ + ΔΠΠΠ	C10431-AZC090B			

Erlenmeyer Flasks Accessories







Compatibility	Diameter (mm)	/Pack	/Case	Cat.No.
Seal Cap for 125 mL PC/PETG Erlenmeyer Flasks	38.00	1	25	781925
Vent Cap for 125 mL PC/PETG Erlenmeyer Flasks	38.00	1	25	781935
Seal Cap for 250 mL PC/PETG Erlenmeyer Flasks	42.80	1	25	782925
Vent Cap for 250 mL PC/PETG Erlenmeyer Flasks	42.80	1	25	782935
Seal Cap for 500&1000 mL PC/PETG Erlenmeyer Flasks	48.00	1	25	783925
Vent Cap for 500&1000 mL PC/PETG Erlenmeyer Flasks	48.00	1	25	783935
Seal Cap for 2L Erlenmeyer Flasks	54.00	1	20	785903
Vent Cap for 2L Erlenmeyer Flasks	54.00	1	20	785913
Seal Cap for 3L Conical Erlenmeyer Flasks/2&3L High Efficient Erlenmeyer Flasks	75.50	1	20	786903
Vent Cap for 3L Conical Erlenmeyer Flasks/2&3L High Efficient Erlenmeyer Flasks	75.50	1	20	786913
Seal Cap for 3L Wide-mouth/5L Erlenmeyer Flasks	106	1	20	787903
Vent Cap for 3L Wide-mouth/5L Erlenmeyer Flasks	106	1	20	787913

Sioprocessing Solution

BioFactory

Strict product quality supervision

Production environment--Class 10,000 clean production workshop

NEST Factory is produced in a dedicated 10,000-class clean room, and other products are produced in a 100,000-class clean room.

Production material--Strictly selected polystyrene conforming to USP Class VI standard

Production Process--Strictly follow SOP for production and quality control

Exquisite product design, high precision forming, ultrasonic welding, no chemical addition.

Surface treatment--Tissue culture treated

The surface of the cell culture container is treated with hydrophilic treatment to ensure that the cells adhere to the surface more evenly and stable with better adsorption capacity.

Product expiration date verification

The cell growth surface can still meet the cell growth requirements after three years of aging, and there is no positive result of the sterility test.

Biosafety testing

Refer to <<State Food and Drug Administration National Standards for Packaging Materials and Containers in Direct Contact with Drugs (Series 6)>>, The product is tested for cytotoxicity, sensitization, intradermal irritation, acute systemic toxicity and hemolysis.

Physical and chemical safety testing

Refer to <<State Food and Drug Administration National Standards for Packaging Materials and Containers in Direct Contact with Drugs (Series 6)>>, The products are tested for insoluble particles, ignition residues, metal elements, and dissolved substances (clarity, color, pH, UV absorbance, non-volatile matter, easy oxides, heavy metals).

Process testing

In order to ensure the structure and strength of the product, it is necessary to verify the performance of relevant equipment, such as injection molding machines, molds, plasma equipment, welding machines, leakage meter and so on before production. After production, the product should be verified for sealing, strength, dropping and transportation.

Cell growth test

Cell growth homogeneity experiment.

Cell factory validation test--Sterility and particle guarantee

Product initial bioburden test, irradiation dose setting, dose review, aseptic packaging verification, irradiation process verification, product sterility and particle testing.

Applicable cells

VERO MRC-5 2BS 293T L-929

Packaging strength verification

The breakage rate is less than 3% after repeated long distance delivery challenges.

Sterility Guarantee--Imported Rhodotron[®] TT200 electron accelerator from Belgian IBA company, Self-built irradiation center.

The irradiation sterilization process has passed ISO 13485 and ISO 11137 quality system certification.

Guidelines for use

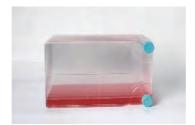
Cell culture



Pour the prepared suspension into the BioFactory (recommended volume of 150-200 mL per layer).



Gently lower the BioFactory Chamber to its normal horizontal incubation position and gently tilt the chamber back and forth until the surface of each chamber is completely covered with medium.



Turn the BioFactory Chamber 90° make sure the liquid at the same horizontal.



Put the BioFactory into the incubator.



Turn the BioFactory[™] Chamber 90° so that the filling and venting ports are up (as shown). It is normal for the medium level in the bottom chamber section to be slightly higher.



Watch operation video

- Precautions
- 1. Please pre-heat the cell factory and culture medium to the culture temperature: since it takes a long time for a large incubator to reach the set culture temperature, pre-heating the cell factory and culture medium to the culture temperature before starting the experiment may speed up cell attachment and significantly increase cell recovery.
- 2. Slow operating is required to avoid occurrence of air bubbles caused by sharp shaking: air bubbles may lead to flowing the medium from an upper layer to a lower layer.
- 3. Avoid spraying alcohol onto the breathable cover, since alcohol may wet the hydrophobic membrane filter and make it impermeable and consequently affect the gas exchange or cause pressure imbalance during operations.

Cell Harvest

- 1. After the culture is completed, pour the culture medium out.
- 2. Wash the factory with the calcium-free and magnesium-free phosphate buffer solution (CMF-PBS) (40-50 mL / layer) and if necessary, repeat the washing process.
- 3. Digestion: pre-heat the digestion solution (10-40 mL / layer) in advance.
- 4. Collection: centrifuge for 5 mins at 1000 rpm, remove the digestion solution and collect cells.
- 5. Washing: washing the biofactory with CMF-PBS or culture medium after digestion.

Precautions

- 1. Ensure that the culture surface of each layer is completely immersed in the CMF-PBS, and gently shake the cell factory forward and backward to wash off the residual culture medium.
- 2. Distribute the digestion solution evenly to each layer; gently tilt the incubator forward and backward, left and right to ensure that the digestion solution has completely covered the culture surface; gently tap the incubator to help the cells detach from the surface.
- 3. Since it is unable to clearly observe the digestion status of the cells in the middle layers of a cell factory, it is recommended to refer to the digestion status of a culture flask or a single-layer cell factory under exactly the same culture conditions. Or, use a dedicated observation platform for multiple-layer cell incubators to observe the growth status of cells in each layer.
- 4. If there are numerous cells present in the washing solution or the culture layers of the cell factory, it is necessary to wash multiple times or adjust the procedure of cell digestion.
- 5. Even a slight deviation of the culture temperature may affect the cell harvest rate, so it is required to pay close attention as to whether or not the culture temperature is exactly the set temperature.

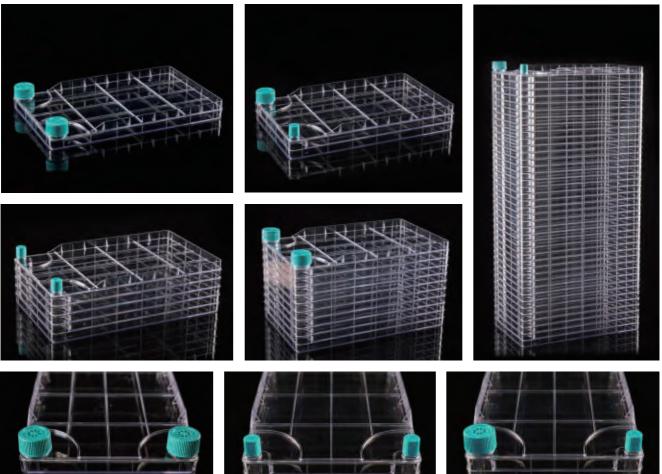




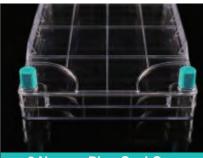
Bioprocessing Solutior

- Made of high clarity, 100% virgin polystyrene.
- Sterilized by E-beam, SAL=10⁻⁶.
- Non-Pyrogenic, DNase/Rnase free.
- Excellent welding line design can avoid producing particles during welding and make the biofactory stronger (Under Features 7th line).
- Vent caps with 0.22 µm hydrophobic filters for gas exchange without contamination.
- · Wide mouth is applicable to pour culture medium directly. Narrow mouth is applicable to operate with the aseptic pipeline.
- Standardize operations to reduce batch differences.

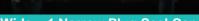
- Individually packaged in double-layer sterile bags.
- TC treated, good for cell attachment and growth.
- · Clear lot number for batch traceability.
- Ultrasonic welding without extrinsic ingredients.
- Standardize operations to reduce batch differences.
- Growth kinetics are the same as cells grow in the cell culture flasks. ٠ Applicable to large-scale culture adherent cells.
- · Large growing area. Just a single operate, you can cultivate a large number of cells and reduce contamination risk.
- Applicable to automatic machine.



2 Wide Plug Seal Caps



2 Narrow Plug Seal Caps



1 Wide + 1 Narrow Plug Seal Cap

BioFactory

	Cultivation		ension		10000	ase Seal Caps Vent Filter Caps		Cat.No.			
Layer	Area (cm ²)	Length	Width	Height	/Case			2 Wide Plug	2 Narrow Plug	1 Wide + 1 Narrow Plug	
1	632	335	205	44	8	16	16	771001	772001	773001	
2	1264	335	205	61	8	16	16	771101	772101	773101	
5	3160	335	205	112	4	8	8	771204	772204	773204	
10	6320	335	205	197	6	12	12	771302	772302	773302	
15	9480	335	205	286	2	4	4	771503	/	/	
40	25280	335	205	712	2	4	4	771403	772403	773403	

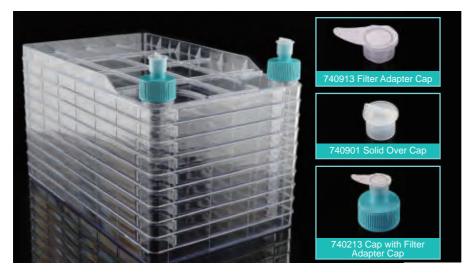
Large mouth design for easy pouring of the medium directly;

Small mouth design for easy connection with the feeding systems;

Vent Cap : 0.22 µm hydrophobic gas permeable membrane, hindering bacteria and water, can also avoid liquid swelling.

BioFactory

BioFactory (Cap with Over cap)



Vented Overcap and Solid Overact can be used directly on the adaptor caps to block dust and bacteria. Vented Overcap is equipped with a 0.22 µm hydrophobic breathable membrane to achieve aseptic ventilation during liquid transfer.

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Accessory information can be found on page 35.
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Layer	Description	Comes with Vented Overcap	/Case	Cat.No.
10	2 Sterile Vented over caps	12	6	771322
40	2 Sterile Vented over caps	4	6	771422

BioFactory (-20°C Frost Resistance)

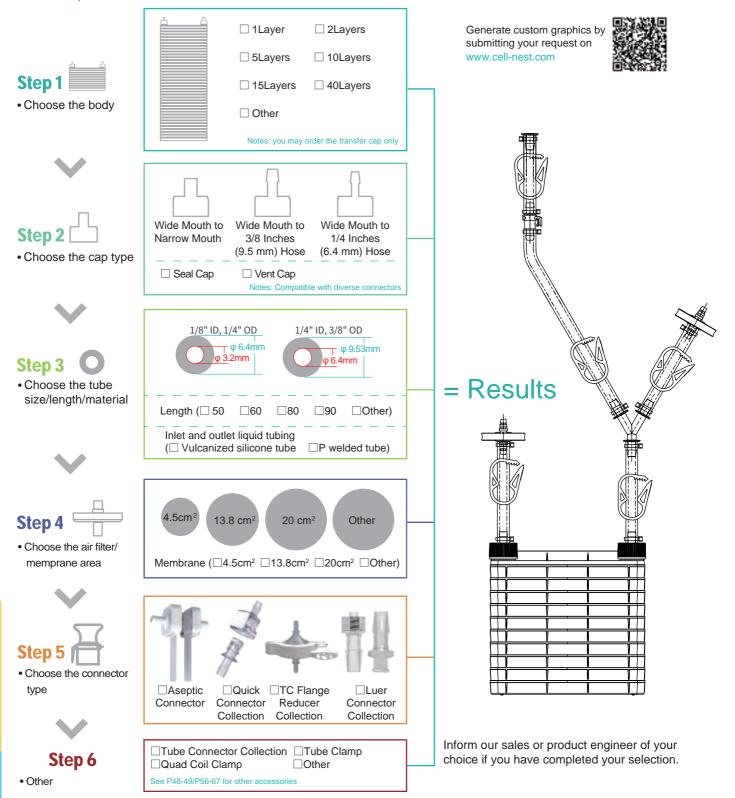


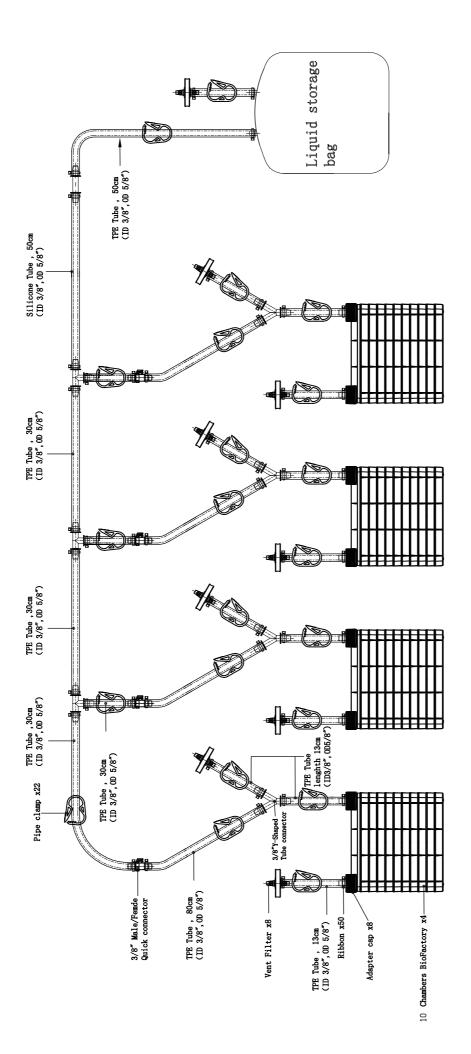
The NEST freeze-resistant BioFactory adopts a dispensing technique to glue different layers, thus its freeze resistance is upgraded. It can withstand freezing at - 18 ~ - 20 $^{\circ}$, and can be repeatedly frozen and thawed three times, with better firmness. Reminder: Due to the principle of thermal expansion and cold contraction, after the BioFactory uses a sealed cap to fill the culture media and freezes, the bottom or top layer may be slightly deformed. This is an inevitable and normal phenomenon, and there will be no leakage and will not affect normal use.

Laver	Cultivation	Dim	ension	(mm)	Description	Package	Cat.No.	
20.90.	Area (cm ²)	Length	Width	Height			Gal.NO.	
10	6320	335	205	201	2 Wide Plug Seal Caps TC Sterile	Double bag package, 1 pc / bag, 6 pcs / case	771392	

Biofactory Closed System Solution

To customize a NEST Biofactory Closed System Solution that meets your needs, follow these steps:





10Layers Biofactory Closed System Solution

Bioprocessing Solution

Biofactory Closed System Solution

Fitter: 0.22 µm PTEE membrane TPE thermoplastic tube Lengh: 80 cm Heat Seai: 1/4' 1D, 3/8' 0D Silicone tube Lengh: 8 cm Transfer cap is made of polyropylene plastic. Narrow-mouth adaptor cap of BioFactory, made of polyropylene (PP)	BioFactory Cap with PTFE Vent Filter
---	---

• Closed liquid transfer, avoiding open operation and reducing the risk of pollution in the process of liquid transfer.

- The liquid inlet tube can be aseptically welded under a normal environment.
- High-quality materials and smooth inner wall of the tube, ensuring an excellent transmission performance.
- Electron beam sterilization, $SAL = 10^{-6}$.
- No endotoxin and no components of animal origin.

Accessory information can be found on page 35.

Layer	Cultivation Area (cm²)	External Liquid Dia.	Transfer Tube Length Connector		0.2µm Filter Membrane area	/Case	Cat.No.
5	3160	TPE Tube: 1/4" ID, 3/8" OD	80 cm	Heat Seal	20 cm ²	2	C71754-BZD080A
10	6320	φ <u>6.</u> 4mm	ou chi	Heat Seal	20 cm ²	2	C71554-BZD080A

BioFactory Accessories

BioFactory Accessories





Description	/Pack	/Case	Cat.No.
Wide Mouth Seal cap for BioFactory	1	10	740001
Wide Mouth Vent cap for BioFactory	1	10	740011
Narrow Mouth Seal cap for BioFactory	1	10	740101
Narrow Mouth Vent cap for BioFactory	1	10	740111

Description	scription Size(mm) /Pack /Case Function		/Pack	Casa	Function	Cat.No.	
Description			Function	Cal.NO.			
Adaptor Cap	11.8	14.3	1	10	Wide Mouth to Narrow Mouth	740201	
Adaptor Cap	7.3	14.3	1	10	Wide Mouth to 3/8 Inches(9.5 mm) Hose	740302	
Adaptor Cap	5.9	8.8	1	10	Wide Mouth to 1/4 Inches(6.4 mm) Hose	740402	



Description	/Pack	/Case	Cat.No.
Filter Adapter Cap	1	20	740913
Solid Over Cap	1	20	740901
Cap with Filter Adapter Cap	1	10	740213



C71254-ZMC000B

Filter/inlet &outlet tubing for BioFactory BioFactory Cap with PTFE Vent Filter (0.22 μm Φ42mm), without BioFactory , Sterile 1 /Pack, 4 /Case

C71255-ZMD000B

Filter/inlet &outlet tubing for BioFactory

BioFactory Cap with PTFE Vent Filter (0.22 μm Ф50mm), without BioFactory 1 /Pack, 4 /Case



C71254-FBA080B

Filter/inlet &outlet tubing for BioFactory

BioFactory Cap with Silicon Tube (80cm 1/4 " ID3/8" OD), Male CPC Connector with Female Sealing Cap, without BioFactory, Sterile

1 /Pack, 4 /Case C71255-HCA080B

Filter/inlet &outlet tubing for BioFactory

BioFactory Cap with Silicon Tube (80cm 3/8 " ID5/8" OD), Male CPC Connector with Female Sealing Cap, without BioFactory, Sterile

1 /Pack, 4 /Case

(6)







Adaptor Connector to 3/8 Inches (9.5 mm)Hose 1 pcs / pack Compatible with transfer cap and narrow mouth One end is designed to fit the narrow mouth of BioFactory and the other end connects to a hose with a 3/8" ID

C71200-ZME000B

Hose Clamp*1 (743001) Intended for hoses with an OD ranging from 12mm to 18mm. Vent Filter *1 (742001) Hydrophobic membrane: PTFE, Pore size: 0.2 µm Membrane area: 20 cm². Silicone Ring*2 SPT-50 Hose*1 (15cm) (744001) ID: 3/8" (9.5mm) , OD: 5/8" (15.9mm)

C71275-ZME000B

Hose Clamp*1 (743001) Intended for hoses with an OD ranging from 12mm to 18mm. Vent Filter *1 (742001) Hydrophobic membrane: PTFE, Pore size: 0.2 µm Membrane area: 20 cm². 2 different Adaptor Caps*1 (741001) PTFE Material , ID:7.3mm Serrated OD: 10 mm Silicone Ring*2 SPT-50 Hose*1 (15cm) (744001) ID: 3/8" (9.5mm) , OD: 5/8" (15.9mm)

745001 BioFactory AccessoryLite Package

Adaptor Cap*1 (740201) Wide mouth to narrow mouth Adaptor Cap*1 (740302) ID 3/8" 2 different Adaptor Caps*1 (741001) Vent Filter *1 (742001) Hydrophobic membrane: PTFE, Pore size: 0.2 µm Membrane area: 20 cm². Hose Clamp*1 (743001) Intended for hoses with an OD ranging from 12mm to 18mm. SPT-50 Hose*1 (15cm) (744001) ID: 3/8" (9.5mm) , OD: 5/8" (15.9mm) 1 pcs / pack

751101 BioFactory Holder, Individually Wrapped

Material: aluminum alloy and silicone 1 pcs / pack, 5 pcs / case Function: to tilt for easy transfer Features:

The double "N" latch makes the width adjustable; the anti-slip silicone mat attached avoids abrasion and secures the stability.

Multiple adjustable positions for desired height Notes:

- ①Position 2 or 3 is recommended(Recommended working volume for each layer of BioFactory:150ml to 200ml)
- ②It is necessary to tilt the BioFactory forward manually to ensure all the liquid flows out when there is a small amount of liquid.







() 40-

Square Bottle & Closed System Solution



Square Storage Bottle is a reagent storage container commonly utilized in laboratories.NEST offers Square Storage Bottles in PET, PETG, and PC materials. Additionally, a fresh range of PET bottles featuring a classic square shoulder design is recently launched, offering a wider variety of specifications and liquid storage solutions.

The bottle body has high transparency, high mechanical strength, and strong impact resistance, making is convenient for observation and transportation.

- The material has strong tolerance, low temperature resistance, UV resistance, and is not easy to crack.
- The smooth inner surface minimizes the residue on the inner wall.
- Non-cytotoxic, non-pyrogenic, and free of animal-derived components

()

Square Bottle



Structural Features

- Cap: the mold for cap is specifically designed. The cap is formed through one-shot moulding without inner gasket, enabling it closer attached to the body for better sealing performance.
- Bottleneck: smooth buckle design reduces residue inside.
- Body: it has high transparency, high mechanical strength, strong impact resistance, and is convenient for observation and transportation. The smooth inner surface minimizes the residue on the inner wall. And thet hickness of the bottle wall is uniform for better anti-crack and anti-puncture capacity.
- Bottom: the bottom has curved inner corners that are easy to celan, and the bottom is injection molded with raw material infomr ation



Double-layer Packaging

- Enhanced protection: double-layer packaging offers additional protection for safety in case the bottles were damaged by extenral forces such as extrusion, vibration, and collision during rtansportation.
- Improved durability: double-layer packaging ensures durability and a longer service life.
- Compliance: in line with material entry requirements of the GMP purification workshop of the biological laboratoryr ation.

Double-layer Large Packaging • Economical and cost-effective: reducing costs of packaging and labor

• Improve efficiency: reducing the redundant loading and unloading operations for industrial customers when filling liquid, spurrnig the efficiency and reducing the labor intensity.

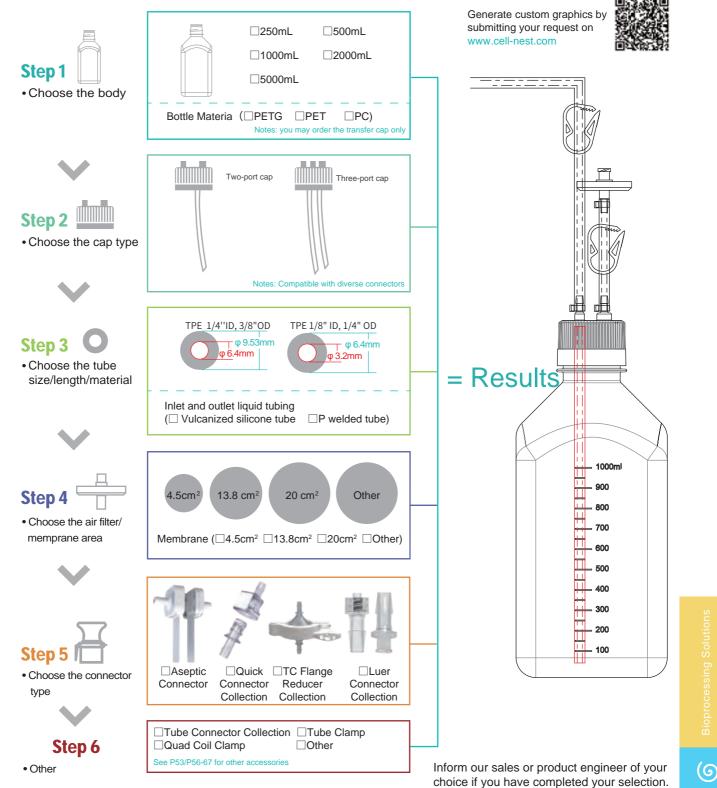
Tray-packed

- The tray-packed bottles features an one-piece plastic sealing coating by packaging equipment, which ensures better protection and less collision between and prevents contamination and loss.
- High space utilization by stacking.

Volume	(ml)		Doub	le-layer Pa	ackaging		Double-la	yer Large	Packaging		Tray	package	
volume	= (IIIL)	/Pack	/Case	PET	PETG	PC	/Pack	/Case	PET	/Pack	/Case	PETG	PC
30	C	5	40	/	354111	354314	/	/	/	40	280	354113	354313
60	C	6	48	354611	354511	354714	/	/	/	40	200	354513	354713
12	:5	6	48	353611	353511	353314	/	/	/	24	96	353513	353313
25	0	6	48	352611	352511	352314	/	/	/	30	60	352513	352313
50	0	8	24	333001	333511	333314	20	80	333004	20	40	333513	333313
50 (Square shoul	0 Ider design)	8	24	333621	/	/	20	80	333624	/	/	/	/
100	00	4	12	334001	334511	334314	12	48	334004	12	24	334513	334313
200	00	6	12	/	355114	355314	/	/	/	/	/	/	/
500	00	1	6	/	/	355714	/	/	1	/	1	/	/

Square Storage Bottle Closed System Solution

To customize a NEST Square Storage Bottle Closed System Solution that meets your needs, follow these steps:



Square Storage Bottle Closed System Solution





(Bi-Directional Transfer Cap) Bi-Directional Transfer Cap

Product Description

The newly launched NEST Closed System collection provides an aseptic liquid infusion solution for pharmaceuticals, biotechnology industry and laboratories. A standard Luer head is used in the joint of the system, enabling the operation more convenient. Also, the TPE material of tubes is in line with the requirements for industrial pharmaceutical enterprises, and is validated by a certified third party in accordance with BPOG Guide for Evaluating Extractables and Leachables.



Closed System Solution (3-Port Transfer Cap)

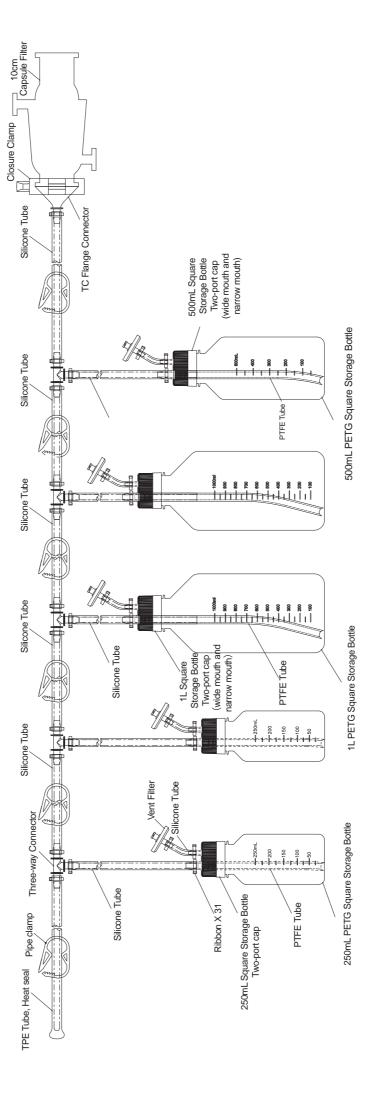


3-Port Transfer Cap

Application

- Various tubing specifications
- The injection-molded transfer cap is highly compatible with other major brands.
- The bottle body is made of PETG, which has high transparency, mechanical strength, low-temperature resistance, and UV resistance, making it suitable for observation and transportation.
- The unique external thick collar design of the bottle neck secures a sealed environment for experiments.
- Non-cytotoxic, non-pyrogenic, no animal-derived components.

	Transfer Cap		Tu	bing	Connector	0.2µm Filter Membrane	10	Cat	. No.
Compatibility	type	Material	Length	Dia.	Connector	area	/Case	Closed System	Transfer Cap
				TPE 1/4"ID, 3/8"OD	Female Luer	4.5 cm ²	10	C50921-BHB060A	C50921-BHB060B
250 mL	Bi-Directional			TPE 1/4"ID, 3/8"OD	MPC Male	4.5 cm ²	10	C50921-BBB060A	C50921-BBB060B
200 1112	Transfer Cap			TPE 1/8" ID, 1/4" OD	Female Luer	4.5 cm ²	10	C50922-AGB060A	C50922-AGB060B
				TPE 1/8" ID, 1/4" OD	MPC Male	4.5 cm ²	10	C50922-AAB060A	C50922-AAB060B
				TPE 1/4"ID, 3/8"OD	Female Luer	4.5 cm ²	10	C51021-BHB060A	C51021-BHB060B
500 mL	Bi-Directional			TPE 1/4"ID, 3/8"OD	MPC Male	4.5 cm ²	10	C51021-BBB060A	C51021-BBB060B
500 ML	Transfer Cap	TPE hose		TPE 1/8" ID, 1/4" OD	Female Luer	4.5 cm ²	10	C51022-AGB060A	C51022-AGB060B
		nuse	60cm	TPE 1/8" ID, 1/4" OD	MPC Male	4.5 cm ²	10	C51022-AAB060A	C51022-AAB060B
				TPE 1/4"ID, 3/8"OD	Female Luer	4.5 cm ²	10	C51121-BHB060A	C51121-BHB060B
	Bi-Directional Transfer Cap			TPE 1/4"ID, 3/8"OD	MPC Male	4.5 cm ²	10	C51121-BBB060A	C51121-BBB060B
1000 mL	Hansier Cap			TPE 1/8" ID, 1/4" OD	Female Luer	4.5 cm ²	10	C51122-AGB060A	C51122-AGB060B
				TPE 1/8" ID, 1/4" OD	MPC Male	4.5 cm ²	10	C51122-AAB060A	C51122-AAB060B
	3-Port Transfer Cap			TPE 1/8" ID, 1/4" OD	Female luer lock connector with luer plug	4.5 cm ²	10	C511AB-AGB060A	C511AB-AGB060B
	Bi-Directional			TPE 1/4"ID, 3/8"OD	Female Luer	13.8 cm ²	4	C50123-BHC060A	C50123-BHC060B
2000 mL	Transfer Cap			TPE 1/4"ID, 3/8"OD	MPC Male	13.8 cm ²	4	C50123-BBC060A	C50123-BBC060B
	3-Port Transfer Cap			TPE 1/4"ID, 3/8"OD	Female Luer	13.8 cm ²	4 Double-layer	C501AA-BHC060A	C501AA-BHC060B
5000 mL	Bi-Directional Transfer Cap	Welding		TPE 1/4"ID, 3/8"OD	Heat-seal	13.8 cm ²	2	C50423-BZC060A	C50423-BZC060B
3000 ML	3-Port Transfer Cap	hose		TPE 1/4"ID, 3/8"OD	Heat-seal	13.8 cm ²	2Double-layer	C504AA-BZC060A	C504AA-BZC060B



Square Storage Bottle Closed System Solution

Carboy



Product Description

The barrel, the tap and the screw cap of the carboy are made from polypropylene (PP) and the gasket is made from thermoplastic elastomer(TPE), all of which are autoclavable for sterilization before use to prevent the growth of bacteria and other microorganisms. It is mainly used for storing and dispensing solutions, culture medium, also ideal for sterile water. The barrel is moulded with a 1-gallon or 5 liter scale markings for easy identification of liquid levels during operation. The sealing performance is secured by the TPE gasket and the thread on the finish, which is well matched to the cap.

Application

- Storage container for raw pharmaceutical materials or culture media that require autoclaving sterilization.
- Storage container for bulk raw pharmaceutical materials or other substances.
- Storage container for sterile water.

Volume (mL)	With Handle	Sterilization	/Case	With Tap	Without Tap
10	YES	NO	4	789001	/
10	YES	NO	6	/	789011
20	YES	NO	3	789101	789111

Carboy Accessories

Product	Sterilization	/Pack	/Case	Without Tap
83B 3-Port Cap, 1/4"ID Inlet and Outlet Ports, 1/4" Vent Filter Port, Non-Sterile	NO	1	2	789901
83B 3-Port Cap, 1/2"ID Inlet and Outlet Ports, 3/8" Vent Filter Port, Non-Sterile	NO	1	2	789911



General accessories for biopharmaceutical processes

Verification Checklist

Aseptic Connector

Product Performance Testing:

Radiation resistance test	Microbial challenge exp	periment	Nuclease test	Insoluble particulate test	
Freeze resistance test	Endotoxin test		High temperature and high press	ure resistance test	
• ISO 10993-5/USP 87	In vitro cytotoxicity	ISO 10993-6 Intramuscular implantation test			
tation test • ISO 10993-11/USP 88 Systemic toxicity test		ISO 10993-10 Irritation and delayed (persistent) hypersensitivity te		ent) hypersensitivity test	
	Freeze resistance test ISO 10993-5/USP 87	Freeze resistance test Endotoxin test ISO 10993-5/USP 87 In vitro cytotoxicity	Freeze resistance test Endotoxin test ISO 10993-5/USP 87 In vitro cytotoxicity ISO 105	Freeze resistance test Endotoxin test High temperature and high press ISO 10993-5/USP 87 In vitro cytotoxicity ISO 10993-6 Intramuscular implantation test	

Extractables and Leachables Test: USP<665> USP<1665>

Quick Connector Collection

Product Performance Testing:

Fatigue resistance test	Radiation resistance test	Acid and alkali resistance	e test	Nuclease test	Insoluble particulate test			
Pressure resistance test	Freeze resistance test	e resistance test • Endotoxin test		High temperature and high press	sure resistance test			
Biocompatibility test:								
ISO 10993-4 Hemolysis test ISO 10993-5/USP 87 In vitro cytotoxicity ISO 10993-6 Intramuscular implantation test								
 ISO 10993-4 Hemolysis test 	• ISO 10993-5/USP 87	In vitro cytotoxicity	• ISO 109	993-6 Intramuscular implantation test	t			

Luer Connector Collection

Product Performance Testing:

Seven tests of Luer conical connector in	n GB/T1962.2-2001 standard	High temperature and high pressure resistance test		
Sealing test	Freeze resistance test	Endotoxin test	Insoluble particulate test	
Radiation resistance test	Acid and alkali resistance test	Nuclease test		

Biocompatibility test:

• ISO 10993-4 Hemo	olysis test	ISO 10993-5/USP 87 In vitro cytotoxicity	 ISO 10993-6 Intramuscular implantation test
• ISO 10993-23 Skin	irritation test	ISO 10993-11/USP 88 Systemic toxicity test	• ISO 10993-10 Irritation and delayed (persistent) hypersensitivity test

Extractables and Leachables Test: USP<665> USP<1665>

TC Flange Reducer Collection

Product Performance Testing:

Pressure resistance test	Freeze resistance test	Endotoxin tes	st	High temperature and high pressure resistance test
Radiation resistance test	Insoluble particulate test	Nuclease test		Acid and alkali resistance test
Biocompatibility test:				
ISO 10993-4 Hemolysis test	• ISO 10993-5/USP 87 In vitro	cytotoxicity	• ISO	10993-6 Intramuscular implantation test
ISO 10993-23 Skin irritation test	ISO 10993-11/USP 88 Systemic toxicity test		ISO 10993-10 Irritation and delayed (persistent) hypersensitivity to	

Extractables and Leachables Test: USP<665> USP<1665>

Tube Connector Collection

Product Performance Testing:

Pressure resistance test	 Endotoxin test 		 High temperature and high pressure resistance test 					
 Radiation resistance test 	 Insoluble particulate test 	Nuclease test		Nuclease test		Acid and alkali resistance test		
Biocompatibility test:								
Biocompatibility test:								
Biocompatibility test: ISO 10993-4 Hemolysis test 	• ISO 10993-5/USP 87 In vitro	cytotoxicity	• ISO	10993-6 Intramuscular implantation test				

Extractables and Leachables Test: USP<665> USP<1665>

Sterile connector

NEST Aseptic Connector Collection provide a highly advantageous connection solution for disposable bioprocess systems. Its unique design allows for aseptic connections, even in non-sterile environments, ensuring both convenience and safety during fluid transfer processes.

It is commonly used to connect the medium container to a bioreactor or storage bag during cell culture, as well as for aseptic fluid transfer during feeding and sampling in downstream processes of biopharmaceutical production.

Features

- The gender-neutral design improves compatibility, making it easy to integrate into dispos able systems.
- The intuitive three-step connection process (open, dock, pull) is simple and convenient, eliminating the need for clamps, fixtures, or welding machines.
- The unique locking design allows the aseptic connector to be opened and reconnected, preventing potential inconvenience caused by mistakes.
- \bullet Supports E-beam sterilization (Max. 50 kGy) or autoclaving (121 $^\circ\!\!C$, 20 min).
- The built-in silicone gasket withstands pressure up to 410 KPa at room temperature.
- The main body is made of PC material, and the gasket is made of medical-grade silicone. Both materials comply with USP Class VI standards.
- Meets biocompatibility requirements of USP 87, USP 88, and ISO 10993 standards.
- Undergoes physical tests and is suitable for demanding application environments.

Specifications

NEST Aseptic Connector is a non-gendered connector. The standard type is compatible with hoses measuring 1/4", 3/8", 1/2", and 3/4", while the mini type is compatible with hoses measuring 1/8", 1/4", and 3/8". The mini type has a smaller body structure compared to the standard type and is specifically designed for low-flow applications.

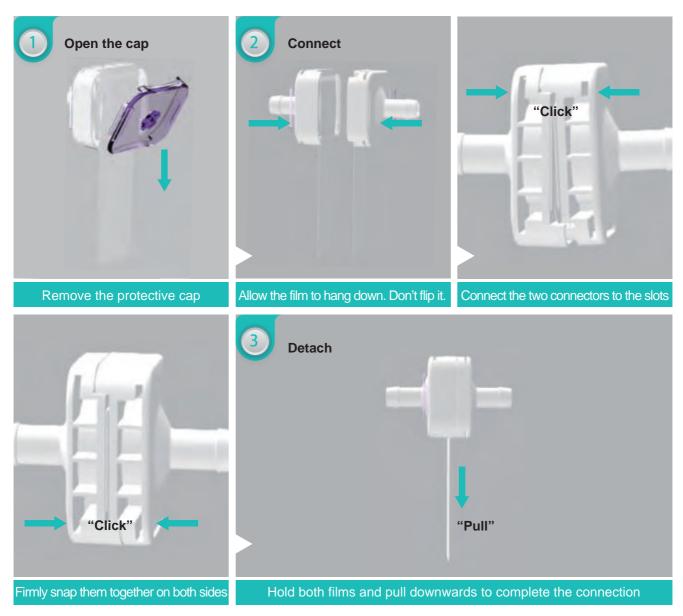


Product	Dia.	A (mm)	B(mm)	C(mm)		Packag	ging (Double E	agged)	Cat.No.
FIOUUCI	Dia.	A(mm)	D(IIIII)	C(mm)	D(mm)	Pcs/Bag	Bag/Pk	Pk/Cs	Callino.
	1/4"(6.4 mm)	45.15	36.2	16.3	8.1	1	10	1	747521
Standard	3/8"(9.5 mm)	45.15	38.0	17.8	10.95	1	10	1	747531
Standard	1/2"(12.7 mm)	45.15	41.5	22.3	14.2	1	10	1	747541
	3/4"(19 mm)	45.15	51.8	33.1	20.5	1	10	1	747551
	1/8"(3.2 mm)	40.7	29.3	11.05	4.55	1	10	1	747611
Mini-type	1/4"(6.4 mm)	40.7	33	15.20	8.1	1	10	1	747621
	3/8"(9.5 mm)	40.7	33.8	15.6	10.95	1	10	1	747631



(6)

Operating Instructions



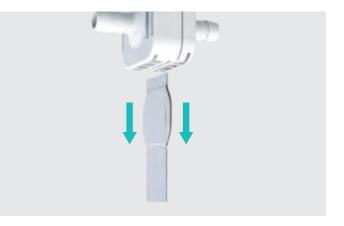
Notes

When connecting the two connectors, be careful not to flip the film. Keep the film in the correct position as shown in the diagram, and then connect the two aseptic connectors.





When pulling and detaching the film, make sure to pull both pieces together. Do not pull only one of them.



Quick Connector Collection

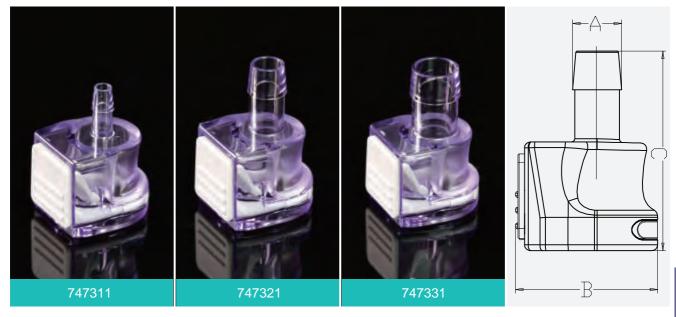
The NEST Quick Connector Collection include Male Quick Connectors and Female Quick Connectors that can be adapted to 1/8", 1/4", 3/8", and 1/2" hoses. These connectors are designed to reduce hose distortion by allowing rotation when connected to the hoses. Additionally, matching sealing caps and sealing plugs are provided.

Connector Material: PC Gasket: Silicone

Features

- Universally compatible with a wide range of quick connectors available in the market.
- Meets the biocompatibility requirements of USP 87, USP 88, and ISO 10993.
- Undergoes physical testing to withstand 410 kPa (30 minutes) at room temperature without any leakage.
- \bullet Supports e-beam sterilization (max. 50 kGy) or autoclaving (121 $^\circ\!C$, 20min).
- Large button area with a textured design for added convenience.

Female Quick Connector



Dia.	A(mm)	B(mm)	C(mm)	Pcs/Bag (Double Bagged)	Cat.No.
1/8"(3.2 mm)	4.7	23.5	28.9	25	747311
1/4"(6.4 mm)	8.1	23.5	33	25	747321
3/8"(9.5 mm)	11.15	23.5	33	25	747331

Male Quick Connector

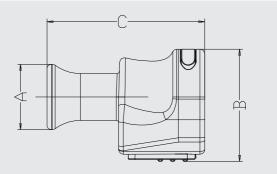


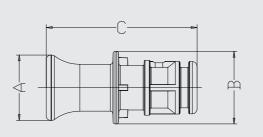
Dia.	A(mm)	B(mm)	C(mm)	Pcs/Bag (Double Bagged)	Cat.No.
1/8"(3.2 mm)	15.2	4.7	28.65	25	747211
1/4"(6.4 mm)	15.2	8.1	33	25	747221
3/8"(9.5 mm)	15.2	11.15	33	25	747231

Caps and Plugs









Product	A(mm)	B(mm)	C(mm)	Pcs/Bag (Double Bagged)	Cat.No.
Сар	13.7	23.5	33	25	747411
Plug	13.7	15.2	31.6	25	747421

TC Flange Reducer Collection

NEST TC Flange Reducer collection is designed for connecting hoses to auxiliary equipment (such as temperature sensors and liquid level sensors) and for aseptic liquid handling processes (such as filters and culture bags). It is particularly suitable for high-load bioprocesses. The collection is available in two sizes: 3/4" and 3/2". It is compatible with hoses with inner diameters of 1/4", 3/8", 1/2", 3/4", and 1". TC Flange Connector: PP

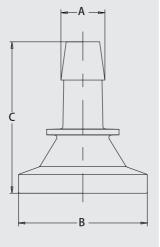
Gasket: Silicone

Clamp: Fiberglass reinforced nylon

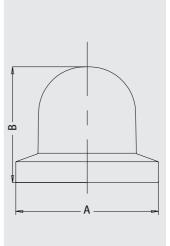
Features

- Meets the biocompatibility requirements of USP 87, USP 88, and ISO 10993
- Undergoes physical testing and can withstand 410 kPa (30min) without leakage at room temperature
- Supports E-beam sterilization (max. 50 kGy) or autoclaving (121 C, 20min)
- Smooth curved surface for uninterrupted liquid flow.



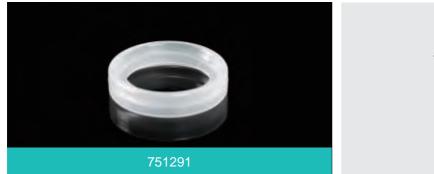




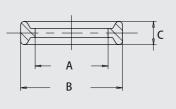


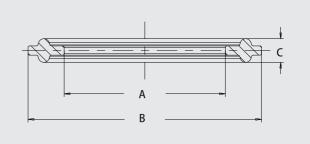
Product	Matching Dia.	A(mm)	B(mm)	C(mm)	Pcs/Bag (Double Bagged)	Cat.No.
3/4"TC Flange Connector	1/4"(6.4 mm)	8.5	25	29.4	100	751211
End Cap	/	25	20.3	/	100	750211
3/2"TC Flange Connector	1/4"(6.4 mm)	8.5	50.4	41.9	100	751411
End Cap	/	50.4	22.4	/	100	750231

Gasket







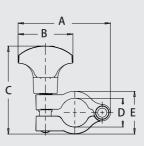


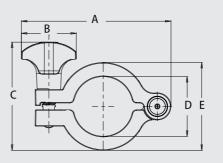
				Packaging (o	double-bagged)	
Specification	A(mm)	B(mm)	C(mm)	/Pack	/Case	Cat.No.
3/4"	Φ15.75	Φ22.00	5.00	25	100	751291
3/2"	Ф34.80	Ф50.40	5.10	25	100	751491

Closure Clamp









Specification	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)	Pcs/Bag (Double Bagged)	Cat.No.
1/2"—3/4"	67.40	40	64.15	21.00	31.20	25	750411
1"—3/2"	109	40	78.90	43.50	64.00	25	750431

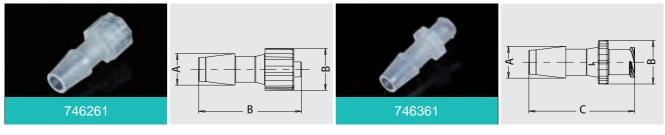
Luer Connector Collection

NEST Luer Connector provides a comprehensive connection solution for disposable bioprocessing systems. It is intended for the docking of laboratory equipment, the connection of inlet and outlet tubing for bioreactors, as well as the tubing connection for culture bags, fluid storage bags, and containers for cell (bacterial) culture sampling. Material: PP

Features

- Complies with ISO and GB/T 1962.2-2001 standards for Luer connectors, ensuring compatibility with all Luer connectors without the need for modifications.
- Meets the biocompatibility requirements of USP 87, USP 88, and ISO 10993.
- Undergoes physical testing and can withstand pressures of up to 410 kPa (30 minutes) without any leakage at room temperature.
- Supports E-beam sterilization (max. 50 kGy) or autoclaving (121 °C, 20 minutes).
- Features a hose hook design that ensures proper and secure tubing assembly.

Luer Connector



Product	Matching Hose ID	A(mm)	B(mm)	C(mm)	Pcs/Bag (Double Bagged)	Cat.No.
Male Luer Connector	Hose ID 1/4"(6.4 mm)	8.3	11.3	27.25	100	746261
Female Luer Connector	Hose ID 1/4"(6.4 mm)	8.3	11.3	27.55	100	746361

Luer Cap&Luer Plug



Product	Match	A(mm)	B(mm)	C(mm)	Pcs/Bag (Double Bagged)	Cat.No.
Luer Cap	Male Luer Connector	13.7	23.5	33	25	746411
Luer Plug	Female Luer Connector	13.7	15.2	31.6	25	746421





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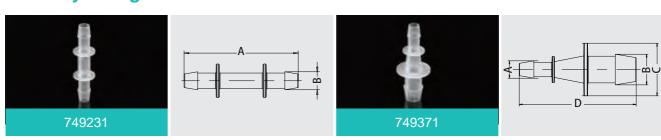
Tube Connector Collection

NEST Tube Fitting Collection features a Pagoda-shaped end and is available in a wide range of diameters, ranging from 1/8" to 1/2". It consists of straight, T-shaped, Y-shaped, Cross, and Reducer Connectors, meeting various customer needs. Material: PP materia

Features

- Meets biocompatibility requirements and complies with USP 87, USP 88, and ISO 10993 standards.
- Supports e-beam sterilization (max. 50 kGy) or autoclaving (121°C, 20min), Etc.
- Smooth inner wall to reduce liquid residue.

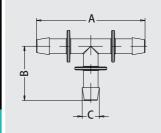
Two-way Straight Connector



Product	Dia.	A(mm)	B(mm)	C(mm)	D(mm)	Pcs/Bag (Double Bagged)	Cat.No.
Straight Connector	1/4"(6.4mm)	52	8.5	/	/	25	749231
Reducer Connector	1/4"×3/8"(6.4mm×9.5mm)	8.5	12.65	12.7	51.7	25	749371

Three-way Connector





Product	Dia.	A(mm)	B(mm)	C(mm)	Pcs/Bag (Double Bagged)	Cat.No.
T-Shaped Tube Connector	1/4"(6.4mm)	52.2	26	8.5	25	749631



Tube Clamp& Quad Coil Clamp

NEST clamp can effectively block the fluid flow in hoses with thick walls, allowing customers to easily control the inflow and outflow of liquids during liquid transmission.

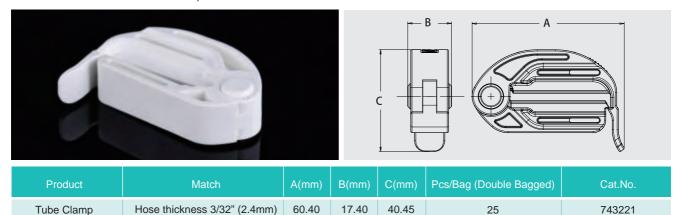
Quad Coil Clamp is primarily used to address the issue of excessive pipe length on equipment such as culture bags, bioreactors, and closed systems. It helps in managing and organizing the pipes, and prevents damage caused by zip ties.

Tube Clamp: Glass fiber reinforced nylon Quad Coil Clamp: HDPE

Tube Clamp

- Supports e-beam sterilization (max. 50 kGy)
- Smooth edges cause no scratches or damage;
- Able to withstand pressure of biopharmaceutical-grade pipelines, interrupting fluid flow completely.
- Withstands temperatures as low as -80°C, meeting requirements for extreme conditions.
- It is ready to use, simple, and convenient. It can be applied on the tube side and facilitates safe one-handed operation.

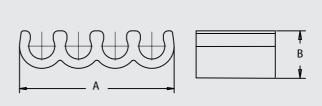




Quad Coil Clamp

- Raw materials meet USP CLASS VI standards.
- Supports E-beam sterilization (max. 50 kGy) or autoclaving (121 °C, 20 min).
- Each batch of products undergoes rigorous testing to ensure secure attachment of tube clamps to pipes.





Product	Match	A(mm)	B(mm)	Pcs/Bag (Double Bagged)	Cat.No.
Quad Coil Clamp	Hose OD 1/4"	31.3	7.8	100	750811

Generic Accessories



744001 SPT-50 Hose

Inner Dia # 3/8 Inches (9.5 mm) Outer Dia # 5/8 Inches (15.9 mm) 50 Inches/ 15 meters 1 pcs / pack Application: linking tubings for filling and draining operations



746001 C-Flex Welding Hose Inner Dia# 3/8 Inches (9.5 mm) Outer Dia# 5/8 Inches (15.9 mm) 50 Inches/ 15 meters 1 pcs / pack Application: linking tubings for filling and draining operations, heat weldable.



743001 Hose Clamp Hose clamp for 12-18 mm diameter hose 10 pcs / pack



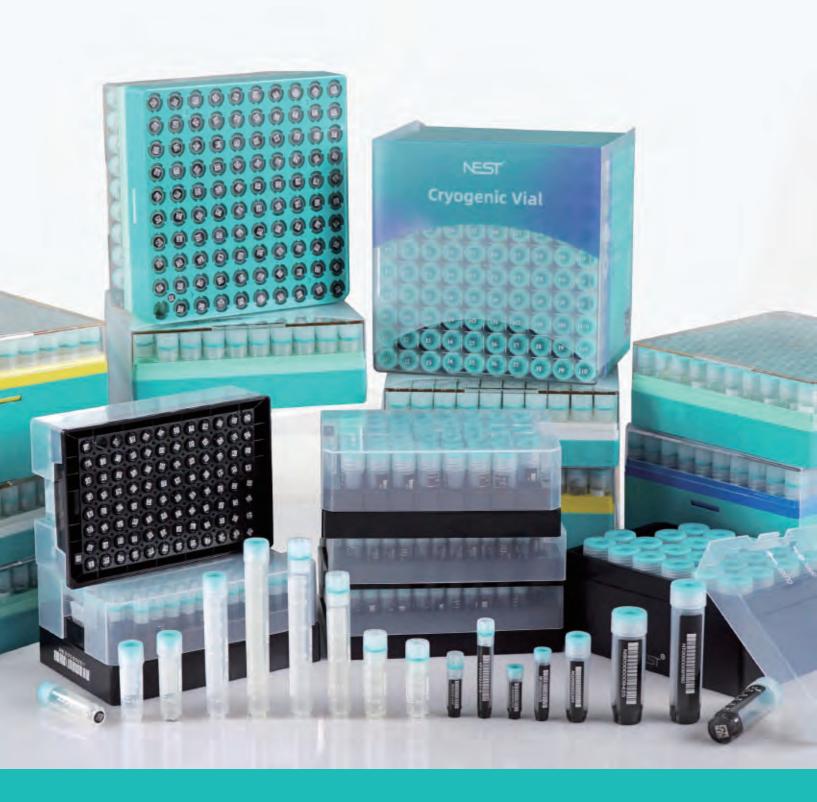
 742011
 0.22μm Vent Filter

 Pore size:0.22 μm
 Membrane area: 13.8 cm²

 1 pcs / pack, 5 pcs / case

742001 0.22µm Vent Filter

Hydrophobic membrane : PTFE Pore size:0.2 μm $\,$ Membrane area : 20 cm^2 Packaging: individual sterile packaging, 1 pcs / pack, 5 pcs / case Application: Hose fitting



Biobank System

Cryogenic tubes, also known as freezing tubes, are commonly used for low-temperature preservation. They are a crucial laboratory consumable in the biological, pharmaceutical, food, and other industries. Made of medical-grade polypropylene (PP), cryogenic tubes can withstand low temperatures down to minus 196°C in a liquid nitrogen gas phase environment. They are available in three types: cryogenic tubes (without 2D barcode), 2D barcode cryogenic tubes and 3-code cryogenic tubes.

√High-quality raw materials:

Top quality and food grade resin is adopted, which complies with USP Class VI, pharmaceutical and laboratory standards, is adopted. It contains much lower concentrations of trace element extractables than glass.



✓ High-Precision Technology: Equipped with high-precision injection-stretch-blow molding equipment and automated equipment for manufacturing.

✓ **Multiple Specifications** : Multiple specifications are available to meet various requirements. We offer standard cryotubes, cryotubes with QR codes, and cryotubes with triple-codes. These are available in both regular box packaging and SBS format for automation.



High Quality Standards: Certified by ISO13485 and ISO 9001, with batch stability.

Conomical and Environmentally Friendly: Some products are reusable and extremely durable, reducing the waste of disposable containers and preventing the leakage of harmful substances, making them environmentally friendly.

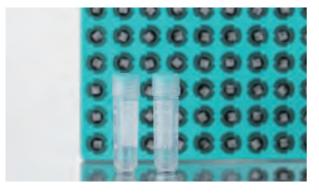
Manufacturing e	enterprise certification		cess, quality standards, tation and use verification	Testing by third-pa ional inspection a		
	ISO 9001, ISO13485	Process test	Injection molding machine, mold performance verification	Biological testing	In vitro cytotoxicity test	
Qualification certificate	EDA CE Sealing test	GB/T16886.5-2017	Skin sensitivit	y test		
	Irradiation ISO 13485, ISO 11137		Cryogenic test	GB/T16886.4-2003	Skin irritation test	
Sterility testing	ISO 7 requirements		High-temperature sterilization test	GB/T16886.10-2017	Acute systemic toxicity test	
laboratory Environmental	GB 50591-2010	Performance test	DNase/RNase	GB/T16886.11-2021	Hemolysis test	
testing	GB/T 16294-2010		Endotoxin		Heavy metal con- tent of materials	Pb, Sn, Cd, Ci
	ISO 8 requirements		Bottom 2D barcode integrity test			Reducing
workshop environmental	GB 50073-2013		Irradiation process verification	Physical and		substances
testing	YY0033-2000		Sterile packaging verification	chemical testing	Leachable	рН
Purified Water System Validation	GMP requirements	Sterility and particle assurance	Product sterility test	GB/T14233.1-2008	testing	Evaporation
Raw material verification	Physical and chemical testing		Insoluble particle detection			residue
	Extractable testing		Drop and transportation verification			UV absorbance

Complete stability and safety verification reports



Volume optimization

Volume selection based on quantity and type of sample.



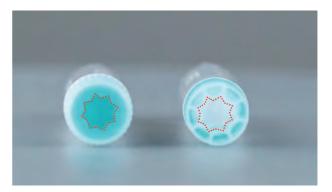
Material upgrade

New polymer material, improved cryogenic and anti-aging performance, high-temperature and high-pressure sterilization.



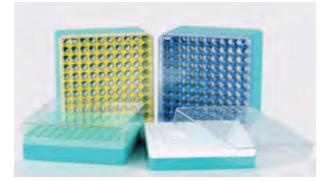
Improved sealing ability

Soft rubber sealing surface design, passing vacuum test, ensuring sample safety.



Suitable for automation

"Eight-petal plum" design, reduces manual process, contamination risk, and labor cost.



• More specifications Filling gap for 4 mL, 5 mL, and 10x10 box series, meeting various research needs.



• Multi-color cap inserts Color-coded cap inserts for easy sample identification.

/pe		Ext	ernal thread	сар			Internal th	nread cap	
e (mL)	1.0	1.5	2.0	4.0	5.0	1.5	1.8	4.0	5.0
height (mm)	46	40.7	45.5	76.3	93.3	40.7	45.5	76.3	93.3
arameters (mm)	5.3		10				8.	.3	
liameter Φ (mm)	8.85 12.85						12.	.10	
rature Range		-196 to 121°C				-196 to 121°C			

Temper Note:

Outer di

1. The thread of the external thread cap is not directly exposed to the outside, which minimizes the possibility of cross-contamination;

2. The internal thread cap has the same diameter as the cryogenic tube, which has an advantage in intensive storage applications;

3. The maximum volume of the external thread cap is closer to the nominal volume than the internal thread cap. Since the content volume usually increases during liquid freezing, the recommended usage volume of both external and internal thread cap cryogenic tubes is 80% of the maximum volume;

4. Both storage methods are aimed at ensuring the safety of cryogenic storage and can be freely selected according to the user's actual needs.





Cryogenic Tubes (without 2D barcode) – Bag Package

Cat. No.	Volume (mL)	Сар Туре	/Pack	/Box	/Case
618901	1.0	External thread	96	/	960
606901	1.5	External thread	50	500	2000
607401	2.0	External thread	50	500	2000
608401	4.0	External thread	50	250	1000
609401	5.0	External thread	50	250	1000
606801	1.5	Internal thread	50	500	2000
607301	1.8	Internal thread	50	500	2000
608301	4.0	Internal thread	50	250	1000
609301	5.0	Internal thread	50	250	1000

Cryogenic Tubes - Rack Package

Cryogenic Tubes Cat. No.	2D Barcode Cryogenic Tubes	Volume (mL)	Сар Туре	Packaging	/Rack	Racks/Case
606902	606952	1.5	External thread	10*10	100	14
607402	607452	2.0	External thread	10*10	100	12
608402	608452	4.0	External thread	10*10	100	8
609402	609452	5.0	External thread	10*10	100	6
606802	606852	1.5	Internal thread	10*10	100	14
607302	607352	1.8	Internal thread	10*10	100	12
608302	608352	4.0	Internal thread	10*10	100	8
609302	609352	5.0	Internal thread	10*10	100	6
618906	/	1.0	External thread	8*12	96	10
SBS /	612891	2.0	External thread	6*8	48	10
/	614591	4.0	External thread	6*8	48	10

SBS Format Cryogenic Tubes

Sealing design

 New sealing structure design, optimized sealing performance, better liquid nitrogen sealing, smoother feel.

High-quality raw materials

- Made of medical-grade high-purity polypropylene, ultra-high rigidity toughening material, excellent weather resistance, compliant with ISO10993 standards.
- No DNase, no RNase, no endotoxin.

Encoding rules

- Three-code-in-1 composed of DATAMATRIX code, barcode and readable code, laser-etched on the bottom and side of the tube.
- Codes are high contrast for easy reading, ratch-resistant, not easy to fall off, resistant to DMSO and other organic solvents.
- Hgh uniqueness of laser-etched international standard DATAMATRIX codes.

At the same time, NEST can customize exclusive encodings. If you have any requirements, please contact us. For more information, please visit our official website at www.cell-nest.com.

Quality assurance

- Produced in GMP 100,000-level clean room certified according to ISO 9001, ISO 13485 quality system certification.
- Strict production process, well-developed management system to ensure batch quality stability.

Sterility assurance

• E-beam sterilization, SAL=10⁻⁶.

Box features

External thread cap

Internal thread cap

- Cryogenic box identifier code: We have a unique QR code at the bottom of the rack and a one-dimensional barcode laser engraved on the side of the rack. When reading the cryogenic tube information, the box information is also read automatically.
- Box lid buckle: The cryogenic box is designed with a buckle which can be tighyly fitted with the box to prevent scattering when dropped. The buckle switch is also convenient, even if frozen in liquid nitrogen will not fail to ensure sample safety.





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SBS Format Cryogenic Tubes

					-10			THE REPORT OF TH	STATE OF THE OWNER OW		
Сар Туре			Exte	ernal thread	d cap			Internal t	hread cap	External t	nread cap
Volume (mL)	0.5	0.75	1.0	2.0	4.0	6.0	8.0	0.5	1.0	4.0	1.9
Overall height (mm)	27.6	37.3	45.6	45.5	76.3	57.5	71.7	33.5	51.4	76.76	42.96
Size parameters (mm)		5.3		1(0	10	.3	6.5	55		
Outer diameter Φ (mm)		8.85		12.	85	17	.8	8.	7	12	.8
Temperature Range	-196 to 121°C						-196	to 121°C			

Note:

1. The thread of the external thread cap is not directly exposed to the outside, which minimizes the possibility of cross-contamination;

2. The internal thread cap has the same diameter as the cryogenic tube, which has an advantage in intensive storage applications;

3. The maximum volume of the external thread cap is closer to the nominal volume than the internal thread cap. Since the content volume usually increases during liquid freezing, the recommended usage volume of both external and internal thread cap cryogenic tubes is 80% of the maximum volume;

4. Both storage methods are aimed at ensuring the safety of cryogenic storage and can be freely selected accoring to user's actual needs.



SBS 3-Code Cryogenic Tubes - Bag Package

Cat. No.	Volume (mL)	Сар Туре	/Bag	Racks /Case
612541	0.5	External thread	96	10
612641	0.75	External thread	96	10
612741	1	External thread	96	10
612841	2	External thread	48	10
614541	4	External thread	48	10
614641	6	External thread	24	10
614741	8	External thread	24	10
612521	0.5	Internal thread	96	10
612721	1	Internal thread	96	10



SBS 3-Code Cryogenic Tube - Rack Package

Cat. No.	Volume (mL)	Сар Туре	/Rack	Racks /Case
612551	0.5	External thread	96	10
612651	0.75	External thread	96	10
612751	1	External thread	96	10
612851	2	External thread	48	10
614551	4	External thread	48	10
614651	6	External thread	24	10
614751	8	External thread	24	10
612531	0.5	Internal thread	96	10
612731	1	Internal thread	96	10

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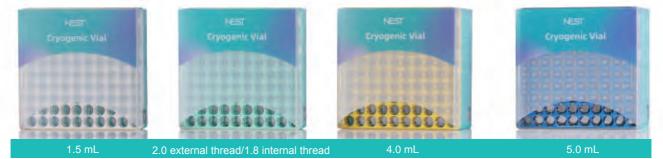
Cap Inserts / Cryogenic Box

Cap Inserts

	Cat. No. (NEW)	Color	Sterilization	Quantity/Bag	Bags/Case
1.	611201	White	No	100	10
	611202	Red	No	100	10
	611203	Yellow	No	100	10
	611204	Blue	No	100	10
all the second sec	611205	Green	No	100	10
	611206	Purple	No	100	10

*Nest new version/upgraded cryogenic vials to work with NEST's latest collection of Cryogenic Vials.

Cryogenic Box





- PC transparent cover, PC-ABS high-strength composite material base.
- Temperature range from -196°C to 70°C.
- Alphanumeric grid for easy sample labeling and identification.
- Each box contains drainage holes and vents, which accelerate the discharge of cold air and reduce condensation.
- Packaging with independent product and batch identification for quality traceability.

Cryogenic Box

Cat. No.	Compatible Cryogenic Tube Capacity (mL)	Format (Holes)	Size (L x W x H)	Color	Sterilization	Quantity/Box
616651	1.5	10*10	133.6×133.6×44	White	No	14
616051	2.0 external thread/1.8 internal thread	10*10	133.6×133.6×48.8	Green	No	12
616151	4.0	10*10	133.6×133.6×79.5	Yellow	No	8
616551	5.0	10*10	133.6×133.6×96.5	Blue	No	6

3-Code-in-1 Cryogenic Vial

Cat. No.	Compatible Cryogenic Tube Capacity (mL)	Format (Holes)	Size (L x W x H)	Sterilization	Quantity/Box
616041	2.0	8*6	127×85.3×48.3	No	10
616841	6.0	4*6	127×85.3×60.4	No	10

*Nest new version/upgraded cryogenic vials to work with NEST's latest collection of Cryogenic Vials.

Defrosting Device

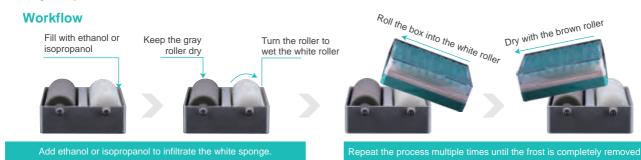


Product introduction

The NEST defrosting device is a tool used to quickly remove frost from the bottom of boxed cryogenic vials. When cryogenic vials are stored in liquid nitrogen vapor phase or -80 ° C freezer, ice can form at the bottom of the vials. However, to ensure the rapid reading of cryogenic vial decoding systems, it is necessary to clearly identify the 2D code at the bottom of the vial. Therefore, rapid defrosting is a necessary step.

Features

- Wide compatibility: can be used for 24, 48, 96, and 384 formats of different brands of cryogenic boxes.
- Sample integrity: achieves bottom defrosting without heating, and the sample can still maintain a frozen state.
- Practicality: sponge roller is easy to assemble. The first roll requires the addition of a special reagent, and the second roll dries it, making it easy to use.



Product name	Defrosting device	Consumables for the defrosting device	Sponge
Cat. No.	106001	Product number	106003/106004
Base material	Aluminum alloy	Material	High-quality sponge
Defrosting part	High-quality sponge	Color	White/Brown
Supporting reagent	Ethanol	Packaging method	1 piece/pack

Vertical Freezer Racks



Cat. No.	Size (mm)	Size (mm) Maximum number of boxes S		Pcs/Case
200301	454H x 143D x 140W	8	133x133x51	6
200302	677H x 143D x 140W	12	133x133x51	6
200303	724H x 143D x 140W	13	133x133x51	6
200304	789H x 143D x 140W	14	133x133x51	6
200305	845H x 143D x 140W	15	133x133x51	6

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Cat. No.	Size (mm)	Size (mm) Maximum number of boxes		Pcs/Case
200321	492H x 143D x 140W	6	133x133x75	6
200322	653H x 143D x 140W	8	133x133x75	6
200323	724H x 143D x 140W	9	133x133x75	6
200324	814H x 143D x 140W	10	133x133x75	6

Cat. No.	Size (mm) Maximum number of boxes		Size of boxes (mm)	Pcs/Case
200341	413H x 143D x 140W	4	133x133x98	6
200342	616H x 143D x 140W	6	133x133x98	6
200343	717H x 143D x 140W	7	133x133x98	6

Sample Freezing **Recommendations**

() Safety Risks and Recommendations:

NEST cryogenic vials are made of polypropylene (PP), which has good chemical resistance and low-temperature performance. The temperature range for using cryogenic vials is -196°C to 121°C. They can be sterilized at high temperature and high pressure or placed in liquid nitrogen vapor.

However, it is not recommended to store them in liquid nitrogen due to the risk of cross-contamination. Liquid nitrogen has very low surface tension, which can cause it to flow into tightly capped cryogenic vials. After removing a cryogenic vial, residual liquid nitrogen may vaporize, creating explosion and injury risks.

If the sample has already been stored in the liquid phase of liquid nitrogen, the following measures are recommended to reduce the risks:

- · Place the cryogenic box and cryogenic vial in liquid nitrogen vapor phase for 24 hours before removing from the liquid nitrogen tank to allow the liquid nitrogen to evaporate.
- When handling, be sure to wear protective goggles and gloves to prevent cryogenic vial rupture.
- Add a cryogenic vial sleeve before freezing the sample.

Please note that correct use and storage of cryogenic vials are critical steps to ensure the quality and safety of biological samples. Therefore, please follow the correct operating procedures and safety measures when using and storing cryogenic vials to ensure the reliability of biological sample quality and research results.

Preserving Sample Activity



- When handling low-temperature samples, it plays the role of a portable refrigerator, quickly cooling and temporarily stabilizing the temperature, maximizing the preservation of cell, nucleic acid, protein, and other sample activities.
- Suitable for tissue culture incubators, biosafety cabinets, and other limited space situations.



Module

	Product number	Product name	Size (mm)	Application		
1	200904	2 mL module	119*101*38	30 holes for 2 mL cryogenic vials		
	200905	1.5 mL module	119*101*38	48 holes for 1.5 mL cryogenic vials		
	200906	5 mL module	119*101*38	30 holes for 5 mL cryogenic vials		
	200907	PCR module	119*101*38	96 PCR holes		

Cell Freezing Box

			2	001
JS	cell	types.	including	ster

- Used for freezing variou m cells, primary cells, cell lines, and yeast, etc.
- "Slow freezing" to protect cell activity; just place in a -80°C freezer to make the sample cool down 1°C per minute.
- Zero addition and zero emissions, permanent use, and responds to the call of environmental protection.

Product number	Shap	Sepcifications (mm)	Application
200101	Hexagonal	S108X100 (S: Side Length)	cryogenic tubes of
200102	Square	117X117X100	microcentrifuge tubes(12-φ13)

Ice Free Cool Box

Product number	Size (mm)	Weight (g)	Application
200103	152x170x123	1300	Includes 200902 ice core and 2mL module 200904
200901	152x170x123	140	Without ice core and module, multiple cooling sources and modules can be selected.

Ice Core

	Product number	Product name	Temperature range	Freezer temperature	Freezing time	Size (mm)
ne	200902	Cold core	0.5°C~4°C	-20°C	4h+	105 x 100 x 26
			0.5°C~4°C	-80°C	2h+	105 x 100 x 26
	200903	Freezing core	-18°C~-4°C	-20°C	6h+	105 x 100 x 26
	200303		-18°C~-4°C	-80°C	3h+	105 x 100 x 26

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Liquid Transfer

Automation Tips

Brand T Automation Tips



Brand H Automation Tips





300uL

Compatible with Brand H Systems

1000uL

Brand T Automation Tips: 50 / 200 / 1000 µL (Available in various packagings with or without filters) **Brand H Automation Tips:** 50 / 300 / 1000 µL (Available in various packagings with or without filters) Compatible with Brand B Systems: 190 / 250 µL (Available in various packagings with or without filters)

Compatible with Brand B Systems



Compatible with Brand B Systems

Advantages

- · Medical-grade black conductive polypropylene (PP) materials.
- Electron beam sterilization: Safe and fast, without chemical residue.
- · Uniform conductivity: Tips of the same box sharing the same cavity number ensures the product traceability and the conductivity uniformity and improves the accuracy of experimental results, greatly reducing the difference among each tip.

50uL

- The smooth inner surfaces of tips supported by the unique processing technology greatly reduces the amount of residual liquid.
- The porous filtration of filter tip ensures optimum performance. And the super hydrophobicity of the tip forms a strong barrier against aerosols thus eliminates the risk of cross-contamination among samples.
- Strong package: The package of thickened high-strength blister card is resistant to impact and dropping, which ensures the integrity and safety of the product under harsh transport conditions.
- Good air tightness and adaptability: The structure mapping is conducted as per the original adapter and the proven injection-molding ensures that the products have good air tightness and adaptability, improving the mechanical precision of the products during work.
- Strict quality management and control test: Class 100,000 clean workshop, effective quality inspections are conducted under strict quality management including tests for DNA, RNA, proteases, and pyrogens, satisfying clients' needs.
- · Air tightness test: Precise equipment is used to test the air tightness between the tip and the adapter, to ensure good air tightness for each batch of products.
- Tests for resistance and CV values: A certain number of products are sampled for each batch for inspection, which is conducted by precise and unique measuring tools for accuracy and reliability of the test results to ensure the uniform conductivity of products.

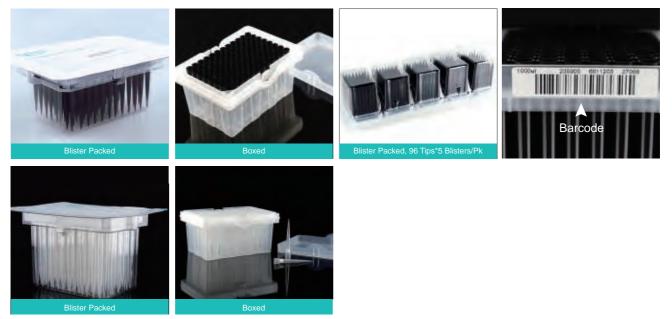
Adaptation model

- Brand T automation conductive tips may be used with the TECAN Freedom EVOlyzers and fully automatic sampling systems.
- Brand H automation conductive tips are used in conjunction with Hamilton series workstations.
- Brand B robotic tips are used in Beckman FX/NX, Biomek i5/ i7 and Biomek 3000.

Brand T Automation Tips

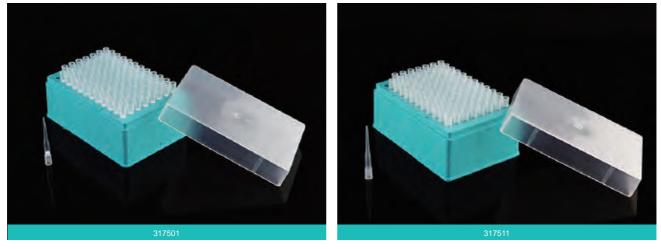


Brand H Automation Tips

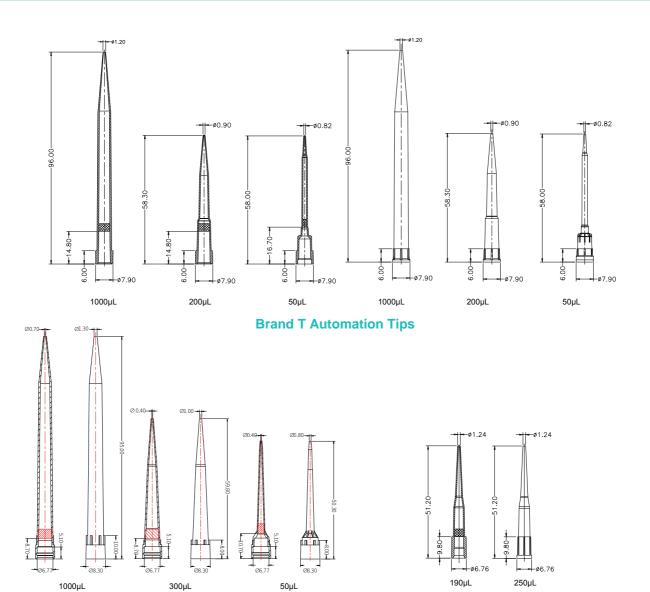


	Operation	Deckering	Automation C	onductive Tips	Robotic Tip	
Volume (µL)	Specification	Packaging	No Filter	Filter	No Filter	Filter
	Blister Packed	96 pcs/rk 24 rks/pk	345002	345012	/	/
50	With Barcode, 96 Tips*5 Blisters/Pk	96 pcs/rk 60 rks/pk	345005	345015	/	/
50	With Barcode, 96 Tips/Pk	96 pcs/rk 24 rks/pk	/	345013	345503	345513
	Boxed, With Barcode	96 pcs/box, 10 boxes/pk, 5 pks/cs	/	345069	345509	345519
	Blister Packed	96 pcs/rk 24 rks/pk	345102	345112	/	/
	With Barcode, 96 Tips*5 Blisters/Pk	96 pcs/rk 60 rks/pk	345105	345115	/	/
300	With Barcode, 96 Tips/Pk	96 pcs/rk 24 rks/pk	/	345113	345603	345613
	Boxed, With Barcode	96 pcs/box, 10 boxes/pk, 5 pks/cs	/	345169	345609	345619
	Blister Packed	96 pcs/rk 24 rks/pk	345202	345212	/	1
4000	With Barcode, 96 Tips*5 Blisters/Pk	96 pcs/rk 60 rks/pk	345205	345215	/	/
1000	With Barcode, 96 Tips/Pk	96 pcs/rk 24 rks/pk	/	345213	345703	345713
	Boxed, With Barcode	96 pcs/box, 10 boxes/pk, 5 pks/cs	/	345269	345709	345719

Brand B Automation Tips



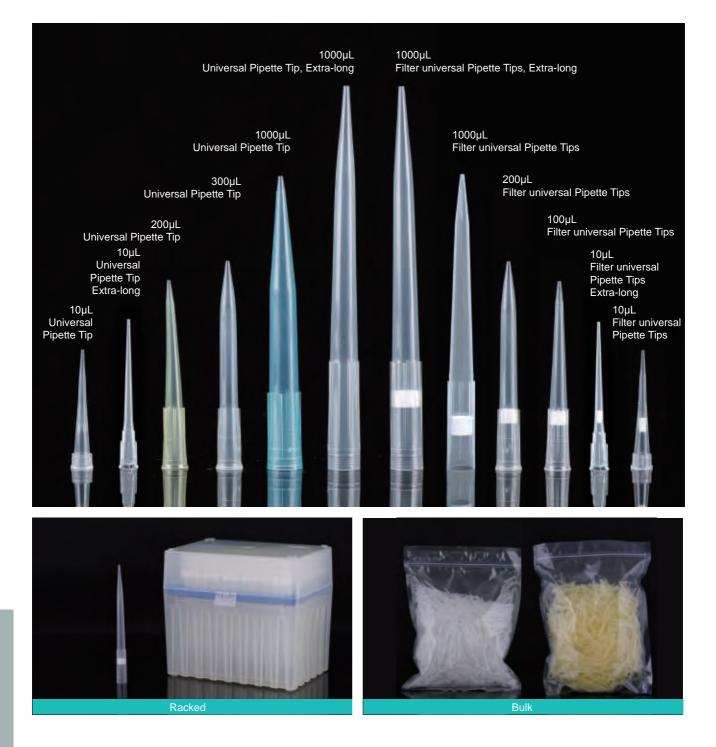
Volume (µL)	Filter	Sterilization	/Box	/Inner box	/Case	Cat.No.
250	NO	YES	96	960	4800	317511
190	YES	YES	96	960	4800	317501



Brand H Automation Tips

Brand B Automation Tips

Pipette Tips



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Feature

- Standard size: suitable for major pipettes on the market.
- Smooth interior: minimizes residue and ensures accurate pipetting.
- High-quality materials: the imported PP materials is in line with USP Class VI.
- High-quality filter: pure UHMW polyethylene through unique processing technology.
- Super hydrophobicity: hydrophobic filter forms a solid barrier to aerosols, eliminating the risk of cross-contamination between sample and pipette.
- Optimal pore size: ensures smooth aspiration
- · Advanced technology: ultra-fine grinding and moulding technique without mould release agent ensures better product quality.
- Innovative design: ensures good flexibility, sealability and compatibility.
- Standard workshop: Class 100,000 cleanroom to ensure the products are free of pyrogen and DNase/RNase.
- Transparency: good transparency make it easy to observe the liquid level during use.
- Resistant to organic solvents: used to pipette various organic solvents.
- Individual labelling: each package has a Cat. NO for quality tracking and traceability.
- Highly efficient sterilization- Larger effective membrane filtration area of 4.9 cm².
- High flow rate and throughput.

Pipette Tip Bulk, Non-Sterile

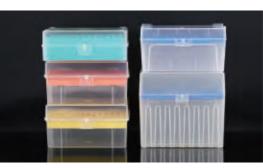
	Universal Pipette Tips			Filter Universal Pipette Tips				
Volume (µL)	Colour	/Pack	/Case	Cat.No.	Colour	/Pack	/Case	Cat.No.
10	Clear	1000	20000	301006	Clear	1000	10000	311001
10 (Extra-long)	Clear	1000	10000	314001	Clear	/	/	/
100	/	/	/	/	Clear	1000	10000	316001
200	Yellow	1000	20000	302106	Clear	1000	10000	312001
300	Clear	1000	10000	305006	Clear	/	/	/
1000	Blue	1000	5000	303206	Clear	1000	5000	313006
1000 (Extra-long)	Clear	500	5000	304006	Clear	500	5000	313001

Pipette Tip Racked, Sterile

	Universal Pipette Tips				Filter Universal Pipette Tips					
Volume (µL)	Colour	/Box	/Pack	/Case	Cat.No.	Colour	/Box	/Pack	/Case	Cat.No.
10	Clear	96	960	4800	301016	Clear	96	960	4800	311012
10 (Extra-long)	/	/	/	/	/	Clear	96	960	4800	314036
20	/	/	/	/	/	Clear	96	960	4800	310012
100	/	/	/	/	/	Clear	96	960	4800	316012
200	Yellow	96	960	4800	302116	Clear	96	960	4800	312012
300	Clear	96	960	4800	305016	/	/	/	/	/
1000	Blue	100	1000	5000	303216	Clear	96	960	4800	313016
1000 (Extra-long)	Clear	96	960	4800	304016	Clear	96	960	4800	313012

Tip Box, Box without tips

Volume (μL)		Middle panel	Packing	Cat.No.	
Universal Tip Box	Filter Tip Box	holes	Facking	Gat.NO.	
10	/	96	50 pcs/cs (Box only)	351001	
10 (Extra-long)	/	96	50 pcs/cs (Box only)	351601	
200	20/100	96	50 pcs/cs (Box only)	351101	
300	200	96	50 pcs/cs (Box only)	351401	
1000	1000	100	50 pcs/cs (Box only)	351201	
1000 (Extra-long)	1250	96	50 pcs/cs (Box only)	351301	



Liquid Transfe

Stackable Tip Refill

Features

- NEST Refill Pipette Tips, Bulk are more convenient for customers to use, saving work and shortening work time, and improving work efficiency.
- NEST Refill Pipette Tips, Bulk are used for quantitative transfer of liquid consumables. They are used in experimental fields with liquid transfer operations, such as in biology and chemistry, and for liquid transfer in cell culture laboratories, liquid addition, liquid suction, or other liquid transfer uses.



Product Introduction

The stacked tips are assembled by stacking 5-10 different-sized tips into the tip box holder. They are convenient for customers to use, reduce costs, and have a high utilization rate. Only one box bottom is needed, and when one box is used up, another one can be loaded into the box holder.

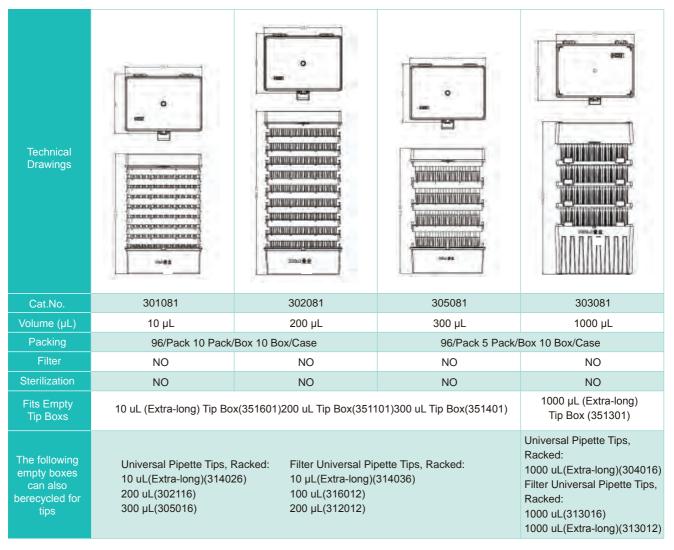
Product Usage and Application Direction

- Product usage: more convenient than bagged pipette tips and more economical than single-box packaging, improving work efficiency and saving work time.
- Application direction: genomics, proteomics, cytology, immunodetection, metabolomics, biopharmaceutical research and development, and other commonly used high-throughput liquid transfer uses.

Product features

- Experimental-grade polypropylene (PP) is used for all injection-molded parts of the product.
- The whole set of products is assembled by stacking 5-10 pieces, which is convenient for customers to use.

Product specifications

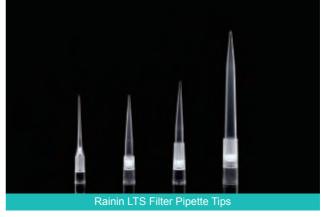


Rainin LTS Pipette Tips

Coming soon







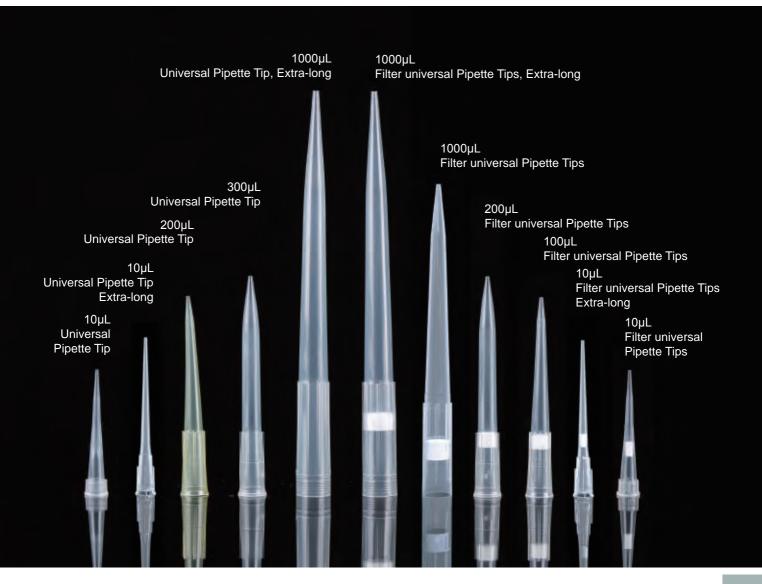
With the constant efforts and many tests of our engineers, we are glad to announce that the alternative RAININ LTS tips are also available for purchase. This kind of tip is different from the universal tips. With a similar design to RAININ LTS Pipette Tips, it could be compatible well with RAININ LTS pipettes.

Meanwhile, like all other pipette tips, it is made from virgin polypropylene and manufactured in a Class 100,000 cleanroom. Also, our smart production line ensures minimal human contact during production. Thus, these tips are free of DNase, RNase, human DNA, and endotoxins.

Features

- Made from virgin polypropylene.
- Compatible well with RAININ LTS pipettes.
- RNase, DNase, Human DNA, Pyrogen-Free.
- Sterilized by E-beam SAL=10⁻⁶.

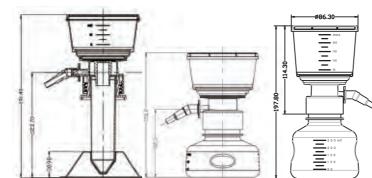
Low-Retention Pipette Tips Coming soon

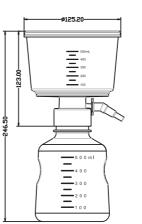


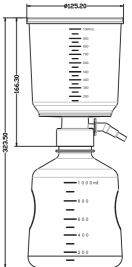
-iquid Transfer

Vacuum Filtration System









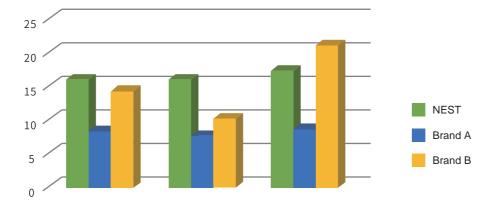
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Features

- High flow rates and flux.Low protein binding and low chemical extractability.
- Pore size: 0.22 µm.
 Non-Pyrogenic, DNase/RNase free.
- Sterilized by E-beam, SAL=10⁻⁶.
- Individually packaged in sterile bag.
- Endoxin free,pyrogen free.For laboratory use only.
- If the package is damaged, please do not use.

Membrane Type	Hydrophilicity	Features	Application Directions	Cautions
PES	Hydrophilic	Low protein adsorption, high flow rate, wide PH range, high chemical compatibility, good heat resistance.	For general culture media and aqueous solutions, polar or middle-polar solvents, neutral aqueous solutions.	Not applicable for chloroform, esters, amides and strong acids or strong bases.
PVDF	Hydrophilic	Wide practicability, good oxidation resistance and heat resistance.	May be used for aqueous solutions and most solvents, including strong non-polar solvents. Ideal for preparations of HPLC and GC.	Not applicable for strong acids and bases.
MCE	Hydrophilic	Strong chemical compatibility and low protein adsorption, the optimum pH range is 3-6.	Used for particle analysis of general culture media and aqueous solutions. HPLC sample preparation.	The set should not be used for filtration of ethanol and alkaline solutions. The working temperature should not be over 40°C.
CA	Hydrophilic	High flow rate and heat stability as well as very low adsorption, stable within the range of pH 4-8.	It may resist most alcohols and oils, and is suitable for sterling filtration of aqueous solutions, buffers, serum and culture media, as well as filtration of the moving phase of HPLCD.	The CA membrane may accommodate a smaller volume of buffer since it has low hydrophilia.

Comparison of the flow rate of different brands of vacuum filters



	DMEM+10%FBs	RPMI1640+10%FBs	TSB
NEST	16	16	17.39
Brand A	8.33	7.69	8.7
Brand B	14.29	10.26	21.1

Vacuum Filtration System

Volume (µL)	Pore Density	Vacuum Filtration System	ms (Sterile)1/Pack, 12/Case	Bottle Top Vacuum Filter	(Sterile) 1/Pack, 24/Case
(μm)		PES Membrane	PVDF Membrane	PES Membrane	PVDF Membrane
	0.10	347002	347102	347012	347112
50	0.22	347001	347101	347011	347111
	0.45	347003	347103	347013	347113
	0.10	346002	346102	346012	346112
150	0.22	346001	346101	346011	346111
	0.45	346003	346103	346013	346113
	0.10	342002	342102	342012	342112
250	0.22	342001	342101	342011	342111
	0.45	342003	342103	342013	342113
	0.10	343002	343102	343012	343112
500	0.22	343001	343101	343011	343111
	0.45	343003	343103	343013	343113
	0.10	344002	344102	344012	344112
1000	0.22	344001	344101	344011	344111
	0.45	344003	344103	344013	344113

Polystyrene Storage Bottles (Sterile)

	Size (mm)			Pac	king	Cathle	
Volume (µL)	Height	Bottleneck Diameter	Bottom Diameter	/Pack	/Case	Cat.No.	
150	80		89.15	1	24	346021	
250	105	42	88	1	24	342021	
500	145	42	96	1	24	343021	
1000	178.5		122	1	12	344021	

Warning

- Do not use plastic bottles, glass bottles, flasks or containers that are not designed for filtration and cannot withstand negative pressure to connect to the upper cup.
- · Not suitable for culture flasks larger than 2L.
- Working temperature: 4-37°C.
- Working pressure: 0.03-0.06Mpa, if there is foam, please reduce pressure appropriately.
- Tighten the upper cup and bottle mouth by hand, but do not over tighten.
- · Personal protective equipment must be used at all times, and goggles must be worn when using vacuum equipment.
- Work on the aseptic operating table.
- It is not recommended to recycle any hazardous substances, hazardous substances, wastes or biochemically hazardous materials.

Adaptor for Vaccum Filtration System

Introduction

NEST Adaptor for Vaccum Filtration System is designed to seamlessly connect the upper cup and the lower container with a 38mm mouth. This meets the filtration needs of customers who use containers of this size.

Features

- It makes a 38mm lower container a viable alternative to the regular one with 45mm
- mouth for filtration, thus minimizing the risk of contamination during liquid transfer. • Validated by the Sealing Performance Test, ensuring no leakage even with the
- additional adaptor.

Descirptions	Packaging	Cat.No.
Adaptor for Vaccum Filtration System	1 pc/pk, 10 pks/cs	334591



Precautions: It is important to use a lower container that is rigid and has thick walls, because thin-walled containers run a certain risk of depression during negative pressure filtration.

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Syringe Filter



Syringe filters are used in fields like life sciences, pharmaceuticals, environment, biotechnology, food and beverages, agricultural testing laboratories, etc. In particular, they are widely used in life science laboratories to sterilize samples of small volume, such as proteins, additives, buffers, reagents and drugs. The one-piece injection molded package of syringe filters is made of medical polypropylene, which is resistant to high pressure and product leakage.

Features

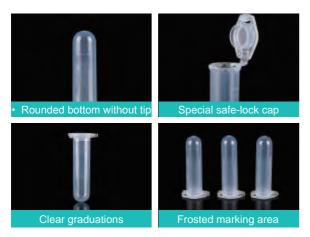
- Highly efficient sterilization
- Larger effective membrane filtration area of 4.9 cm².
- High flow rate and throughput.
- Sterilized by E-beam, SAL=10⁻⁶.
- Non-Pyrogenic, DNase/Rnase free.

Size (mm)	Pore Size (µm)	Membrane	/Pack	/Case	Cat. No.
30	0.22	PES	1	100	331011
30	0.22	PVDF	1	100	331001
25	0.22	PES	1	100	331111
13	0.22	PES	1	100	331211

Precautions

- · When handling chromatography samples, avoid introducing other impurities during the filtration process.
- Do not use a syringe with a volume less than 10 cc, which may cause excessive pressure in the injection tube thus resulting in membrane damage or personal injury.
- · Single use only.
- Discard the initial few filtrates, of which the volume is about the volume of the filter.

Microcentrifuge Tube





• USP VI grade polypropylene material, free from heavy metal.

• Sterilized by E-beam, SAL=10⁻⁶.

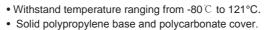
• RNase free, endotoxin level less than 0.1EU.

• Each package is individually labelled with a Cat.NO for easy quality tracking and traceability.

Brown colour provides protection from light, especially for light-sensitive substances.

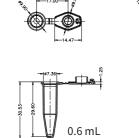
Volume (mL)	Bottom	Color	Sterile	/Pack	/Bag	/Case	Cat.No.
		Clear	Non-sterile	1000	/	10000	605001
0.6	Conical	Clear	Sterile	50	750	7500	605601
0.0	Conical	Amber	Sterile	50	750	7500	605401
		Amber	Non-sterile	50	750	7500	605501
		Clear	Non-sterile	500	/	5000	615001
1.5	Conical	Clear	Sterile	50	400	4000	615601
		Amber	Sterile	50	400	4000	615401
	Round	Clear	Non-sterile	500	/	5000	620011
2.0	Round	Clear	Sterile	50	400	4000	620611
	Round	Clear	Non-sterile	200	200	2000	603011
5.0	Round	Clear	Sterile	200	200	2000	603111

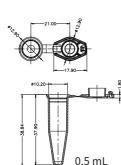
Micro Tube Box

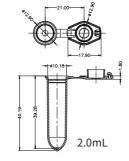


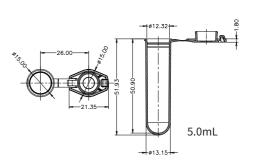
• Non-sterile.

Application (mL)	Spec (well)	/Pack	/Case	Cat.No.
0.6	10*10	5	8	613001
1.5/2	8*8	5	8	613111









RCF: 30,000 xg.Autoclavable at 121°C/15psi

15/50 mL Centrifuge Tube









Features

- Printed Graduations (with marking area).
- Polypropylene tube and high-density polyethylene cap.
- High centrifugal strength up to 12,000xg.
- Flat markable cap with leakproof seal.
- One-hand operation design for the caps is easy to handle.
- Sterilized by E-beam, SAL=10⁻⁶.
- Non-Pyrogenic, DNase/Rnase free.

Premium Level

- Up to the standards of biological analysis.
- High strength non-toxic materials.
- Raw material comply with USP VI complies.

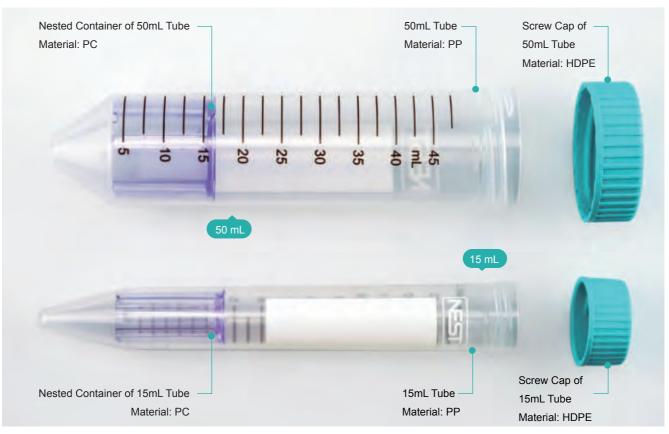
Centrifuge Tube Rack

- Made of virgin polypropylene.
- Reusable and economic.
- Non-sterilized.

Application	/Case	Cat.No.
For 15 mL Tubes	50	610001
For 50 mL Tubes	50	610101

Volume	Volume (mL) Color Pack	Deckoging	Max.RCF(xq)		Max.RCF(xg) Sterile		cking	Cat.No.	
(mL)		Packaging	Wax.RCF(xy)	Sterlie	/Pack	/Case	Premium Level	Standard Level	
	Clear	PS Rack	12000	50	500	601001	601051		
15	Clear	Bulk	12000		50	500	601002	601052	
	Amber	PS Rack	12000		50	500	601201	/	
	Clear	PS Rack	12000	Yes	25	500	602001	602051	
50	Clear	Bulk	12000		25	500	602002	602052	
	Amber	PS Rack	12000		25	500	602201	/	
50 (Self-Standing)	Clear	Bulk	5000		25	500	/	602072	

Peripheral Blood Lymphocyte Separation Tube



This product separates and purifies cells with separation solution by means of density gradient centrifugation according to the difference in cell density. With the density gradients generated inside, the target cells can be retained on top of the nested container in the tub, which is designed specifically to separate the target sample from the density gradient medium to the utmost extent; while erythrocytes and granulo-cytes will sink at the bottom after centrifugation, and the PBMC (Peripheral Blood Mononuclear Cell, including lymphocytes and monocytes, etc.) will float on the surface. Only the simple operation of decanting is involved in the final stage, and no other professionally technical operations required.

Features

- Rapid separation and purification for PBMC within only 15 min.
- Simple operation procedures: no need to slowly and laboriously add samples into the solution; when collecting samples, simply decant the centrifuge tube. No other professionally technical operations are required.
- · Good reproducibility for reduced errors and less operation variation among users.
- E-beam sterilized with SAL=10⁶.
- Pyrogen free, nucleases free.

Usages and Application Directions

Peripheral Blood Lymphocyte Separation Tube is mainly applied to separate Peripheral Blood Mononuclear Cell (lymphocytes and monocytes) from whole blood or bone marrow through density gradient centrifugation. For research use only.

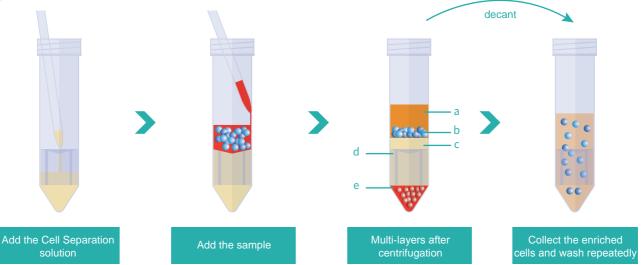
Volume (mL)	Capacity(mL)	Sterile	/Pack	/Case	Cat.No.
45	15 4-9	Yes	50	500	601852
15			50	150	601851
50	12.20		25	500	602852
50	50 13-30		25	100	602851

Instructions

Preliminary Preparation

- Cool off the separation solution away from light to the room temperature (RT) .
- Add the separation solution by a serological pipette through the central hole of the nested container: for a 15 mL tube, add approximately 4 mL separation solution; for a 50 mL tube, add approximately 13 mL separation solution; Please ensure the separation solution on top of the nested container throughout the procedure.
- Add the drawn anticoagulated blood and bone marrow into the separation tube cooled off to the room temperature. Besides, adding saline to dilute the specimen is not requisite but can help improve the separation result.

Separation

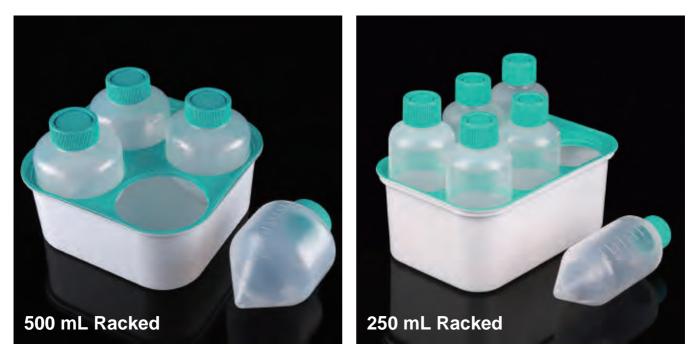


- Slowly pour or pipette the anticoagulated sample (blood or bone marrow, diluted with saline if needed) along the tube wall into the tube slowly: for a 15 mL separation tube, 4-9 mL of the sample is recommended; for a 50 mL separation tube, 13-30 mL of the sample is recommended.
- Centrifuge at room temperature with a centrifugal force of 1200 x g for 10 minutes, then turn off the centrifuge. For samples left for more than 24h, longer centrifugation time is recommended.
- Liquid separation condition after centrifugation (from top to bottom): A. plasma; B. enriched cell fractions (intermediate phase contains lymphocytes/PBMCs cells); C. separation solution; D. nested container; E. precipitation (erythrocytes and granulocytes). Collect or directly discard the plasma layer of 5-10 mm above the enriched cells to prevent the enriched cells from re-contamination by platelets.
- Collect the enriched cells (lymphocytes/PBMCs cells) and pour the supernatant from the separation tube into another clean centrifuge tube, during which the nested container works to prevent the enriched cells from re-contamination by erythrocytes and granulocytes. Don't invert the separation tube for more than 2s.
- Wash the enriched cells (lymphocytes/PBMCs cells) with Phosphate Buffer Solution(PBS) then centrifuge them at 250 xg for 10 min.
- Repeat the washing 2 times as in step 5 and finally re-suspend cells with 5 mL PBS.

Precautions

- This product should be operated by professionally trained personnel under the guidance of good laboratory practices.
- Do not re-use the separation tube.
- Specific separation effects may vary due to the difference in centrifuges' performance from different brands and the difference in regional temperature and environment. Users may adjust the speed and time of centrifugation to find out the best separation conditions (up to respective laboratory).
- The product is applicable to the sample of human peripheral blood, bone marrow and umbilical cord blood, but not to leukocyte isolation samples, samples with brownish yellow layer of erythrocyte sedimentation nor samples over 48 hours.
- After centrifugation, cells may aggregate on the tube wall above the enriched layer, which is a normal phenomenon influenced by the quality, sample placement time and anticoagulant type of sample, but independent of the use of the separation tube. Cells can be removed by scraping the interior wall with a pipette tip.
- When specimens of any biological origin are involved, operate the blood taking needles, blood collection tubes and related instruments, etc. cautiously in accordance with strict protocols. Do treat specimens as hidden dangerous sources of infectious diseases such as HIV, HBV, HCV, etc, in which case disposable gloves are necessary in order to avoid the risk of infection during operation.

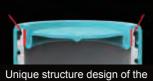
250/500 mL Centrifuge Tube



The 250 mL & 500 mL centrifuge tubes can process a large number of samples at one time and are suitable for the separation and harvest of large amounts of cells, supernatants, bacteria, yeast and tissue samples. Therefore, they are widely used in the field of life sciences and clinical.

Application

- Separation of sediments after chemical reactions for harvest and application.
- Harvest of biomacromolecules, inorganics and organics.
- In biochemistry and other biological fields, usually used to centrifuge and collect a large volume of cells, biomacromolecules and supernatants.



cap provides double security



Newly added o-ring



Increased the thickness of conical bottom

Features

- · Unique structure design of the cap provides double security, further improving the tight seal ability.
- Increased the thickness of conical bottom in order to improve the maximum centrifugal limit.
- Polypropylene tube and high density polyethylene cap.
- Max. centrifugal limit 7000xg.
- Temperature range: -80 °C~120 °C.
- Clear scale.
- DNase, RNase and pyrogen free.
- E-beam sterilization, SAL=10⁻⁶
- Separation of sediments after chemical reactions for harvest and application.
- · Harvest of biomacromolecules, inorganics and organics.
- In biochemistry and other biological fields, usually used to centrifuge and collect a large volume of cells, biomacromolecules and supernatants.

Packaging	Sterile	Volume (mL)	/Pack	/Case	Cat.No.
Bulk	Yes	250	6	102	622001
Bulk	Yes	500	6	36	623001
Racked	Yes	250	6	24	622002
Racked	Yes	500	4	24	623002

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97

Centrifuge Tube Closed System Solution



Product Description

The pre-assembled Closed System of Centrifuge Tube is convenient for aseptic sampling and transfer during biological production procedures. Each is double-packed and equipped with a seal cap which can be used to substitute the pipes in case of subsequent centrifugation and analysis.

The pre-assembled Closed System of Centrifuge Tube is convenient for customers in biomedical/biopharmaceutical/vaccine production industries to aseptically sample and transfer the tissue and cell culture/ vaccine solutions, which can effectively save the assembling and sampling time and lower the cost.

Features

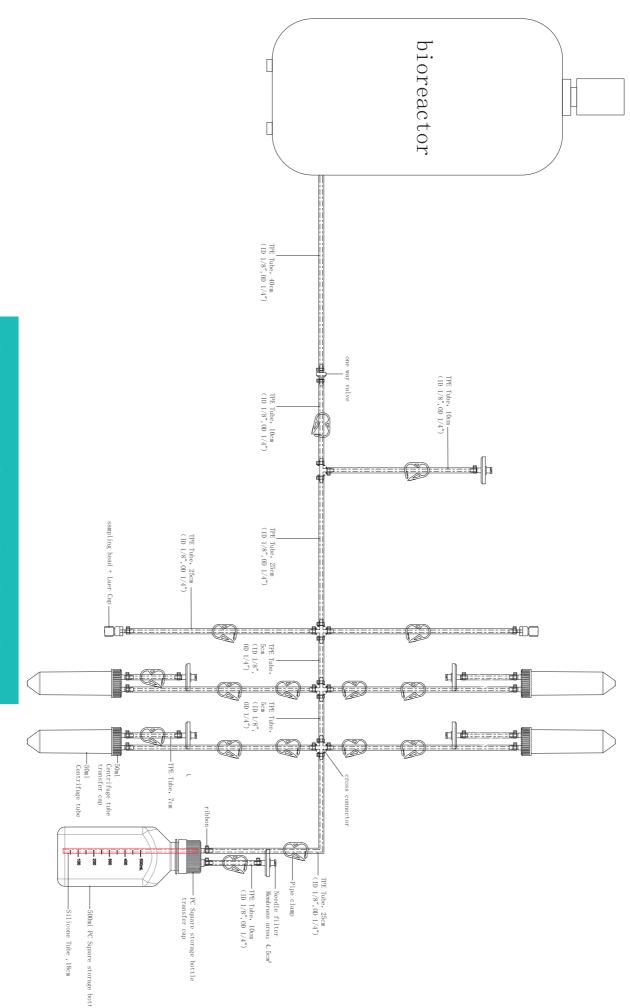
- The pre-assembled Closed System is ready to use at hand. The closed liquid transfer avoids the contamination risk of open transfer and eliminates the necessity of subsequent cleaning validation.
- The pipeline material meets the requirements of industrial pharmaceutical enterprises, and is connected to male taper at the connector, which prevents accidental disconnection and offers convenience.
- The double aseptic packaging suits GMP production.
- Pipelines can be customized according to demand.

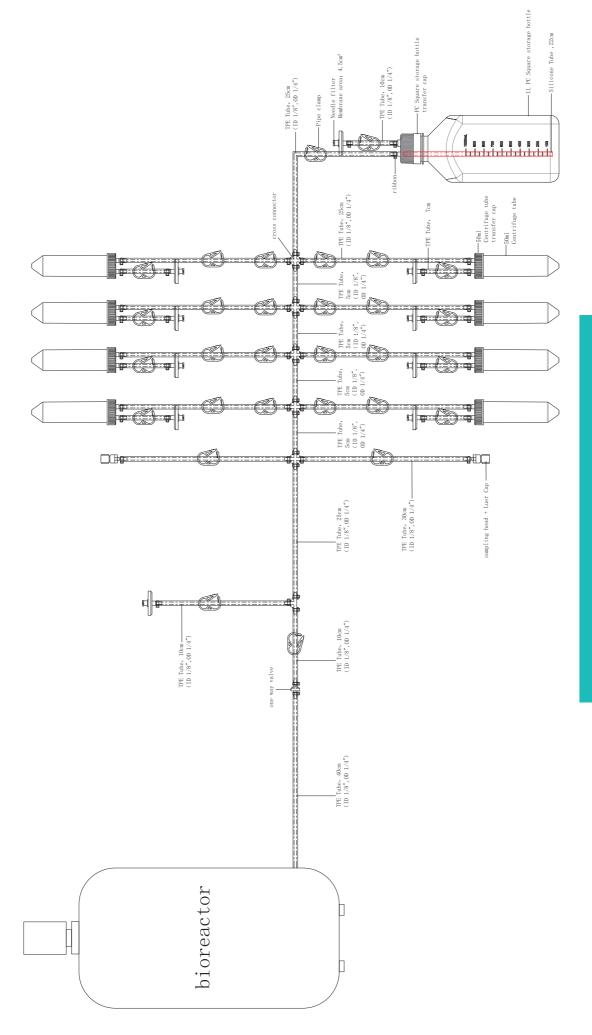
Volume (mL)	Tube Material			0.2µm Filter	/Case	Cat.No.
	Dia.	Length	Connector	Membrane area	/Case	Gal.NO.
50	1/8" ID, 1/4" OD		Male Luer		4	C60622-EFB050A
250	φ 6.4mm	50 cm	Connector	4.5cm ²	4	C60922-EFB050A
500	φ σ.ε.min				4	C61022-EFB050A



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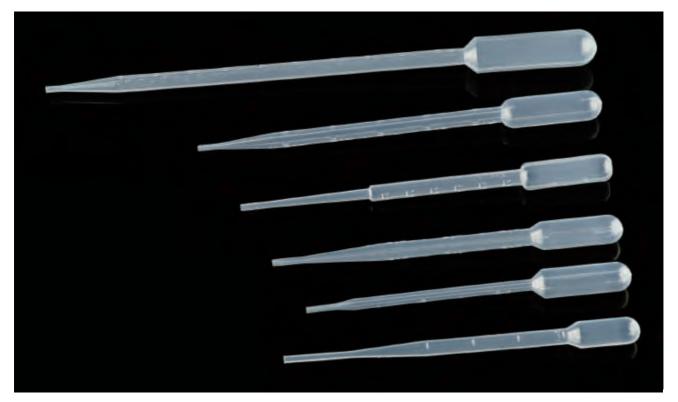




8 Outlet Paralleled Centrifuge Tube Closed System

Liquid Transfer

Pasteur Pipette



Features

- · Good chemical stability.
- Transparent with clear graduations for easy observation.
- Pipette can be twisted for use with micro vessels and special-shaped containers.
- Good resilience for rapid liquid transfer
- High precision and good repeatability.
- Each package is individually labelled with the batch number for easy quality tracking and traceability.
- DNase/RNase, endotoxin and pyrogenic free.
- Individually wrapped, sterilized by EO, SAL=10⁻⁶.

Volume (mL)	Length (mm)	Packaging	Sterile	/Pack	/Case	Cat.No.
		Individually Packed	Sterile	500	2000	318012
1	144	Bulk	Non-sterile	500	5000	318031
0		Individually Packed	Sterile	500	2000	318112
2 150	150	Bulk	Non-sterile	500	5000	318131
	100	Individually Packed	Sterile	500	2000	318212
3	162	Bulk	Non-sterile	500	5000	318231
	182 (Extra Long)	Individually Packed	Sterile	200	2000	318314
5	200	Individually Packed	Sterile	250	1000	318516
10	285	Individually Packed	Sterile	125	500	318417

Serological Pipette



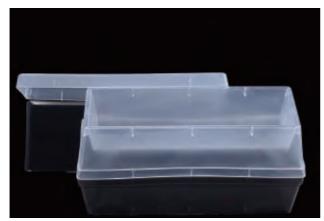
NEST serological pipettes can be used in biological research such as tissue culture and bacterial culture. They are made of highly transparent polystyrene and are individually packaged in paper-plastic bags. Pipettes of different specifications are distinguished by different colors.

Features

- Edged color-coded band for identification.
- Made of high clarity, 100% virgin polystyrene.
- Negative graduations for extra volume.
- Polyolefin fiber filter to reduce contamination.
- Each package is individually labelled with the batch number for easy quality tracking and traceability.
- Non-Pyrogenic, DNase/Rnase free.
- Sterilized by E-beam, SAL=10⁻⁶.

Volume (mL)	Sterile	/Box	/Case	Individually Plastic-plastic Wrapped	Individually Paper-plastic Wrapped
1	Yes	500	3000	324003	324001
2	Yes	400	2400	325003	325001
5	Yes	200	800	326003	326001
10	Yes	200	800	327003	327001
10 (Ink-free laser printed)	Yes	50	500	327303	/
25	Yes	200	800	328003	328001
50	Yes	100	600	329003	329001
100	Yes	50	300	/	329501

Reagent Reservoir



Features

- · Made of USP Class VI compliant polypropylene.
- The V shape bottom is compatible with single or multi-channel pipettes during cell culture, immunoassays, etc.
- A large capacity of 60 ml; injection-moulded with scale lines
- · Individually labelled with the Cat.NO for easy quality tracking and traceability.
- Non-Pyrogenic, DNase/Rnase free.

Volume (mL)	Sterile	Сар	/Pack	/Case	Cat.No.
60	No	Yes	5	125	360002
60	Yes	Yes	5	125	360012

Reservoir



12 Channel

96 Channel



Features

- Perfectly overcomes the surface tension of liquids during automated pipetting and minimizes liquid residues.
- Made of USP Class VI compliant polypropylene, and is chemically stable and resistant to chemical corrosion.
- Freezable down to -80° C
- · Less residue and wall hangings
- · Conforms to ANSI (American National Standards Institute) SBS standards.
- Each package is individually labelled with the batch number for easy quality tracking and traceability.
- Non-Pyrogenic, DNase/Rnase free. Low heavy metal content.
- Sterilized by E-beam, SAL=10⁻⁶.

Channel Troughs	Channel	Skirt	Volume	/Pack	/Case	Cat.No.	
Chariner Hougho		ONIT	(mL)	/1 aux	/0436	Non-sterile	Sterile
	Multi Well	Medium Profile	22	5	500	360101	360111
8	Multi Well	High Profile	32	5	500	360201	360261
	Single Well	High Profile	290	5	500	360205	360265
	Multi Well	Medium Profile	15	5	500	360102	360112
12	Multi Well	High Profile	22	5	500	360202	360262
	Single Well	High Profile	290	5	500	360206	360266
22	Single Well	Medium Profile	195	5	500	360103	360113
96	Single Well	High Profile	290	5	500	360203	360263
004	Single Well	Medium Profile	195	5	500	360104	360114
384	Single Well	High Profile	290	5	500	360204	360264

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Round Storage Bottle



Round Storage Bottle is sterile and made from enzyme-free plastic in line with product packaging and storage requirements in molecular biology and cell biology, laboratory medicine, genomics and proteomics, etc. Improvement in the quality of product packaging helps to improve the company image and brand value, make our products' packaging comply with international standards and enter the international market.

Features

- The raw materials, premium polypropylene (PP)/polyethylene (HDPE), are excellent in physical and chemical index and resistant to pressure, impact and acid-base. PP materials can undergo autoclave sterilization at 121°C; HDPE can be stored at -80°C.
- A full range of choices to meet different packaging and storage requirements.
- The properties of wash-free and ready to use mean no need for tedious pro-cleaning processing work. The internal packaging is thickened to ensure transportation and storage safety.
- The professional leak-proof design of bottle mouth guarantees excellent seal ability and exempts the need for inner cover or inner gasket for protection.
- 100% leaking-proof guarantee ensures safety even during air transportation; wide-mouthed design makes it easy to access liquid
 inside.
- No biotoxicity, pyrogen-free, DNAse/RNAse-free, manufactured in Class 100,000 clean workshop. The plastic bottles are sterilized using • by GAMMA-ray.
- Introduction of imported digital-controlled production equipment with high precision. The products are fine in details and comfortable to • hold, with high uniformity among batches. The walls have high gloss but no color difference.
- High-class molding technologies and surface processing technologies produce smooth interior and exterior surfaces of the plastic bottles without wicking effect of reagents during the process, subsequently significantly reducing sample wastage. With paralleled quality, our products can perfectly replace the imported competitors.

Application

• NEST Round Storage Bottle is designed for liquid storage in molecular and cellular biology, laboratory medicine, genomics and proteomics research.

Volume		Size(mm)		Pac	king	Natura	I White	Am	ber
(mL)	Bottleneck Diameter	Bottom Diameter	Height	/Pack	/Case	Material	Cat.No.	Material	Cat.No.
8	13.8	24.8	42.3	20	400	HDPE	335101	PP	335201
15	13.8	24.8	56.1	20	400	HDPE	336101	PP	336201
30	21	33.9	59.05	10	200	HDPE	337101	PP	337201
60	21	38.6	81.5	10	200	HDPE	338101	PP	338201
125	28	50.8	95.5	10	100	HDPE	339101	PP	339201
250	33	60.5	127.6	10	100	HDPE	340101	PP	340201
500	43.8	73	161.6	5	50	HDPE	341101	PP	341201

Sample Vial



Application

- Caps have 6 color Caps (blue, red, yellow, purple and natural) personalize the identification of different reagents in a fast and convenient way.
- Cap color is encoded in the product code.
- Products are made of transparent polypropylene (PP) which meets USP Class VI standards and is free of heavy metal ions. Products can be used in proteomics, drug development, genomics and other fields.
- Special knurling design on the vial body enables the vial to be stuck in the special base and to be tightened with a single hand.
- Silicone O-ring inside the screw caps ensures secure sealing. ADR & IATA compliant, no liquid leakage in negative pressure test under a pressure of -0.95 bar.
- Withstands a maximum centrifugal force up to 20,000 xg.



Available in 6 colors

_	1 A M	
Sam	nle	Vial
Carri		· · · ·

Volume	Pac	king	Bottom	Cat.No.	
(mL)	/Pack	/Case	Bollom	Cat.No.	
0.5	500	2000	Self Standing	633901	
1.5	500	2000	Self Standing	634901	
1.5	500	2000	Conical	634911	
2.0	500	2000	Self Standing	635901	

Sample Vial Cap

Color	Pac /Pack	king /Case	External Thread Cap with raised edge	External Thread Cap Hinged Cap with raised edge	Flat Cap
Blue	500	2000	633951B	633961B	633981B
Red	500	2000	633951R	633961R	633981R
Yellow	500	2000	633951Y	633961Y	633981Y
Purple	500	2000	633951P	633961P	633981P
Natural	500	2000	633951N	633961N	633981N
Green	500	2000	633951G	633961G	633981G

Cluster tube

NEST 1.1mL 96-well Cluster Tube Box conforms to the ANSI-SBS standard and is compatible with multi-channel pipettes and automated liquid workstations. The raw material of tube body is imported PP, which meets the USP-CLASS 6 standard. It has high transparency and good chemical stability, and is suitable for low-temperature storage of cells, drugs, tissues, sera, and other reagents.



Complete Specifications

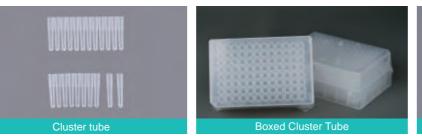
- NEST 1.1mL Cluster Tubes are available in single tube, 8-strip, and 12-strip, and the tube caps are available in 8-strip and 12-strip for customers to choose from.
- They are compatible with multi-channel pipettes and automated liquid workstations with SBS standard size carriers.

Exquisite Design

- The one-way cap design, with letter and number grids, ensures positive identification of samples.
- The bottom and side walls of the box holder are hollowed out for good thermal conductivity, and the box supports direct immersion in a water bath.

High Quality Raw Materials

- The raw material is imported PP, which conforms to USP class 6 standards. The 8-strip and 12-strip caps are made of TPE, which has better sealing performance.
- \bullet Resistant to low temperature storage at -80 $^\circ\!\!\!C$, and autoclavable.





Cluster Tube

	ematic gram	Name	Packaging			Material	Sterile Cat.No.	Non-sterile Cat.No.
		4 Arel Oisels Obsets Table	Bagged	960 pcs/bag	5 bags/case	PP	/	628111
	1.1mL Single Cluster Tube	Boxed	96 pcs/box 10 boxes/pack	5 bags/case	PP	628114	628112	
1144	1.1mL 8-strip Cluster Tube	Bagged	120 pcs/bag	5 bags/case	PP	/	628121	
		Boxed	12 pcs/box 10 boxes/pack	5 bags/case	PP	628124	628122	
	1.1mL 12-strip Cluster Tube	Bagged	80 pcs/bag	5 bags/case	PP	/	628131	
		Boxed	8 pcs/box 10 boxes/pack	5 bags/case	PP	628134	628132	

Cluster Tube Cap

Schematic Diagram	Name	Packaging			Material	Sterile Cat.No.	Non-sterile Cat.No.
00000000	8-strip Cluster Tube Cap	Bagged	120/bag	600/case	TPE	628923	628921
#992000000°	12-strip Cluster Tube Cap	Bagged	80/bag	600/case	TPE	628933	628931



Molecular Biology

ELISA Plate

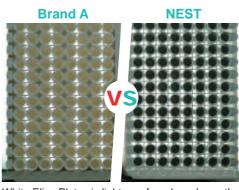
NEST ELISA plate, made of polystyrene, is a safe, reliable and effective supporter in enzyme-linked immuno-absorbent assay (ELISA). The features of the plates are crucial for the adsorption of antigens, antibodies and antigen-antibody complexes. ELISA plates from NEST adopts a unique surface treatment process, allowing to obtain ideal results in ELISA tests which are extensively employed in vitro diagnostics in medical and clinical laboratories.

Features

- The plates are made of polystyrene and are designed specifically for ELISAs. They present good adsorption performance and low baseline value.
- · Uniform thickness and size.
- High batch-to-batch stability and low coefficient of variation (CV) value.
- Both detachable and non-detachable flat-bottom plates are offered for customers to choose from based on their applications.
- The letters and numbers on the frame of the plates are convenient for detection and identification in experiments.
- High transparency of clear plate bottom.
- White plates are best suited for luminescence measurements as they reflect the signal instead of absorbing it and hence enhance the luminescence signals. Raw materials show good light-proof properties, which greatly reduce well-to-well signal interference.

Features of detachable 96-well ELISA plate

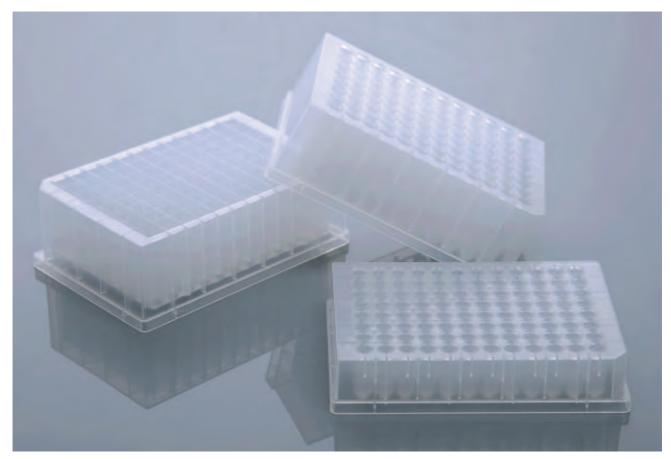
- Greatly improves the flexibility in diagnostic testing.
- Each well is locked in the frame, all at the same horizontal.
- The design of 8-well strip allows for uniform reading and washing.



White Elisa Plates is light-proof, and can lower the cross-talk between wells

			TRANSPORT - CONTRACT	
Cat.No.	514201	504201	504271	504261
Specification	F96	12 x F8	12 x F8	12 x F8
Color	Transparent	White Frame & Clear Well	White Frame & White Well	White Frame & Black Well
Description	Undetachable	Detachable	Detachable	Detachable
Packing	5/Pack 50/Case	5/Pack 50/Case	5/Pack 50/Case	5/Pack 50/Case
Features	High trans	parency	White Elisa Plates is light-proof, and can lower the cross-talk between wells	Made of non-autofluorescent materials with good protein adsorption and low background fluorescence.
Application	Quantitative and qualitative say and binc		Autofluorescence, chemilumi- nescence	Fluorescence immunoassay and binding assay

Deep Well Plate



The length and width of the deep well plate comply with the SBS international standards. The deep well plates of NEST have a variety of specifications, conforming to the needs of fully automatic workstations and experiments.

Features

- High quality imported PP material employed for high stability and no chemical reactions with test reagents.
- Compatible with DMSO and inert to water.
- Can be stored under subzero temperature from -40 to -80 $^\circ\mathrm{C}$.
- Maximum sustainable centrifuge force 4000g.
- Autoclavable at 20Psi, 121 $^\circ\!\!C$ for 20 minutes, great heating uniformity.
- Minimum residual liquid, low heavy metal content.
- Certified DNase/RNase and Pyrogen Free.
- Conformed to international SBS Standards.
- Good flat and can be transported for long distance if sealed by heat sealable film.
- Produced and packed in Class 100,000 clean workshop.
- Alphabetical sorting and corner cut marking for convenient tracking of samples.
- Each package has a separate article number/batch number identification, facilitating the quality tracking.

Application

Genomic DNA extraction, plasmid DNA extraction, and purification of various samples. High-throughput automatic liquid operation to achieve high-throughput operations, such as protein precipitation, liquid extraction, and processing of animal tissues, bacteria, plants, soil, clinical samples, yeasts, etc.



503102、503162

507001、507101

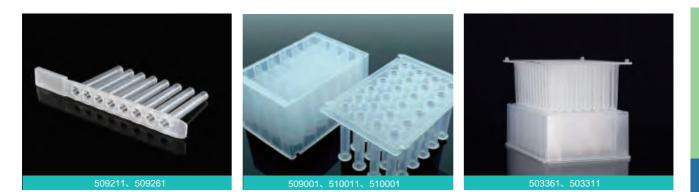
Round Well

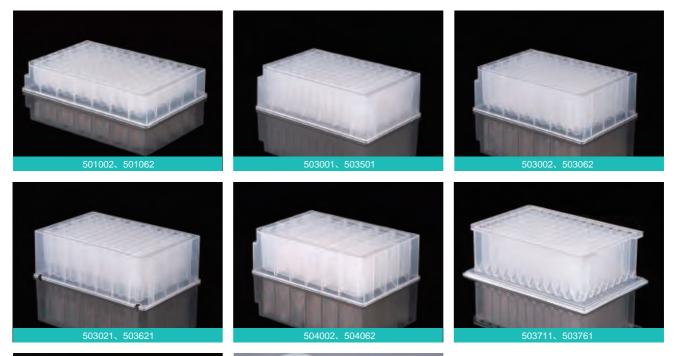
Specification	Volume (mL)	Bottom	/Pack	/Case	Non-sterile Cat.No.	Sterile Cat.No.
48-Round well	3.5	U-Bottom	10	50	504102	504162
	0.36	V-Bottom	10	50	500101	500161
	0.4	U-Bottom	10	50	501102	501162
96-Round well	0.5	V-Bottom	10	50	501101	501601
	1	U-Bottom	5	50	/	502162
	2	U-Bottom	5	50	503102	503162
	1.3	U-Bottom	5	50	507001	507101

Plastic Tip Comb

Specification	Bottom	/Bag	/Pack	/Case	Non-sterile Cat.No.	Sterile Cat.No.
8 Tip Combs	U-Bottom	2	25	50	509211	509261
8 Tip Combs	V-Bottom	1	/	25		509001
MagPure 96 Tip Combs	V-Bottom	5	/	50	503311	503361

503361、503311 Compatible with KingFisher Flex&Presto









Square Well

Specification	Volume (mL)	Bottom	/Pack	/Case	Non-sterile Cat.No.	Sterile Cat.No.
24 Square Well	16	V-Bottom	1	25	/	510001
24 Square Well with 24 Well Plastic Comb	16	V-Bottom	1	25	510071	510011
48 Square Well	4.6	U-Bottom	5	50	504062	504002
	0.5	V-Bottom	5	50	500021	500621
	1	U-Bottom	10	50	501002	501062
	1.6	U-Bottom	5	50	502002	502062
96 Square Well	2	V-Bottom	5	50	503001	503501
	2.2	U-Bottom	5	50	503002	503062
	2.2	V-Bottom	5	50	503021	503621
96 I Shape Square Wells	2.2	U-Bottom	5	50	503711	503761

500021、500621、503021、503621 Compatible with King Fisher Flex&Presto

Silicone Sealing Mat

Compatibility	Volume	Piercibility	/Pack	/Case	Cat.No.
96 Well Round well ≤ 1.0 mL		Can been punctured	10	50	506005
	2.0 mL	Can been punctured	10	50	506006
	0.5.0.0		10	50	506003
96 Well Square well	0.5-2.2mL	Can been punctured	10	50	506004

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8-Strip PCR Tube & Tube & Cap





PCR Tube

Volume (mL)	Сар Туре	Color	/Pack	/Case	Cat.No.
0.2	Flat	Transparent	1000	10000	401001

Features

- Made of polypropylene.
- Compatible with all major PCR and real-time PCR instruments on the market. Thin-wall design produces high thermal conductivity, allowing the reaction solution inside to reach the target temperature as quickly as possible.
- The cap has excellent sealing performance and is easy to open; the loss of reaction volume can be controlled within 5% when a pcr heated lid is applied.
- A maximum capacity of 250 µL.
- No human DNA, DNase/RNase free, no PCR inhibitors.
- Zip-lock bag.

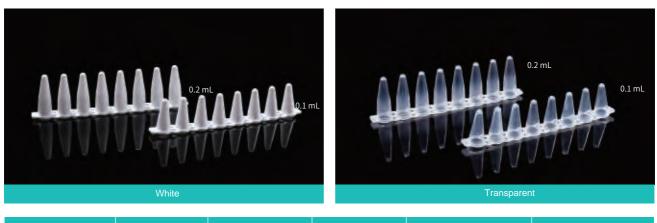
PCR 8-strip Tube with Individual Cap Attached

Volume (mL)	Сар Туре	Color	/Pack	/Case	Cat.No.
0.2	Flat	Transparent	120	1200	404001

Features

- No human DNA, no DNase/RNase, no PCR inhibitors.
- Zip-lock bag.
- White PCR 8-strip tubes can effectively prevent signal interference, increase signal strength, and improve experimental efficiency.

PCR 8-strip Tube



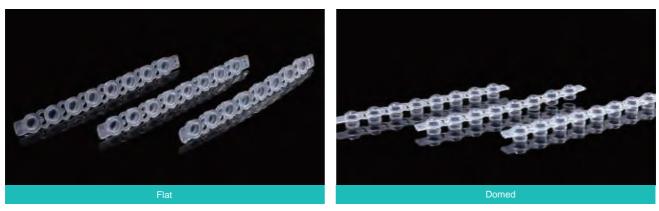
Volume (mL)	Color	/Pack	/Case	Non-sterile Cat.No.	Sterile Cat.No.
0.4	Transparent	125	1250	403102	403122
0.1	White	125	1250	403112	403132
0.0	Transparent	125	1250	403002	403022
0.2	White	125	1250	403012	403032

The transparent version is suitable for ordinary PCR reactions, and the white version is suitable for qPCR reactions.

The 0.1 mL tube is intended for overnight incubation experiments. It is specifically designed to be shorter than standard tubes to reduce contamination caused by condensation and the evaporation of the reaction solution. The design also increases the penetration intensity of fluorescent signals in qPCR.

The maximum capacity of the 0.1ml tube is 150 $\mu\text{L},$ and that of a 0.2 mL tube is 250 $\mu\text{L}.$

PCR 8-strip Tube Cap



Сар Туре	Color	/Pack	/Case	Non-sterile Cat.No.	Sterile Cat.No.
Flat	Transparent	125	1250	406012	406022
Domed	Transparent	125	1250	406112	406122

• Compatible with NEST 8-strip PCR Tubes or 96-well PCR plates.

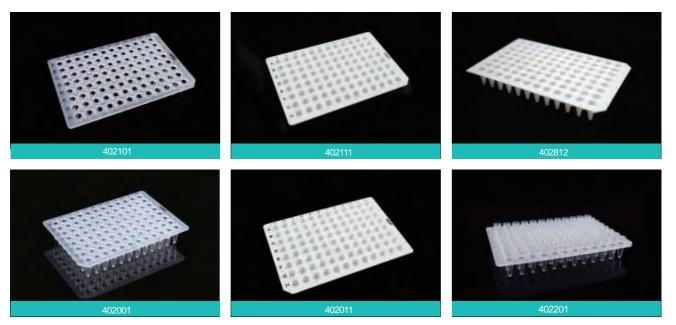
- The cap design allows for easy opening and closing, securing better sealing performance.
- The flat caps are better for qPCR experiments.
- The domed cap can better prevent liquid evaporation.

PCR 96 Well Plate

When using a thermal cycler with the fluorescence detector above the samples, NEST white PCR plates effectively mutual interference between wells. The Nest white PCR plate also allows for high accuracy of detection when signal intensity is low, while Nest clear PCR plates are designed for PCR machines where the fluorescence detector is located below the sample plate.

Features

- Made of high-quality polypropylene to ensure minimal loss of reaction solution.
- Flat surface, thick and solid, not easy to deform.
- The black ink-printing marks on the surface are easy to read and identify.
- Elevated edge of the hole can better prevent cross contamination.
- Compatible with NEST pressure sensitive film, self-adhesive film and hot sealing film.
- Autoclavable.
- The tube wall of transparent 96-well PCR Plate is thin, allowing for good light transmission.
- White PCR 96-well plate is better for qPCR experiments.
- The maximum capacity of the 0.1ml tube is 150 $\mu L,$ and that of a 0.2 mL tube is 250 $\mu L.$
- Certified DNase/RNase and Pyrogen Free.

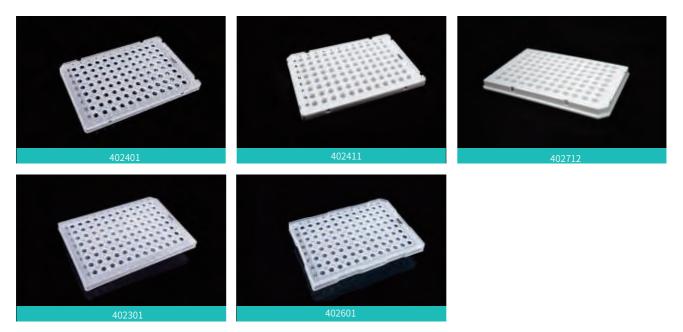


PCR Plate, No Skirt

Volume (mL)	Cut Position	Color	Tube	Notes	/Pack	/Case	Cat.No.
	H12	Transparent	Low profile	/	25	100	402101
96-well 0.1	H12	White	Low profile	/	25	100	402111
	A12/H12	White	Low profile	Compatible with Roche	10	500	402812
	H1	Transparent	High profile	/	25	100	402001
96-well 0.2	H1	White	High profile	/	25	100	402011
	H12	Transparent	Elevated Wells	/	25	100	402201

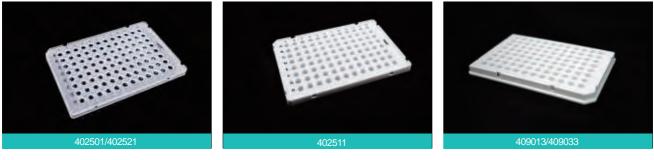
• The low-profile design minimizes the condensate contamination and evaporation of reaction solution.

• 0.1ml tube and 0.2ml tube



PCR Plate, Semi Skirt

Volume (mL)	Skirt Type	Notes	Cut Position	Color	Tube	/Pack	/Case	Cat.No.
	Semi Skirt	Compatible with ABI models	A1	Transparent	Low profile	25	4	402401
96-well 0.1	Elevated Semi Skirt	/	A1	White	Low profile	25	4	402411
	Semi Skirt	Compatible with Roche	H12	White	Low profile	10	5	402712
96-well 0.2	Semi Skirt	/	A12	Transparent	High profile	25	4	402301
30-well 0.2	Semi Skirt	Compatible with ABI models	A12	Transparent	High profile	25	4	402601



PCR Plate, Full Skirt

Volume (mL)	Skirt Type	Notes	Cut Position	Color	Tube	/Pack	/Case	Cat.No.
	Full Skirt	/	H1	Transparent	Low profile	25	100	402501
96-well 0.1 mL	Full Skirt	/	H1	White	Low profile	25	100	402511
	Full Skirt	Sterile	H1	Transparent	Low profile	25	100	402521
384-well 40 µL	Full Skirt	Compatible with Roche	A24+P24	White	Low profile	10	500	409013
	Full Skirt	Compatible with Roche, Sterile	A24+P24	White	Low profile	10	500	409033

Compatibility

402712 Compatible with lightcycler 480 \hfill lightcycler 480 \hfill \hfill lightcycler 96 402812 Compatible with lightcycler 96

409013、409033 Compatible with lightcycler 480 $\rm II$

Precautions

- Select the appropriate plate according to the equipment
- During the experiment, the PCR film must be tightly attached to the plate to prevent evaporation

PCR Rack



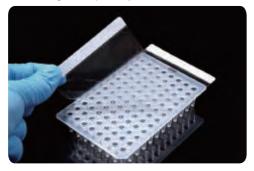
• Fits all NEST PCR products.

- Stackable.
- Autoclavable.

Specification	Сар Туре	Color	/Pack	/Case	Cat.No.
(1 Rack+1 Cap)/ Set, 8*12 Format	Flat	Blue rack+Transparent lid	1 rack +1 lid	25	407001
(5 Rack+1 Cap)/ Set, 8*12 Format	Flat	Blue rack+Transparent lid	5 rack +1 lid	5	407101

PCR Sealing Film

NEST PCR sealing film is compatible with NEST 96-well ELISA Plates and 96-well PCR Plates in various applications such as the ELISA/PCR amplification reaction and PCR fluorescence quantification, etc. Both the regular PCR sealing film and high-transparency film are available.



High Transparency PCR Sealing Film:

- NEST High Transparency PCR Sealing Film is made of a layer of transparent polypropylene film and a layer of transparent silicon-based pressure-sensitive adhesive.
- Applicable temperature is -70°C to 100°C.
- Pressure-sensitive film is non-adhesive to skin and gloves, which is convenient for experimental operation and does not affect optical analysis.
- Does not react with the experimental sample, the experimental results are more reliable.
- No autofluorescence.

Sealing Film:

- \bullet Material: non-permeable soft film; the adhesive is medical grade strong adhesive. \bullet Thickness: 100 $\mu m.$
- Economical and easy to use; compatible with a majority of PCR plates on the market.
- Good sealing performance.

	Specification	Size (mm)	Usable Film Dimension	Color	/Pack	/Case	Cat.No.
	Standard Sealing Film	146 × 81	124×81	Transparent	100	500	410001
Nev	Advanced Sealing Film	141 × 78	116×78	Transparent	100	500	410011
	PCR Sealing Film	141 × 83	118×80	Transparent	100	500	410021

Note: for life science laboratory research only, not for clinical drug treatment. Recommended storage conditions: temperature range of 10-27 ° C; humidity range of 40%-60%.

PCR Scraper



• NEST PCR Scraper is compatible with NEST High-transparency Sealing film and Standard Sealing Film, enabling the filming attached to the plates closer and ensuring better sealing performance.

Size (mm)	/Pack	Cat.No.
70*78	1	411001

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Molecular Biology	
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		401001	403002/404001	403102/403122	403112/403132	403012/403032 404001/403022	404001/403022	402001	402301	402501	402401	402101	402812	402601	402201
Brand	Model			PC	PCR Tube						PCR Plates	ates			
	2720	401001	403002/404001				404001/403022	402001	402301					402601	
	0096	401001	403002/404001				404001/403022	402001	402301					402601	
	0026	401001	403002/404001				404001/403022	402001	402301					402601	
	9800Fast			403102/403122							402401	402101			
	Veriti/Fast			403102/403122				402001	402301		402401	402101		402601	
	2000	401001	403002/404001			403012/403032	404001/403022	402001	402301					402601	
	2300	401001	403002/404001			403012/403032	404001/403022	402001	402301					402601	
	7500/Fast	401001	403002/404001	403102/403122		403012/403032	404001/403022	402001	402301		402401	402101		402601	
	0022	401001	403002/404001				404001/403022	402001	402301					402601	
Applied Biosystems®	7900HT/Fast	401001	403002/404001	403102/403122			404001/403022	402001	402301		402401	402101		402601	
	StepOne			403102/403122	403112/403132						402401	402101	402812		
	StepOnePlus			403102/403122	403112/403132						402401	402101	402812		
	ProflexPCRSystem	401001	403002/404001				404001/403022	402001	402301					402601	
	QuantStudio 12K	401001	403002/404001				404001/403022	402001	402301					402601	
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	3130							402001	402301					402601	
	3700							402001	402301					402601	
	3730/3730x							402001	402301					402601	
	Mastercycler®	401001	403002/404001				404001/403022	402001	402301	402501					
	Mastercycler® ep realplex	401001	403002/404001				404001/403022	402001	402301	402501					
	Mastercycler ep	401001	403002/404001				404001/403022	402001	402301	402501					
Eppendorf®	Mastercycler nexus	401001	403002/404001				404001/403022	402001	402301	402501					
:	Mastercycler nexus eco	401001	403002/404001				404001/403022	402001	402301	402501					
	Mastercycler nexus flat	401001					404001/403022								
	Mastercycler nexus flat eco	401001	403002/404001				404001/403022								

	, ,	401001	403002/404001		 	404001/403022	402001	402301	402501	 		
	Mastercycler nexus gradient eco	401001	403002/404001			404001/403022	402001	402301	402501			
Ennandorf®	Mastercycler nexus GSX1	401001	403002/404001			404001/403022	402001	402301	402501			
	Mastercycler nexus GSX1e	401001	403002/404001			404001/403022	402001	402301	402501			
	Mastercycler nexus SX1	401001	403002/404001			404001/403022	402001	402301	402501			
	Mastercycler nexus SX1e	401001	403002/404001			404001/403022	402001	402301	402501			
	Mastercycler pro/S	401001	403002/404001			404001/403022	402001	402301	402501	 	L	
	3Prime	401001	403002/404001			404001/403022						
	3PrimeG	401001	403002/404001			404001/403022						
	3PrimeX	401001	403002/404001			404001/403022						
	Cyclogene TM	401001	403002/404001			404001/403022	402001	402301	402501			
	Flexigene TM	401001	403002/404001			404001/403022	402001	402301	402501			
	Genius	401001	403002/404001			404001/403022	402001	402301	402501			
	Genius Quad	401001	403002/404001			404001/403022	402001	402301	402501			
() Cochoo T	Genius(TC412)	401001	403002/404001			404001/403022	402001	402301	402501	402101		
	Prime	401001	403002/404001			404001/403022	402001	402301	402501			
	Prime Elite	401001	403002/404001			404001/403022	402001	402301	402501			
	Prime Elite Satellite	401001	403002/404001			404001/403022	402001	402301	402501			
	PrimeG	401001	403002/404001			404001/403022	402001	402301	402501			
	Touchgene®Gradient(TC512)	401001	403002/404001	403102/403122		404001/403022	402001	402301	402501	402101		
	Touchgene®X	401001	403002/404001	403102/403122		404001/403022	402001	402301	402501	402101		
	PrimeQ	401001	403002/404001			404001/403022	402001	402301	402501			
	Quantica®	401001	403002/404001			404001/403022	402001	402301	402501			
	FlexCycler	401001	403002/404001	403102/403122		404001/403022	402001	402301	402501	402101		
	T1 Thermal Cycler	401001	403002/404001	403102/403122		404001/403022	402001	402301	402501	402101		
Analytik Jena/ Biometra	TGradient	401001	403002/404001	403102/403122		404001/403022	402001	402301	402501	402101		
	Tpersonal	401001	403002/404001	403102/403122		404001/403022	402001	402301	402501	402101		
	TProfessional/Basic	401001	403002/404001	403102/403122		404001/403022	402001	402301	402501	402101		

<u> </u>	TProfessional/Standard	401001	403002/404001	403102/403122		404001/403022	402001	402301	402501	40	402101		
	TProfessional/TIRO	401001	403002/404001	403102/403122		404001/403022	402001	402301	402501	40	402101		
I	TRobot	401001	403002/404001	403102/403122		404001/403022	402001	402301	402501	40	402101		
Analytik Jena/	Uno	401001	403002/404001	403102/403122		404001/403022	402001	402301	402501	40	402101		
Biometra	Uno II	401001	403002/404001	403102/403122		404001/403022	402001	402301	402501	40	402101		
	q TOWER	401001	403002/404001				402001	402301	402501				
	SpeedCycler ²	401001	403002/404001				402001	402301	402501				
	TOptical	401001	403002/404001				402001	402301	402501				
	C1000 TM Touch TM	401001	403002/404001			404001/403022	402001	402301	402501				
	DNA Engine Dyad®/Dyad Disciple	401001	403002/404001			404001/403022	402001	402301	402501				
	Engine Tetrad®2	401001	403002/404001			404001/403022	402001	402301	402501				
	MyCycler TM	401001	403002/404001			404001/403022	402001	402301	402501				
	PTC-100®	401001	403002/404001			404001/403022	402001	402301	402501				
	PTC-200	401001	403002/404001			404001/403022	402001	402301	402501				
	PTC-225 Tetrad	401001	403002/404001			404001/403022	402001	402301	402501				
	S1000 TM	401001	403002/404001			404001/403022	402001	402301	402501				
	T100 TM	401001	403002/404001			404001/403022	402001	402301	402501				
	CFX Connect TM	401001	403002/404001	403102/403122		404001/403022	402001	402301	402501	40	402101		
Biorad®/	CFX96 TM Touch/CFX96	401001		403102/403122	403112/403132	404001/403022			402501	40	402101 4	402812	
MJ Researsh®	Chromo4 TM	401001	403002/404001			404001/403022	402001	402301	402501				
	DNA Engine Opticon®2	401001	403002/404001			404001/403022	402001	402301	402501				
	iCycler	401001	403002/404001			404001/403022	402001	402301	402501				
	iQ TM 5	401001	403002/404001			404001/403022	402001	402301	402501				
	M iniOpticon TM	401001	403002/404001			404001/403022	402001	402301	402501				
	MyiQ TM	401001	403002/404001			404001/403022	402001	402301	402501				
	Opticon			403102/403122	403112/403132				402501	40	402101		
	miniOpticon				403112/403132						7	402812	
	BaseStation TM							402301	402501				
	MJ research option										7	402812	
	Opticon2			403102/403122					402501	40	402101 4	402812	

	Multiblock System	401001	403002/404001	403102/403122		404001/403022	402001	402301	402501		402101		
	T1 Thermal Cycler	401001	403002/404001	403102/403122		404001/403022	402001	402301	402501		402101		
	Omn-E	401001	403002/404001	403102/403122		404001/403022	402001	402301	402501		402101		
	Omnigene	401001	403002/404001	403102/403122		404001/403022	402001	402301	402501		402101		
Thermo Hybaid	PCR Express	401001	403002/404001	403102/403122		404001/403022	402001	402301	402501		402101		
	PCR Sprint	401001	403002/404001			404001/403022							
	Px2	401001	403002/404001	403102/403122		404001/403022	402001	402301	402501		402101		
	PxE	401001	403002/404001	403102/403122		404001/403022	402001	402301	402501		402101		
	Touchdown	401001	403002/404001	403102/403122		404001/403022	402001	402301	402501		402101		
	Deltacycler I	401001	403002/404001	403102/403122		404001/403022	402001	402301			402101		
Ericom	Single Block	401001	403002/404001	403102/403122		404001/403022	402001	402301			402101		
	Twin Block	401001	403002/404001	403102/403122		404001/403022	402001	402301			402101		
	Mk3000®	401001	403002/404001				402001	402301					
Ctrotogooo	Nk3000P®	401001	403002/404001				402001	402301					
oualagene	Mk3005®	401001	403002/404001				402001	402301					
	Mx4000®	401001	403002/404001				402001	402301					
Aciloret	SureCycler®8800	401001	403002/404001	403102/403122		404001/403022	402001	402301	402501	402401			
אפוופווו	ARIA MK G8830A				403112/403132							402812	
Oiccord	Flexigene®	401001	403002/404001			404001/403022	402001	402301	402501				
age 100	Rotor-Gene® Q	401001				404001/403022							
MNG®	Primus 96	401001	403002/404001	403102/403122			402001	402301	402501		402101		
PeqLab®	peqSTAR 96	401001	403002/404001			404001/403022	402001	402301	402501				
SensoQuest	Thermocycle 96	401001	403002/404001				402001	402301	402501				
Stratagene	Robocycler	401001	403002/404001			404001/403022	402001	402301	402501				
	TP240	401001	403002/404001				402001	402301	402501				
TaKaRa®	天隆TL988-IV				403112/403132								
	ТР3000	401001	403002/404001	403102/403122		404001/403022	402001	402301	402501		402101		
Amoreham@CE@	MegaBACE®500							402301	402501				
	MegaBACE1000							402301	402501				402201
Beckman Coulter®	CEQ TM							402301					
Transgenomic	WAVE®System							402301	402501				



Bacteria

Petri Dishes





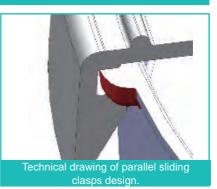
RODAC Dish

These non-treated polystyrene plates are transparent and DNase/RNase-Free. The bottom has a ridge allowing for easy handling and stacking. The plate has three vents for gas exchange.

- Made of high clarity, 100% virgin polystyrene.
- Numeric marks at 3/6/9/12 o'clock at the bottom, making it convenient for users to determine the position of bacteria.
- Flat, transparent surface.
- PA/PE composite film packaging.
- Stackable for easy storage and handling.
- Each package has an independent item number and batch number identification, which is convenient for quality tracking and traceability.
- Sterilized by E-beam, SAL=10⁻⁶.
- Non-Pyrogenic, DNase/Rnase free.



Petri Dish with Safe-lock Design



Square Petri Dish

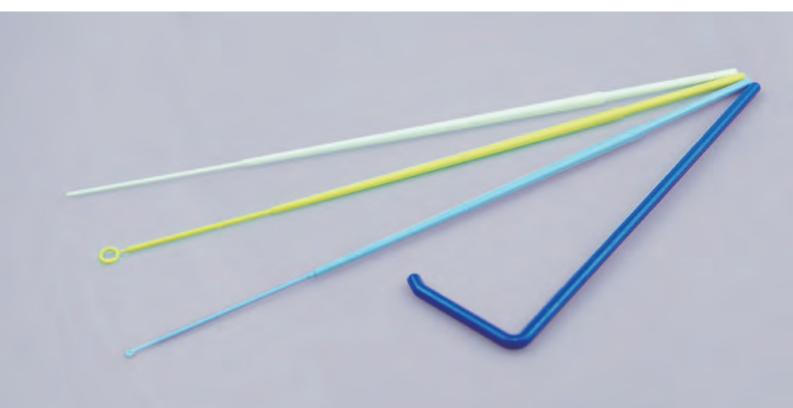
NEST Square Petri Dish is a labware used for bacterial cultivation and observation. It consists of multiple grids that can be used to separate different bacterial cultures for various experiments and observations.

Square Petri Dish

Petri Dishes

Spec (mm)	Height (mm)	Volume (mL)	тс	Sterile	/Pack	/Case	Cat.No.	
35	12	5	NO	Sterile	20	500	706011	
60	15	15	NO	Sterile	20	500	754001	
65	15	13-15	NO	Sterile	20	500	722011(RODAC)	
05	15	15 Safe-lock Design	NO	Sterile	20	500	722311	
	15	40	NO	Sterile	20	500	752001(US: 753001)	
	15	40	NO	Sterile	20	500	752002(US: 753002)	Double E
	15	40	NO	Sterile	10	500	752004	
90	15	40	NO	Sterile	5	500	752003	
	15	20 x 2 Compartments	NO	Sterile	20	500	752011(US: 753011)	
	15	13 x 3 Compartments	NO	Sterile	20	500	752021(US: 753021)	
	15	10 x 4 Compartments	NO	Sterile	20	500	752031(US: 753031)	
	15	40 Safe-lock Design	NO	Sterile	20	500	752101	
	20	40	NO	Sterile	20	300	753401(US: 752401)	
	25	40	NO	Sterile	13	325	752501(US: 753501)	
150	15	60	NO	Sterile	10	100	715011	
100	25	/	NO	Sterile	5	100	755001	
100×100×15	17.25	45	NO	Sterile	20	500	753901	

Innoculating Needles / Loops L-Spreader



Inoculating Needle / Loop

- PS material, hydrophilic.
- Flexible handles for easier collection and inoculation.
- Applied in microbiology experiments.
- Different colors for identification.
- · Easy-tear sterile individual packaging.
- Each package has an independent item number and batch number identification, which is convenient for quality tracking and traceability.
- Sterilized by Ethylene Oxide.

L-Spreader

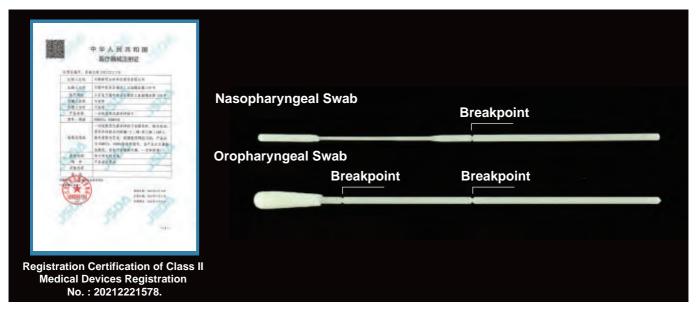
- Sterile L-Spreader, made of using medical ABS.
- Sterilized by E-beam, Non-Pyrogenic.
- Smooth and flat surface that avoids problems such as contamination or uneven application of spread plate in bio-labs.
- Length of handle: 144mm, diagram of spreading: 33mm, suitable for 3.5cm, 6cm, 9cm, 10cm petri dishes and etc. Ideal for spreading cells or bacteria evenly in the culture dish.

Volume (µL)	Name	Color	/Pack	/Case	Cat.No.
/	Inoculating Needle	White	400	4000	716001
1	Inoculating Loop	Blue	400	4000	717101
10	Inoculating Loop	Yellow	400	4000	718201
/	L-Spreader	Blue	200	2000	711001



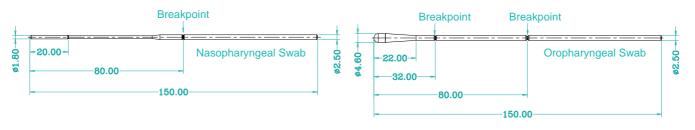
Medical Consumables

Disposable Swab



ADVANTAGE:

- Swab head is flocked nylon, and swab shaft is made of ABS (Acrylonitrile butadiene styrene).
- Endotoxin-free.
- Individually wrapped and sterile.
- CE, FDA, ISO certified.



Cat.No.	Descriptions	/Pack	/Case
202003	Oropharyngeal Specimen Collection Swab, Individually Wrapped, Sterile	100	5000
202004	Nasopharyngeal Specimen Collection Swab, Individually Wrapped, Sterile	100	5000

A.

Viral Transport Medium / Inactivation Transport Medium



Viral Transport Medium

- Used for collection, storage and transportation of human nasopharyngeal virus samples.
- Unused VTM medium can be transported at room temperature.
- \bullet Sample transport temperature requirement & storage time: 2 to 4 C°, 48 h.

Cat.No.	Description	/Pack	/Case
202016	Disposable Sampler, 10 mL Vial with 3 mL VTM, with Individually Wrapped and Sterile Oropharyngeal Swabs, 1 Vial + 1 Oral Swab/pk, 100 pk/cs	1	100
202017	Disposable Sampler, 10 mL Vial with 3 mL VTM, with Individually Wrapped and Sterile Nasopharyngeal Swabs, 1 Vial + 1 NP Swab/pk, 100 pk/cs	1	100
202115	Disposable Sampler, 5 mL Vial with 2.5 mL VTM, 10 Vials/pk, 100 Vials/cs	10	100
202117	Disposable Sampler,10 mL Vial with 3 mL VTM, 10 Vials/pk, 100 Vials/cs	10	100

Inactivation Transport Medium

- ITM medium serves to both inactivate viruses and prevent nucleic acid degradation.
- Room temperature transport.
- Samples can be stored at room temperature for 20 days.
- Used for collection, storage and transportation of viruses, chlamydia, mycoplasma and urea plasma.

Cat.No.	Description	/Pack	/Case
202001	Disposable Sampler, 5 mL Vial with 2 mL ITM, with Individually Wrapped and Sterile Oropharyngeal Swab, 10 Vials/pk, 50 Vials + 50 Swabs/cs	10	50
202005	Disposable Sampler, 5 mL Vial with 2 mL ITM, with Individually Wrapped and Sterile Nasopharyngeal Swabs, 10 Vials/pk, 50 Vials + 50 Swabs/cs	10	50
202006	Disposable Sampler, 10 mL Vial with 3 mL ITM, with Individually Wrapped and Sterile Oropharyngeal Swabs, 1 Vial + 1 Oral Swab/pk, 100 pk/cs	1	100
202007	Disposable Sampler, 10 mL Vial with 3 mL ITM, with Individually Wrapped and Sterile Nasopharyngeal Swabs, 1 Vial + 1 NP Swab/pk, 100 pk/cs	1	100

Other preservation solutions such as UTM, AMIES, and STM are available, and the packaging specifications are customizable.

Disposable Intranasal Atomization Device

Product Presentation

- The device provides a painless and rapid absorption medication delivery option for non-invasive intranasal medication delivery. It improves safety for both caregivers and patients by avoiding needle-sticking injuries.
- It is an atomizing device for drug administration intended to convert liquid preparations into atomized particles and spray on the surface of human body tissues (or organs) for full contact to maximize the administration effect. Meanwhile, the reasonable and effective selfdestructive structure ensures that the product can only be used once to provide users with safe and hygienic products.



Micro-level atomized Fine particles for easy absorption

The Spray Nozzle can atomize liquid medication into fine mist particles ranging from 10-70µm in diameter.

Patent Number: CN116077816B





Order Information

Color	Pcs/cs	Cat.No.
White	1000	201002
Yellow	1000	201112

Syringe

It comes with clear surface scale. The plunger self-destructs after use due to the built-in self-destruct design, ensuring one-time use and preventing reuse.

Spray Nozzle

The Spray Nozzle micronizes the medication to facilitate rapid absorption. Additionally, the spray is generated in an umbrella shape, minimizing any potential harm or irritation to the human body.

Dose Limiter

The Dose Limiter, in a swallowtail clip shape, is easy to install and disassemble.

Advantages of nasal mucosal administration

After the influenza virus invades the human body, it is commonly found in the nasal cavity, respiratory tract mucosa, body fluids, and cells. The intranasally delivered nasal spray influenza attenuated live vaccine can rapidly stimulate the human body's triple immune response and offer protection against viruses in different regions.

Success Story - Influenza Vaccine, Live Nasal, **Freeze-dried**



mucosal immunity + humoral immunity + cellular immunity

• Nasal mucosal administration stimulates the production of mucosal immunity, specifically IgA antibodies, which provide the initial defense against pathogens in the nasal cavity.

Additionally, it induces the production of humoral immunity, specifically IgG antibodies, which help eliminate influenza viruses in body fluids.

Furthermore, it triggers the production of cellular immunity, specifically T cells, which are responsible for eliminating influenza viruses within cells.

Saliva Collection Kits

Features

- USP VI Polypropylene Tubes.
- Collection process is painless and safe.
- The humanized design of funnel conforms to the mouth shape of human, making the collection process simple and easy.
- Good sealing performance effectively prevents leakage and specimens contamination safely and reliably, making it easy to preserve and transport specimen.
- The bottom of the collecting vial is conical, making it easy to process concentrated sample.
- Bar codes makes digital management easier, and labels with writing areas are convenient for users to record information.

• RNase/DNase free, non-pyrogenic.

Cat.No.	Volume (mL)	Upper Cup	Sterile	Contents	/Pack	/Case
203101	5 mL	Screw Funnel	Sterile	Screw Funnel 5 mL Vial Specimen Bag Cap	1	100
203102	10 mL	Screw Funnel	Sterile	Screw Funnel 10 mL Vial Specimen Bag Cap	1	100
203111	5 mL	Wedged Funnel	Sterile	Wedged Funnel 5 mL Vial Specimen Bag Cap	1	100
203112	10 mL	Wedged Funnel	Sterile	Wedged Funnel 10 mL Vial Specimen Bag Cap	1	100
203901	Wedged in) Funnels	Sterile	Compatible with different tube diameters ranging from 9.5-20.0 mm	1	100

Medical Consumable

Dry Saliva Collection Kits



Features

- Applied at room temperature.
- The 5 mL preservation solution vial is filled with 2 mL ITM solution.
- Samples can be stored and transported at room temperature.
- DNA samples can be stored stably for 12 months.
- RNA samples can be stored steadily for 1 month.
- With good antibacterial performance and strong storage stability, the preservation solution can guarantee the integrity of viral nucleic acids in the sample if it is used to store inactivated viral samples.

Introduction

- The product is used to collect high-quality DNA/RNA samples in the saliva.
- The collection process is painless and won't cause any injury or discomfort to the human body.
- The collected samples can be used for various biological experiments such as enzymatic hydrolysis, PCR and next-generation sequencing and are widely used in the collection and preservation of specimens in hospitals, scientific research institutions and households.

Introduction

- The cap of the Preservation Solution Tube should always be securely fastened to prevent accidental ingestion.
- The delicate design allows the preservation solution automatically to flow into the storage vial, eliminating direct contact with the preservation solution at all stages.
- The ITM Inactivation Preservation Solution, which deactivates viruses while preventing nucleic acid degradation, effectively prevents accidental contact or infection during transportation and testing.
- The device can be conveniently stored or transported at room temperature.
- It ensures a comfortable collection process without causing pain or damage to the human body. It is particularly suitable for children and patients who cannot provide a blood sample.

Instructions



Take a barcode out and stick it on the saliva collection tube. Then place the tube with the attached barcode and two additional barcodes into the sample bag for later storage, transportation or testing. The user should retain the remaining barcode for future reference or feedback.

Description	/Pack	/Case	Cat.No.
Saliva Collection Kit with ITM, each kit Includes a 10 mL Vial with a funnel, a separate 5 mL Vial filled with 2.0 mL ITM, Sterile, 100 kits/case	1	100	203011

Saliva/gargle Collection Kit



Introduction

The disposable sampler saliva/gargle collection kit is intended for the collection and transport of clinical samples from the collection site to the testing laboratory. As it will not cause any discomfort to the collection object, it is easy to be accepted. Both saliva and gargling method will be presented in this IFU either method is at your choice. This product is easy to carry and operate.

Features

- Applied at normal ambient temperature.
- The kit process is simple, convenient and easy to operate.
- Flexible to use, can be easily collected in the laboratory, clinic, or even at home.
- It is suitable for a wide range of target group, especially for children and patients who do not meet the blood sample collection conditions.
- The non-invasive collection of samples will not cause any discomfort to the collection objects, reducing the chance of infection and improving safety.

Description	Packing	/Pack	/Case	Cat.No.
	Paper Box Package	1	100	203051
Saliva/Gargle Collection Kit, each kit Includes a funnel, an empty 5mL vial with cap, a 5 mL Vial Filled with 4.0 mL saline, Sterile	PE Bag Package	1	100	203061
	Blister Package	1	100	203071



Pharmaceutical Packaging

Pen Injector

Pen Injector is a type of reusable liquid medicine injection device that contain liquid medicine solution with a syringe. The Liquid medicine medication is placed in the pen in a cartridge, eliminating the need to extract liquid medicine each time. To administer the medication, simply remove the pen cap, adjust the dial to the desired dose, and then perform the liquid medicine injection.

In addition to the common insulin injection, NEST Pen Injector can also be used for growth hormone, antibiotics, interferon, beauty drugs, anti-biochemical first aid, hemostasis and pain, heart disease first aid, detoxification, antipyretic analgesia, anesthesia and sedation.

Product feature



Simple operation

It is easy for beginners to use, eliminating the need for professional guidance.







3、Injection

1. Preparation

Enlarged view window

The clear scale provides a convenient observation of the dosage.

2. Dose regulation

Flexible adjustment

The dosage adjustment knob can be adjusted in both directions, allowing for easy correction in case of excessive dosage.

Portable and convenient

The small and delicate package makes it highly portable.

Smooth injection

The transmission mechanism is completely made of special materials with high lubrication, ensuring a smooth injection process with a required pressure of less than 30N.

Portable and convenient

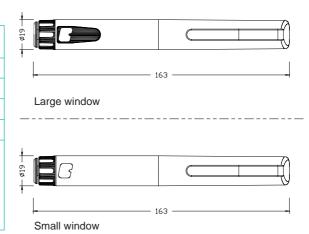
The injection-moulded screw thread ensures high precision and low margin of error, resulting in a stable injection process. The injection increment is 1IU, and the reusable pen injector range 1IU-60IU, the disposable pen injector range 1IU-60IU/1IU-80IU.

Product packaging



Product specification

Description	Plastic pen body with large windowPlastic pen body w small window				
Model No.	NIVR-01 NIVR-02				
Material	Pen body: ABS				
Injection range	0~60 IU (0.6mL)				
Single Minimum Dose	1 IU (0.01mL)				
Application	Compatible with disposable injection needles in line with ISO 11608-2, including BD, Jierui injection needles, etc; Compatible with standard 3 mL cartridge that complies with ISO 11608-3.				



Pharmaceutical packaging

Satisfy customer's needs



Product Feature



Pharmaceutical > Final assembly company partner

Simple operation

It is easy for beginners to use, eliminating the need for professional guidance.







1. Preparation

3、Injection

Convenient

Liquid medicine solution can be pre-filled into, eliminating the need for multiple refilling.

Hygienicand safe

It provides a hygienic and safe solution as it appears as a new pen for each use, eliminating the need for cleaning and disinfection and reducing the risk of cross-contamination.

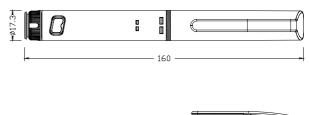
Accurate dosage

Dosage can be pre-set according to individual needs, granting patients the flexibility for their liquid medicine administration.

Supports customization in multiple colors.

Product specification

Injection range	36/50/60/74/75/80 unit, Appearance, colors, dosage and scale (mg/IU) are customizable.		
Packaging	1 pc/pk, 200 pcs/cs		
Material	Pen body: ABS		
Single Minimum Dose	1 unit (0.01 mL)		
Application	Suitable for a variety of disposable injection needles: such as BD, Jierui injection needles, etc. The needles must comply with ISO 11608-2. Applicable to the injection of standard 3 mL cartridge solution: 3 mL cartridge refills must comply with ISO 11608-3.		





AccureVial® COP Bottle



Introduction

The main raw material for NEST AccureVial[™] COP Bottle is cyclic olefincopolymer (COP). As a substitute for borosilicate glass, COP has the characteristics of high transparency, high rigidity, high heat resistance, low refractive index, low protein adsorption, and drug compatibility test producing no flake. The bottle body can withstand temperatures ranging from 121 [°] to -80 [°] C. NEST AccureVial[™] COP Bottle is featured with good steam tightness and resistance against acid, alkali and abrasion. This product is

sterilized by electron beam and can be directly used for prefilling of injection solution, freeze-dried powder and other kinds of drugs and easy to be stored and transported.

Features

- Excellent drug stability, resistance to high and low pH values (without delamination), low protein adsorption
- · Good barrier properties against water vapor and oxygen permeation
- High crack resistance reduces transportation costs
- Does not release heavy metal ions or produce delamination
- Excellent temperature resistance: from 121 to -80°C
- COP material enables various specifications, providing more flexible customization services.
- Reports on extractables and biocompatibility testing are available
- Complies with ISO 9001, ISO 15378, YBB standards

6x8 Nested configuration

- The specification for pre-sterilized wash-free and sterilization-free NEST AccureVial®COP bottles is now available. These bottles are produced in a cleanroom that adheres to GMP management standards, from injection molding to final packaging.
- Compatible with various sterilization methods, including ethylene oxide and steam sterilization.



Disposable Pre-filled Glass Intranasal Atomization Device



NEST Disposable Pre-filled Glass Intranasal Atomization Device is a pharmaceutical packaging designed to effectively store drugs for extended periods of time while maintaining stability and compatibility. A Spray Nozzle is included to convert liquid medication into uniformly sized mist particles, which are then sprayed onto the patient's mucous membranes (such as nasal or oral mucosa) for efficient drug administration.

The liquid medication can be pre-filled into the syringe and sealed for storage and transportation. This eliminates the need to transfer the liquid medicine to a syringe before use, reducing workload. It also addresses the issues of dosage loss and waste caused by residue. Additionally, pre-filling enhances safety and hygiene by minimizing the risk of contamination during the transfer process.



Features

Stable Material

Made of high quality medium borosilicate glass, which is extensively applied in pharmaceutical packaging including biological agents and vaccines, the product possesses strong chemical durability and shock resistance.

Hermetically Sealed

The spray is equipped with a protection cap, which is embedded with sealing ring to ensure its leak-proofness and virus-resistance during transfer and transportation.

Perfect Atomization Effect

Atomization cavity with precision turbine design ensures uniformly atomized particles evenly distributed on human mucous membrane for ideal liquid atomization effect.

Precise Dose

The precise Dose Limiter ensures the uniformity of each dose .

Single Use Design

The device is set with self-distruct design. After administration, the stopper will stick in the syringe and can't be taken out for a second use.

Application

Intranasal medication, administered through absorption in the mucous membrane, is an efficient treatment method. The nasal mucosa is moist and smooth with rich blood vessels, making it an ideal route for intranasal medication. This device is designed for intranasal delivery of medication to achieve the effects of reducing inflammation, stopping bleeding, fighting bacteria, and relieving nasal congestion. The medication will then be absorbed into the blood vessels and distributed throughout the body. For example, if antipyretic analgesics like Analginum are delivered nasally in droplets, they can help reduce fever.

Compared to intravenous drug delivery and other modes of administration, intranasal medication offers several advantages. Firstly, the activity of nasal mucosal hydrolase is lower than in the gastrointestinal tract, reducing the degradation of polymer compounds like polypeptides, hormones, vaccines, etc., thus ensuring the effectiveness of the drugs. Secondly, it bypasses the "first-pass effect" in the liver and reduces the potential liver damage caused by oral drugs. Thirdly, it has high bioavailability, allowing for targeted drug delivery to the brain. Finally, it is easy to administer and convenient for infants and children, with minimal adverse reactions and good compliance.

In recent years, nasal spray vaccines have gained attention as a new area of research and application, thanks to the specific advantages of intranasal administration. Research has shown that nasal mucosal immunity can induce both local and systemic immune responses. Its effects is comparable to intravenous injection and can even be more effective and intense than oral administration. Therefore, nasal spray vaccines broaden the possibilities of intranasal administration.

Order information

Specifications	Description	Packaging		Cat.No.	56.70
0.5 mL	①Assembling Unit	160pcs/rk	2400 pcs/cs	205001	
	2 Plunger	10000pcs/pk	10000 pcs/cs	205091	
	③Dose Limiter	5000pcs/pk	10000 pcs/cs	205092	

10x10 Nested Configuration



• The specification for pre-sterilized wash-free and sterilization-free NEST Disposable Pre-filled Glass Intranasal Atomization Device is now available. From injection molding to final packaging, they are produced in a cleanroom that adheres to GMP management standards.

· Provide data reports on extractable and biocompatibility studies.

COP Pre-filled Syringe



NEST COP Pre-filled Syringes are in high demand in the pharmaceutical market due to their small size, portability, accurate drug dosage provision, and low risk of contamination. They are widely used as a container of high-value products such as biologics, biochemical products, anti-thrombotic drugs, and beauty products

Serving as alternatives to borosilicate glass, cyclic olefin polymers (COP) offers a high degree of flexibility in design. Its high crack-resistance also reduces logistics and transportation costs. In terms of other physical and chemical properties, COP exhibits high transparency, rigidity, heat resistance, low refractive index, low protein adsorption, and is free from heavy metals and tungsten. Compatibility tests with pharmaceuticals indicate no delamination. And it can be manufactured with low or no silicone content, addressing the limitations of glass pre-filled syringes.

Application

- Container for biological agents (such as GLP-1, hormones, monoclonal antibodies)
- Ophthalmic applications
- Emergency drugs

- Vaccines
- Medical aesthetic drugs
- · Compatible with automatic injectors

NEST COP Pre-filled Syringe is designed to meet your ever-changing needs. We offer comprehensive process services, which include design, production, and pre-sterilization, to provide you with the perfect solution.



Key Features

- Excellent drug stability, low protein adsorption, and barrier properties against water vapor and oxygen permeation.
- Eliminates the need for drug reconstitution before injection, reducing the risk of drug contamination.
- Accurate drug composition, avoiding changes in drug proportions during on-site drug preparation.
- Luer Connector, in line with the International Standard, is included to ensure secure connections and achieve excellent sealing performance. This reduces drug leakage and prevents the risk of needle rotation and popping during injection.
- COP offers a high degree of design flexibility and allows for greater customization.
- Compatible with various sterilization methods, such as ethylene oxide sterilization and steam sterilization.
- Complies with ISO 9001, ISO 15378, YBB, and USP Class VI standards.

Advantages of COP material compared to other materials.

Features	СОР	Glass	PP
Gas permeability (O2, N2, CO2)	М	G	М
Water vapor permeability	G	G	М
Transparency after steam sterilization	G	G	Р
Transparency after EP sterilization	G	G	Р
Transparency after gamma ray sterilization	G	G	Р
Drug pH change	G	Р	G
Brittleness	G	Р	G
Precision Molding/processing type	G	Р	G
Waste characteristics/combustion characteristics	G	Р	G
High purity	G	G	М

Remark: G-Good, M-Moderate, P-Poor

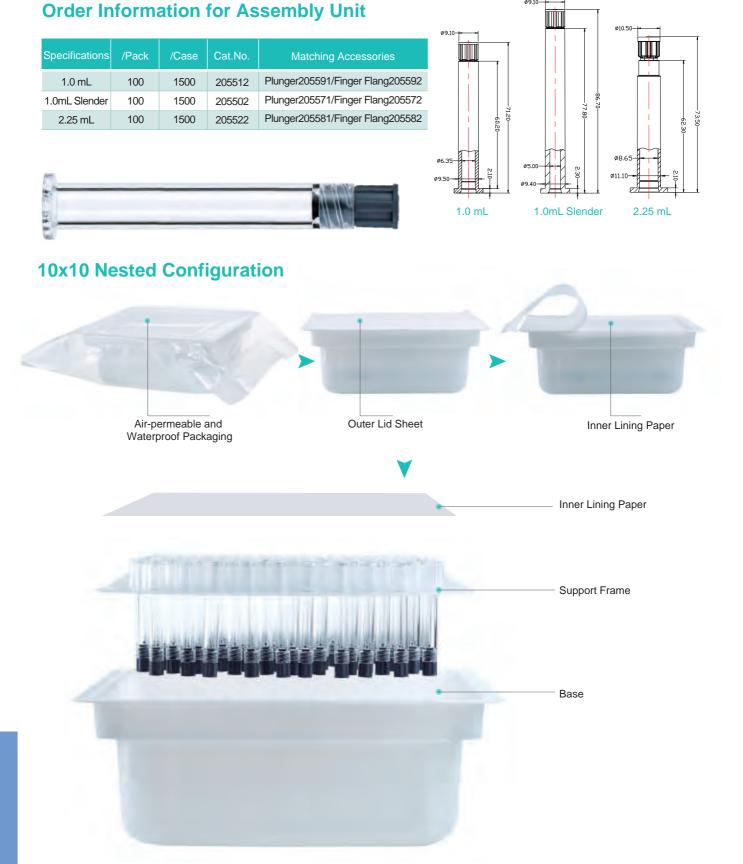


Rubber Stopper and Luer Cap

Made of butyl rubber bromide and compliant with European Pharmacopoeia, United States Pharmacopoeia, and Japanese Pharmacopoeia.

Product	Material	Rubber Stopper Formulation	Color
Rubber Stopper	Butyl Bromide	HS264	Black
Luer Cap	Butyl Bromide	HM174	Gray

Pharmaceutical packaging



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- The specification for pre-sterilized wash-free and sterilization-free NEST Pre-filled Disposable Glass Intranasal Atomization Device is now available. They are produced in a cleanroom that adheres to GMP management standards, from injection molding to final packaging.
- State-of-the-art automated production process is adopted to ensure minimal tolerance and stable quality of the barrel.
- Provide data reports on extractable and biocompatibility studies.

Plunger

- Design Compatibility
- Compliant with ISO 11040 standard
- Material: Polycarbonate (PC)
- Fit high-speed sealing production line
- Compatible with plunger chamber
- Customizable shape, available in standard or custom colors
- Manufactured in a class 10,000 cleanroom
- Sterilized by electron beam **Order information for Finger Flanger**

(Double-bagged, non-sterile)

Specifications	/Pack	/Case	Cat.No.	Matching Accessories
1.0 mL	5000	5000	205591	Plunger205512/Finger Flang205592
1.0mL Slender	5000	5000	205571	Plunger205502/Finger Flang205572
2.25 mL	5000	5000	205581	Plunger205522/Finger Flang205582

Finger Flange

- Polypropylene (PP)
- Compatible with ISO 11040 compliant check valves with injection flange or beveled flange
- Manufactured in a Class 10,000 cleanroom
- Customizable design
- Sterilized by electron beam

Order information for Finger Flanger (Double-bagged, non-sterile)

Specifications	/Pack	/Case	Cat.No.	Matching Accessories	-		
1.0 mL	10000	10000	205592	Plunger205512/Finger Flang205591		R.S.	1ª
1.0mL Slender	10000	10000	205572	Plunger205502/Finger Flang205571		all	
2.25 mL	10000	10000	205582	Plunger205522/Finger Flang205581	205572	205582	20





Lab Safety

Nitrile Examination Glove



Colloidal Oatmeal Coated Nitrile Gloves

Feature

- Made of nitrile, an alternative solution for people allergic to natural latex.
- Suitable for both left and right hand.
- Tensile Strength: Minimum 18.0 MPa (Before Aging).
- Rolled cuff design makes it easy to wear and prevents rollback.
- Textured fingertips increase friction for better gripping.
- Powder-free.
- Non-Sterile.Single use only, powder free.
- Boxed pull-out packaging.
- Made in Malaysia.
- Powder-free nitrile gloves weigh 3.5 grams.



Colloidal Oatmeal Coated Nitrile Glove

Oats Extractions

Oats extractions is a patented coating recognized by the FDA as a skin protectant, which have been proven by clinical studies could reduce and control rash and dry skin symptoms. Clinical studies have shown that colloidal oatmeal could reduce and control rash, dry skin.

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Moisturizing

Soothing

Keep skin moist through its moisture-locking capacity

Relieves inflammation, irritation and itchiness and

boosts skin's restoration process



Forms an adhesive, closed barrier to protect skin from external stimuli

btect skin from Maintains skin's protective barrier function by restoring pH balance

Clean

Anti-Oxidation

Restoring pH

Acts as a natural cleanser to remove dead skin cells

Protects skin from oxidative damage

Cat.No.	Size	Palm Width (mm)±4 mm	Length (mm)	/Pack	/Case
903001	XS	76		100	1000
903011	S	84		100	1000
903021	М	94	≥230	100	1000
903031	L	105		100	1000

Nitrile Powder Free Examination Glove

Cat.No.	Size	Palm Width (mm)±4 mm	Length (mm)	/Pack	/Case
902001	XS	76	-	100	1000
902011	S	86		100	1000
902021	М	98	≥230	100	1000
902031	L	107		100	1000
902041	XL	115		90	900

Individually Packaged Nitrile Examination Gloves





Thickened

Thick and durable nitrile gloves provide a higher level of protection.

Anti-slip

Fingertip embossed design provides enhanced anti-slip performance.

Comfortable

Comfortable feel similar to natural latex.

Safe

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Better tensile strength and toughness for higher safety protection during operations.

Protective

Latex-free, minimizing allergy risks.

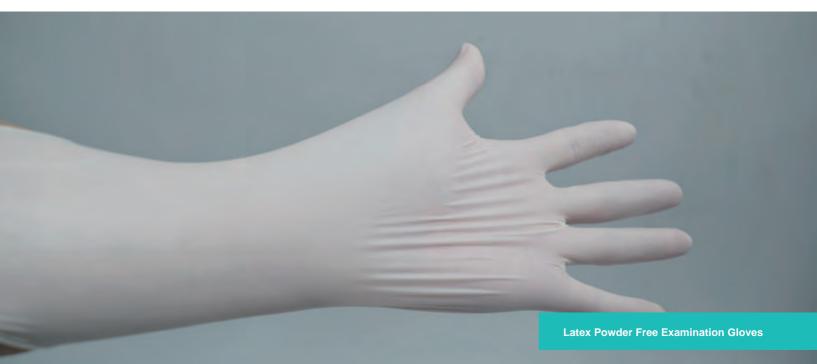
Clean

Sterile product, convenient to use and can be used immediately in a clean room environment.

Individually Packaged Nitrile Examination Gloves

Cat.No.	Size	Palm Width (mm)±4 mm	Length (mm)	/Pack	/Case
902502	XS	76		2	1200
902512	S	84		2	1200
902522	М	94	≥230	2	1200
902532	L	105		2	1200
902542	XL	≥110		2	1200

Latex Examination Glove





Colloidal Oatmeal Coated Latex Gloves

Feature







- Made of synthetic latex.
- Suitable for both left and right hand.
- Tensile Strength: Minimum 18.0 MPa (Before Aging).
- · Rolled cuff design makes it easy to wear and prevents rollback.
- Textured fingertips increase friction for better gripping.
- Powder-free.
- Non-Sterile. Single use only, powder free.
- Boxed pull-out packaging.
- Made in Malaysia.
- Powder-free latex gloves weigh 5.5 grams.

Colloidal Oatmeal Coated Latex Glove

Oats extractions is a patented coating recognized by the FDA as a skin protectant. Clinical studies have shown that colloidal oatmeal could reduce and control rash, dry skin symptoms.

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PH

Moisturizing

Keep skin moist through its moisture-locking capacity

Protect

Forms an adhesive, closed barrier to protect skin from external stimuli

Soothing

Relieves inflammation, irritation and itchiness and boosts skin's restoration process

Anti-Oxidation

Protects skin from oxidative damage

Restoring pH

Maintains skin's protective barrier function by restoring pH balance

Clean

Acts as a natural cleanser to remove dead skin cells

Cat.No.	Size	Palm Width (mm)±4 mm	Length (mm)	/Pack	/Case
904001	XS	76		100	1000
904011	S	84	≥230	100	1000
904021	М	94		100	1000
904031	L	105		100	1000

Tip: Please store in a cool, dry place, and avoid direct sunlight.

Latex Powder Free Examination Glove

Cat.No.	Size	Palm Width (mm)±4 mm	Length (mm)	/Pack	/Case
901001	XS	76		100	1000
901011	S	86		100	1000
901021	М	98	≥230	100	1000
901031	L	107		100	1000
901041	XL	115		100	1000

Nonwoven Mask

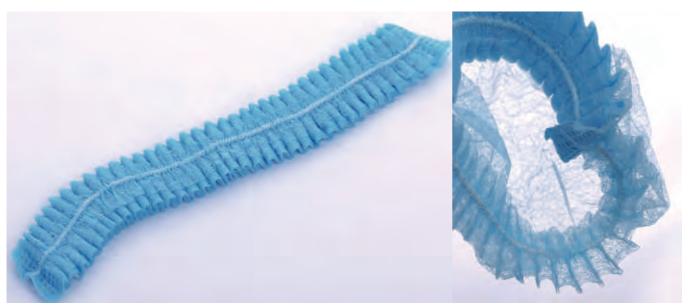


Features

- Can filter some toxic and harmful substances, odor gases, dust, etc. in the air.
- Bendable nose clip to ensure a better fit between the mask and the face.
- Foldable, easy to store, light weight, easy to carry.
 The four-layer activated carbon protection mask is made of activated carbon fiber of high adsorption, which is more effective in filtering than the ones protection mask without activated carbon fiber.

Cat.No.	Name	Size (±0.5cm)	Color	/Pack	/Case
922001	Three-layer PP Non-woven Lab Protection Mask	17.5 x 9	Blue	50	500
922101	Four-layer PP Activated Carbon Non-woven Lab Protection Mask	17.8 x 9.3	Dark Gray	50	500

Mushroom Cap& Non-woven Shoe Cover



Features

- Breathable, dustproof, able to block dust and microorganisms.
- Not feeling tight for long-time wearing, no allergic reaction.

Cat. No.	Name	/Pack	/Case
921001	Blue Mushroom Cap	100	1,000



Features

• Breathable, non-slip, with rubber bands, comfortable to wear.

Cat. No.	Size(cm)	/Pack	/Case
923001	42 * 17	100	1,000

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Lab Instrument

Centrifuge

Feature

- Electronic locks. Centrifugation only when the lid is locked.
- The lid opens automatically after centrifugation.
- Fast Lifting Speed, the electronic brake.
- Low Noise.
- Capacitive touchpad, responsive.
- LCD display. Real-time display of speed, time and operating status.
- Centrifugal time and speed adjustable. Adjustable speed during centrifugation.
- Size: 260*220*150mm.
- Voltage: 110-220V, 50-60HZ.

Туре	Name	Centrifuge Range (RPM)	Max RCF (g)	Rotor
102001	Universal Centrifuge	500-6,000	2,400	General Rotor (1.2/05/1.5/5.0ml)
102002	5 mL Centrifuge	500-6,000	2,400	For 5 mL Centrifuge Tubes
102101	High - Speed Centrifuge	500-12,000	8,800	For 1.5 mL & 2.0 mL Centrifuge Tubes









General Rotor 5 mL Centrifuge

High - Speed Centrifuge

Mini Dry Bath

Feature

- Manual mode & automatic mode.
- Fast heating, with overheat protection switch to prevent overheating.
- Display setting parameters and real-time parameters simultaneously, easy to observe and use.

Range of Application	0.2/0.5/1.5/2.0ml Centrifuge tube
Temperature Range	Indoor temperature-100 [°] C
Time set	1-999min or 1-999sec
Temperature control accuracy	±0.1 °C
Temperature uniformity	±0.3 [°] C
Heating up time	About 5min
Touch screen	Capacitive touch screen
Display	LCD
Voltage	100-220V, 50-60HZ
Size	157*115*100mm (L*W*H)
Weight	About 0.5kg



7° Digital Nutating Mixer

Features

- The adjustable and gentle motion is ideal for many staining applications;
- Includes a large platform and non-slip mat;
- Low voltage power supply provides safe cold room operation and low energy consumption;
- Continuous or timed operation with automatic switch-off;
- Continue to run by last set speed and the remaining time when the power recovers;
- Audible and visual alarm: In timed mode, alarm will sound 5 times and then the time window shows "End" and flicker 5 times when the time reaches zero.

Cat. No.	105005	
Speed	2~80rpm	
· · ·	· ·	
Speed Accuracy	1rpm	
Tilt Angle	7°	
Timer	0~99h59min	
Platform Dimensions	307x297mm	
Max. Load	0.8kg	
Display	LED	
Included Accessory	C. Duikh an Otring	
Standard in Packaging	6 Rubber Strips	
Ambient Temperature	5~40°C	
Relative Humidity	≤80%	
Power Supply	AC100~240V, 50 / 60Hz	
Max. Power	6.5W	
Dimensions	440(L)x296(W)x189(H)mm	
Net Weight	7.3kgs	
Protection Level	IP21	



Mini Vortex Mixer

Features

- Extremely compact and easy operate;
- Powerful vortex for tubes up to 30mm;
- Head is made of durable material to ensure long life;
- Refined steel base is designed to ensure product stability.

Cat. No.	105003
Oscillation Mode	Circumference Oscillation
Orbital Diameter	Ф4.5mm
Max. Capacity	80mL
Max. Tube Diameter	Ф30mm
Speed	3000rpm
IP rating (DIN EN 60529)	IP40
Ambient Temp.	5~40°C
Outside Dimensions	Ф96xH85mm
Power	5W
Power Supply	AC100~240V,50/60Hz
Weight	0.55kg



Variable Speed Tube Revolver with Digital Display





Rotisserie Paddles For 10mL / 15mL Tubes



Rotisserie Paddles

For 5mL / 7mL Tubes

Rotisserie Paddles For 1.5mL / 2mL Tubes



Rotisserie Paddles For 0.5mL / 0.8mL Tubes

Features

- Small footprint, "Plug and Play" operation;
- Includes five different interchangeable rotisseries;
- Rotation direction can be changed by slightly touching the rotisseries;
- Paddle angle is adjustable for different purposes;
- High quality, maintenance-free motor with little noise.

Cat. No.	105004
Rotation Speed	10~40rpm
Conceitu	84x0.5mL tubes, 60x1.5mL / 2.0mL tubes,
Capacity	28x5mL / 7mL tubes, 24x10mL tubes, 6x50mL tubes
	Rotisserie Paddles for 10mL / 15mL Tubes 2pcs
Holder for Tubes	Rotisserie Paddles for 5mL / 7mL Tubes 2pcs
	Rotisserie Paddles for 1.5mL / 2mL Tubes 2pcs
Standard Configuration	Rotisserie Paddles for 0.5mL / 0.8mL Tubes 2pcs
	Rotisserie Paddles for 50mL Tubes 1pcs
Ambient	4~60 [°] C
Outside Dimensions	260(W)x148(D)x195mm(H)
Power	10W
Power Supply	AC100V~240V 50Hz/60Hz
Weight	1kg



Rotisserie Paddles For 50mL Tubes

CO₂ Orbital Shaker



Features

- Orbital shaking through magnetic power eliminates the need to replace belts;
- Small footprint ideal for use in a CO₂ incubator;
- Specially treated mechanical components protect up to 20% CO₂ and 95% humidity conditions;
- Convenient external control box with LED display allows for easy adjustments without opening the chamber door;
- Minimal heat dissipation assures conditions within the CO₂ chamber are not effected;
- \bullet CO $_{\rm 2}$ resistant shaker can be used outside of CO $_{\rm 2}$ incubator for maximum value.

Cat. No.	105008 (No Accessories) / 105009 (Contains Accessories)
Speed Range	30rpm~300rpm
Timer	0~99h59min (0, continuous)
Orbit Diameter	Ф19mm
Platform Dimensions	355mmx300mm
Max.Capacity	50mL x30 / 100mL x15 / 150mL x15 / 200mL x15 / 250mL x15
Max.Capacity	500mL x9 / 1000mL x6 / 2000mL x4 / 3000mL x2 / 5000mL x1
Display	LED
Max.Load	6kgs
Ambient	Temp.: 5 ~ 60 Humidity: <99%RH
Outside Dimensions (WxDxH)	Machine Body: 360 x 300 x 96mm Control Box: 360 x 105 x 75mm
	The Unit: 360 x 405 x 96mm
Power	30W
Power Supply	AC100~240V, 50Hz/60Hz
Weight	Machine Body :17.5kgs Control box: 1kg



Flask clamp feature

Made of polished stainless stainless-steel. They can be fixed on any platform of all models of incubator shakers.

Cat.No.	Name	
	100mL Flask Clamp * 2	
	250mL Flask Clamp * 4	
105901	500mL Flask Clamp * 4	
103901-	1000mL Flask Clamp * 2	
	2000mL Flask Clamp * 2	
	Aluminum Platform * 1	
105902	100mL Flask Clamp	
105903▲	250mL Flask Clamp	
105904	500mL Flask Clamp	
105905▲	1000mL Flask Clamp	
105906▲	2000mL Flask Clamp	
105907	Aluminum Platform 300mm*360mm	

A Make to Order

Standard Mini Roller



Features

- Variable speed to accommodate numerous applications.
- Anti-corrosive and wear-resistant construction for use in humid and CO₂ environments.
- Remote control box makes it easy to operate the unit while it is in an incubator.

Product Name	Standard Mini Roller (11 Rollers)	Standard Mini Roller (6 Rollers)
Cat. No.	105007	105006
Included Accessory Standard	Rollers: 11	Rollers: 6
in Packaging	O Ring (23.5x3.6mm): 20	O Ring (23.5x3.6mm): 20
III Fackaying	O Ring (13.2x2.7mm): 20	O Ring (13.2x2.7mm): 20
Roller Speed	0.5~80rpm	0.5~80rpm
Operating Mode	Way forward	Way forward
Roller Dimensions (DXL)	Ф28mmx259mm	φ28mmx259mm
Available Tubes or Bottles	Max. Ø120mm bottles; tubes	Max. Ø120mm bottles; tubes
Positions	Centrifuge tubes can be placed randomly	Centrifuge tubes can be placed randomly
FOSIIONS	or three 1500ml standard bottles	or three 1500ml standard bottles
Max.Load	6.5kgs	6.5kgs
Ambient	5°C~60°C	5 °C ~60 °C
Relative Humidity	≤95%	≤95%
Display	LED	LED
Timer (Control Box)	999min or continuous	/
Outside Dimensions (WxDxH)	378mmx360mmx72mm	378mmx360mmx72mm
Power	10w	10W
Power Supply	AC100~240V,50/60Hz	AC100~240V,50/60Hz
Weight	6.5kgs	6.5kgs

Automatic Decapper Instruction manual



Product Introduction

The device is equipped with the functions of automatic capping g/uncapping and automatic counting, which is small and light, out of ergonomic inclination design. It is of ergonomic inclination design, small and light. With a single hand holding the tube, automatic capping/uncapping can be realized, effectively reducing the working intensity of testers and greatly improving the working efficiency.

Features

Flexible & Easy-to-use Multiple working modes available (Continuous uncapping; continuous capping; and capping after uncapping), The device can customize the parameters such as torque, clamping force and number of turns to avoid sealing failure and prevent sample contamination.

Intelligent & Efficient The device is fitted with a high-safety automatic trigger starting mechanism, without need for manual trigger of key, The processing speed less than 4s/sample.

Compatible The device is suitable for the sampling tubes with screw caps(the cap diameter is 8-22mm) and can be customized for other sizes.

Safe & Portable The software interface is simple and easy to understand, with counting display, counting re-set and module re-set functions. With a small size, it is flexible to move and can be used in the working scenarios such as biosafety cabinet and super clean bench, and disinfectant like alcohol can be used to directly spray for disinfection.

Product Model	European / German standard plug	British standard plug	South Africa / India standard plug	American standard plug
Cat.No.	107001	107002	107003	107004
Clamping force	40-150N			
Capping/torque	1N*m			
Starting mode	Push up the tube to automatically trigger the startup			
Working mode	Continuous uncapping; continuous capping; and capping after uncapping			
Settable functions	Torque, clamping force, number of turns, uncapping mode			
Applicable specifications	The sampling tubes with screw caps (the cap diameter is 8-22mm)			
Weight	10 kgs			
Dimensions	250mm×245mm×420mm			

Application sites



Application scenarios



Sample collection link (Sample collection for COVID-2019 testing)



Sampling and testing link (Sampling for COVID-2019 testing)



Packaging (Reagent packaging)

Label Printer



BradyPrinter i5100 Label Printer

Brady i5100 label printer supports batch printing and integrates intelligent printing technology, making various complex printing tasks within your enterprise easier to accomplish.

Product Performance Advantages:

- Simple settings changes: The touch screen is easy to use for adjusting printer settings quickly.
- Comprehensive feature set: The printer has all the features needed for high-performance printing.
- Intelligent Printing (IP) technology: Software and con sumables that communicate with the printer eliminate debugging after consumable replacement and allow you to get back to work quickly.
- Intelligent loading design: Specially designed ribbon rewind spools and automatic centering label roll holders make consumables easy to replace without additional steps.
- Multiple hardware options: You can use a variety of connection ports to connect to the devices you need and use replaceable rubber rollers to optimize printing effects for different labels.

Model	15100
Handheld/Desktop	Desktop
Power Supply	100 - 240V AC, 50/60 Hz, PFC
Printing Method	Thermal transfer (300 or 600dpi) / direct thermal (300dpi - depending on material and printhead)
Printing Resolution	300 dpi / 600 dpi
Maximum Printing Width	4.16 inches (106mm)
Maximum Label Width	0.20 inches (5mm) to 4.33 inches (110mm)
Maximum Printing Speed	Maximum 11.8 inches (300mm)/second (300 dpi) Maximum 5.9 inches (150mm)/ second (600 dpi)
Printing Color	Single color

Memory	256MB
Connectable to Computer	Yes
Interfaces	USB 2.0, RS232-C, Ethernet 10/100 BASE-T, SD slot
Keyboard	External
Display Screen	Color LCD touch screen
Dimensions	12.5 inches (318mm) x 9.5 inches (241mm) x 17.1 inches (434mm)
Weigh	14.6 pounds (6.6kg)
Maximum Power Consumption	Standby <10W / Normal 150W / Maximum 300W
Software	Brady Workstation (v4.1 or higher) and Workstation applications, Brady LabelMark software (v6.6.1 or higher)

Consumables Number	106091	106092
Consumables Name	Cryogenic Labels	Thermo Ribbon
Consumables Model	THT-163-499-3127mm*37.4mm	IP-R4302
Packaging	3000 pcs/roll	1 roll/box

Sample Management Software

NEST Sample Management System (SMS) is a comprehensive sample information management system for laboratories, medical units, and scientific research institutions. It streamlines multiple steps in the sample information process, including pre-processing, storage, queries. NEST SMS supports custom configurations according to on-site needs, without the need for special customization development. It links functional modules efficiently, ensuring simple and smooth inbound and outbound steps, complete information, and reducing the workload and human error risks associated with sample library management.

Software highlights

Efficient and flexible

Pre-set with information about storage equipment, cryogenic boxes, and data interfaces, allowing for quick and easy customization.

Adaptability

Compatible with NEST cryogenic boxes and other ANSI-SBS standard specifications, making sample storage quick and easy.

Interconnection Data interface makes it

easy to connect sample information with other related information systems, saving you valuable storage space.

User-friendly

Designed for easy use, with a virtual model that allows for simple and intuitive sample operations.

Secure and reliable

Permission system and operation log ensure the security and integrity of your data, giving you peace of mind.

Basic Functional Modules

- Regional equipment: visual equipment structure overview
- Sample management: custom, pre-entry, sample storage and retrieval
- Query and statistics: query and statistics of samples by location, custom fields, association information, and scanning
- Data management: data backup, batch editing of samples
- Associated information: can be docked with HIS, LIS, PACS, and other information systems to quickly improve sample information and save local space
- Label printing: human-readable barcodes and custom adhesive labels can be added
- Settings: custom storage equipment (refrigerator, liquid nitrogen tank, freezer rack, cryogenic box), custom sample information, user role settings, etc.

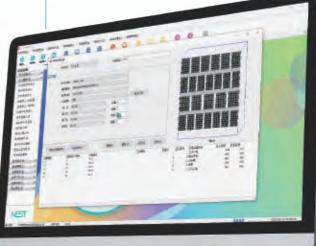
Advanced Functions

- Pre-set SQL Server, Oracle, MySQL data interface
- Quick association pre-entry
- Custom sample number, encoding rule settings
- User permission management, log information inquiry
- Label printing scene settings.

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Product Specification

106131	NEST Sample Management Software-20 terminal devices
106132	NEST Sample Management Software-15 terminal devices
106133	NEST Sample Management Software-10 terminal devices
106134	NEST Sample Management Software-5 terminal devices
106135	NEST Sample Management Software-3 terminal devices



Single-Rack Reader

The NEST Single-rack reader is a device that rapidly decodes entire boxes of biological samples in biobanks and high-throughput laboratories. It is lightweight, compact, and can quickly decode various types of cryogenic boxes on-site. The device can simultaneously decode the entire box and read the cryogenic box code. When used with the NEST sample management software, it can directly decode and store entire boxes of samples. The device was granted a utility model patent in 2020.

Cryogenic box plate rack

Decoding entire boxes of cryogenic tubes

- Decoding rules can be customized according to the cryo genic box specification (8*12, 6*8, 5*5, 9*9, 10*10, etc.)
- Non-standard decoding area can be specified for each position.
- Cryogenic box code
- Can be a one-dimensional or two-dimensional barcode on any side of the cryogenic box or a two-dimensional code at a certain position on the bottom of the cryogenic box.
- Cryogenic box code decoding does not require an external device.
- Cryogenic box code location can be automatically set by software.

Data interface

- Enabling data integration with systems such as HIS, LIS, PACS, EMR, etc.
- Open database interface can be implemented through the pre-configured Oracle, SQL Server, MySQL of the system without the need for customized development.

Matching software and interface services

- Operating system: Windows XP or higher version.
- One-click cryogenic box numbering and entire box cryogenic tube decoding.
- Cryogenic box template can be customized.
- Decoding results can be displayed through graphics, lists, and images.
- Decoding results can be exported to Excel files.
- HTTP service interface can be started with one-click to automatically generate URL addresses.
- HTTP service call return results consistent with the direct software interface operation results.

Mainframe framework

- Small and portable size: 220*175*220mm (length * width * height).
- Light weight: about 1.5 kg.
- Operating environment -20 $^\circ\!\mathrm{C}\,$ ~ 35 $^\circ\!\mathrm{C}$.

Camera

- Dust-proof and waterproof tempered glass protection above the camera
- Plug and play, no need to install drivers.

Product number	106211
Product model	Single-rack reader NSSnap, English

USB data cable/power switch

- Standard USB2.0 interface, no external power supply required, low power consumption (1W-4W).
- Standby power consumption less than 1W, and photo decoding power consumption is less than 4W.

Multi-Rack Reader

Multi-Rack Reader

- Partial scanning according to the number of cryogenic boxes.
- Scanning results in various ways such as graphics, lists, and images.
- Full-frame decoding less than 10 seconds, single-box scanning within 3-5 seconds.
- Excel export of a single box or merged multiple boxes.
- Decoding application for scanning bottom QR codes for integration (single-rack/multi-rack) based on the Windows system.
- Fast scanning of inbound and outbound barcodes, greatly improving work efficiency.
- Number and type of cryogenic boxes customization.
- Compatible with major brands of cryogenic tubes on the market.
- Compatible with various scanning racks to meet different quantity requirements.



Product number	106212
Product model	Multi-rack reader NSScanner, English
Product type	Flatbed
Maximum scanning range	216×297mm
Scanning component	CCD
Optical resolution	4800×9600dpi
Scanning speed	Full-frame scanning ≤ 6 seconds

Scanning light source	LED light source
Rack types	SBS box + traditional square box, 2 traditional square boxes, 3 SBS boxes
Product size and weight	443.5×278.6×54mm 2.14kg
Power/power consumption	220V/18W
Data interface	Provides HTTP access service to return a JSON string containing the position and cryogenic tube code
Support system	Windows2000/XP/Vista/7/10
Machine brand	EPSON

Barcode Scanner

The barcode and DATAMATRIX code on the cryogenic tube can be scanned using a barcode scanner to quickly obtain information related to the sample.

The scanning result can be directly input into the sample library management system, facilitating the subsequent sample tracking and management.

The barcode scanner has the following features: high efficiency, high accuracy, easy to operate, and strong durability.

- Quick recognition of electronic screen codes: can scan one-dimensional and two-dimensional codes and traditional paper barcodes, and has strong decoding ability for electronic screen QR codes.
- High-speed rebound button: 5 million fatigue tests, still maintaining good button effects.
- Adaptus6.0 imaging technology: upgraded barcode image acquisition technology combined with custom sensors to achieve extended depth of field and fast reading.
- Sturdy and durable shell: using a new generation of high-strength ABS materials, it can withstand a 1.5m free fall impact.
- Classic commercial appearance: loved by international brands, simple and versatile design, naturally formed.



Handheld Decapper for Cryogenic Vials



Product introduction

NEST decapper is available in 1, 8, 24, 48, and 96 channel models, suitable for use in biobanks, genetic sequencing, disease control centers, blood centers, laboratory automation, pharmaceuticals, and other industries.

Features

- Improved efficiency: significantly improves efficiency compared to manual operations
- Safety requirements: prevents laboratory personnel from contacting samples or reagents when opening or closing caps, reducing the risk of biological and chemical hazards.
- Sealing guarantee: the uniform torque design of the automated decapper prevents caps from being closed improperly or damaging the cryogenic vial due to uneven hand force.
- Wide compatibility: easily opens and closes all NEST 2D barcode cryogenic vials, and is also suitable for other brands with the same cap clasping mechanism.

Product parameters

Product name	Handheld Decapper for Cryogenic Vials
Product number	106002
Empty load speed	170rpm
Manual torque	2N.m
Electric torque	0.25-0.35N.m
Battery type	Lithium battery
Battery voltage	3.7V
Battery capacity	260mAh
Charging time	45 minutes

Cell Thawing Device



Product Features

- Small size, less space on the workbench.
- Especially suitable for scenarios with few samples to be thawed and resuscitated.
- The LCD screen can display the real-time temperature of the sample.
- Has account management and data export functions
- Comes with a transfer container for transferring cryogenic tubes.

Product Introduction

To better meet the needs of applications with small sample quantities and reduce user procurement costs, NEST has launched the NEST cell thawing device, which integrates real-time temperature data display. NEST cell thawing device uses "resistive heating", "programmed temperature control", "low temperature sensing" and other technologies to achieve cell thawing and resuscitation. The built-in temperature monitoring system identifies the surface temperature of cryogenic tubes and each stage temperature during the solid-to-liquid thawing and resuscitation process. Even if there are frozen storage labels and marker pens on the surface, the thawing effect will not be affected. Customizable thawing and recovery solutions for all types of frozen cell storage tubes, whether they are stored in liquid nitrogen or at -80°C.

The thawing time of the NEST cell thawing device is basically the same as that of a water bath. It takes 1 minute to preheat, about 1 minute and 10 seconds for the melting stage, and about 1 minute and 20 seconds for the thawing and resuscitation stage. The cell survival rate of thawing and resuscitation is similar to that of a water bath.

Product Name	NEST Cell Thawing Device
SKU	106007
Model	LA-G002
Throughput	2 holes, each hole can be used independently
Application	2.0ml standard cryogenic tubes
Filling volume	0.8-1.5ml
Thawing time	3 minutes
Alarm	Low temperature alarm, error operation alarm
Prompt sound	Preheating end prompt, thawing countdown prompt, thawing end prompt
Thawing and resuscitation end	Cryogenic tube pops out directly
Size (L * W * H)	23 * 14 * 16cm
Weight	3.5kg
Voltage	220V, 50Hz
Warranty	One-year warranty for the whole device

Operating procedures





02 Insert the cryogenic tube into the hole

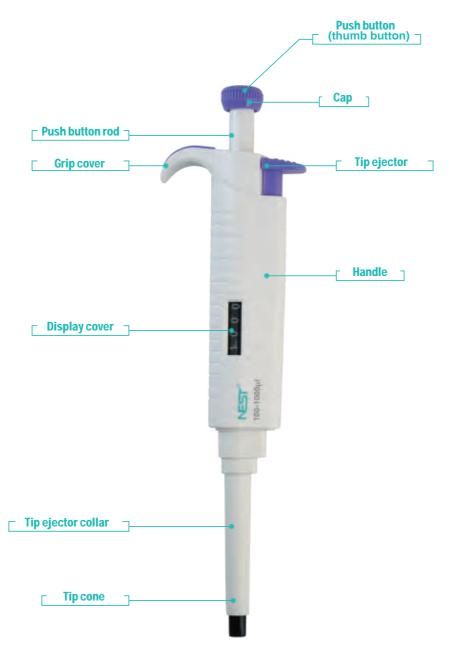


03 The thawing instrument automatically thaws



03 After thawing is complete, the cryogenic tube pops out

Pipette





Features

- Available as Fixed Volume and Adjustable Volume formats.
- Streamlined shape design.
- \bullet Comprehensive volume range from 0.1 μL to 10mL.
- Easy calibration and maintenance.
- 8 and 12 channel pipette options.
- Dispensing head rotates for effortless pipetting convenience.
- Individual piston and tip cone assembly.
- Spring loaded tip cones for easy cleaning and maintenance.
- Compound material-made tip cone secures high sealing performance.



Mechanical Pipette Volume Selection

Specifications This volume list is for MicroPette and MicroPette plass (Autjds tixed volume)

				Error limits in accordance with IS08655-2				
Cat.No.	Volume Range	Increment	Test Volume	Systema	tic Error	Random Error		
	μL	μL	μL	μL	%	μL	%	
			2.5	±0.0625	±2.50	±0.05	±2.00	
104011	0.1-2.5	0.05	1.25	±0.0375	±3.00	±0.0375	±3.00	
			0.25	±0.03	±12.00	±0.015	±6.00	
			10	±0.1	±1.00	±0.08	±0.80	
104012	0.5-10	0.1	5	± 0.075	±1.50	±0.075	±1.50	
			1	±0.025	±2.50	±0.015	±1.50	
			20	±0.18	±0.09	±0.08	±0.04	
104013	2-20	0.5	10	±0.12	±1.20	±0.1	±1.00	
			2	±0.06	±3.00	±0.04	±2.00	
			50	±0.3	±0.60	±0.15	±0.30	
104014	5-50	0.5	25	±0.225	±0.90	±0.15	±0.60	
			5	±0.1	±2.00	±0.1	±2.00	
			100	±0.8	±0.80	±0.15	±0.15	
104015	10-100	1	50	±0.5	±1.00	±0.2	±0.40	
			10	±0.3	±3.00	±0.15	±1.50	
			200	±1.2	±0.60	±0.3	±0.15	
104016	20-200	1	100	±0.8	±0.80	±0.3	±0.30	
			20	±0.6	±3.00	±0.2	±1.00	
			1000	±6	±0.60	±2	±0.20	
104017	100-1000	5	500	±3.5	±0.70	±1.25	±0.25	
				100	±2	±2.00	±0.7	±0.70

User calibration should refer to the industrial standard ISO8655-2.

Bulk, Non-sterile	Racked, Sterile	Product Desciription	0.1~2.5µl 104011	0.5~10µL 104012	2~20µL 104013	5~50µL 104014	10~100µL 104015	20~200µl 104016	100~1000µ 104017
—	314016	10µL filter universal pipette tips, extra long, clear	\checkmark	\checkmark					
314001	—	10µL universal pipette tips, extra long, clear	\checkmark	\checkmark					
-	311012	10µL filter universal pipette tips, clear	\checkmark	\checkmark					
311001	—	10µL filter universal pipette tips, clear	\checkmark						
301006	301016	10µL universal pipette tips, clear	\checkmark	\checkmark					
_	310012	20µL filter universal pipette tips, clear			\checkmark				
316001	316012	100µL filter universal pipette tips, clear				\checkmark	\checkmark		
312001	312012	200µL filter universal pipette tips, clear					\checkmark	\checkmark	
302106	302116	200µL universal pipette tips, yellow			\checkmark	\checkmark	\checkmark	\checkmark	
305006	305016	300µL universal pipette tips, clear			\checkmark	\checkmark	\checkmark	\checkmark	
313001	313012	1000µL filter universal pipette tips, extra long, clear							\checkmark
303206	303216	1000µL universal pipette tips, blue							\checkmark
304006	304016	1250µL universal pipette tips, clear							\checkmark

Note: Due to the easy loosening of the filter of the bag-packaged tips, there may be a situation of not fitting in this combination. Not recommended.

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Cell Culture Product

GelNest™ Matrix

GelNest[™] Matrix is derived from mouse tumor tissue and contains extracellular matrix components such as laminin, type IV collagen, heparan sulfate proteoglycans, and more. These components support cell adhesion, differentiation, and proliferation, providing signals for these processes. Additionally, they simulate the characteristics of the basement membrane in the physiological environment, enhancing the success rate and effectiveness of cell culture.

In addition to the matrix components, GelNest[™] Matrix is rich in various growth factors. These growth factors promote cell differentiation, proliferation, and migration, mimicking cellular signaling pathways and interactions in the physiological environment. GelNest[™] Matrix has a wide range of applications, particularly in tissue engineering, cell culture, and research. It can be used for organoid culture, stem cell differentiation, angiogenesis, migration or invasion assays, and in vivo tumor studies.

Cell Migration and Tumor Invasion Experiments Used in combination with NEST Cell Culture Insert to provide a more realistic cellular growth/ environment. **2D Culture Coating Organoid Culture** Insert Receiving Chamber Promotes cell growth and provides a (well plate) Walls Provides a 3D cell growth environment favorable environment for attachment GelNestTM Matrix that is physiologically relevant for Migration/Invasion and proliferation. studying organ development and Inducing Substances function. **GelNest**[™] In Vivo Tumor In Vitro/In Vivo Blood **Formation Experiment Vessel Formation** Used for in vivo tumor formation experi-Provides a 3D cell growth environment ments in mice to study tumor growth and that is physiologically/pathologically treatment. relevant for studying neovascularization and maturation. **Stem Cell** Differentiation Used for studying stem cell differentiation and tissue regeneration. n Cells

GelNest™ Matrix

Organoid Culture Test

- 1. Re-suspend the single-cell suspension for organoid culture in pre-cooled basal medium at 4°C and perform cell counting.
- 2. Mix the cells with the gel solution and add the mixture to pre-warmed 24-well plates. Each well should contain approximately 5x104 cells and 60µL of matrix gel.
- 3. Immediately place the plates in the incubator, and the gel will solidify in approximately 10 minutes.
- 4. Add 500µL of organoid culture medium for cultivation.
- 5. Wait for 3-5 days for the organoids to form. Finally, image the live cells using high-content microscopy to determine the sensitivity of the organoids to various drugs.

This method provides an efficient and convenient solution for organoid culture and can be used in areas such as drug screening and tumor research.

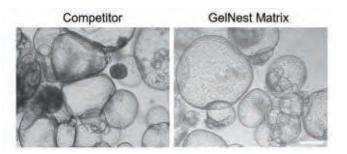


Figure 1. Growth of Human Bile Duct-like Organoids in competitor's matrix gel and GelNest[™] Matrix after 5 Days. Scale bar: 300µm.

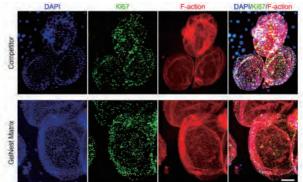


Figure 2. Growth of Human Bile Duct Cancer-like Organoids in competitor' s matrix gel and GelNest[™] Matrix after 6 Days. Scale bar: 200µm.

Stem Cell Differentiation Test

For human embryonic stem cells (hESCs) and induced pluripotent stem cells (iPSCs) without feeder layer culture:

- 1. Thaw GelNest[™] Matrix stored in freezing conditions and let it thaw overnight in a 4°C ice bath. Gently blow and mix the gel three times with a pre-cooled pipette tip for thorough mixing. Transfer the thawed matrix gel using the pre-cooled pipette tip. If bubbles form, briefly centrifuge with a handheld centrifuge to remove them.
- 2. Preheat the cell culture plates in the incubator.
- 3. Dilute the gel solution in pre-cooled serum-free medium at a 1:100 ratio. Make sure to cover the entire culture plate with the diluted gel solution. The recommended amount is 300µL/cm^2 in the culture dish.
- 4. Leave the culture plates with the modification solution at room temperature for 1 hour.
- 5. Remove the modification solution and immediately seed the stem cells mixed with mTeSR in the culture plate. Be cautious to prevent the surface of the modified culture plate from drying out.

This method provides an efficient and convenient solution for stem cell culture and is expected to play an important role in tissue engineering, regenerative medicine, and other fields.

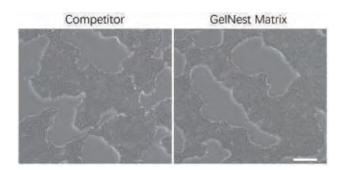


Figure 3. Results of human embryonic stem cells grown on competitor's matrix gel-modified surfaces and GelNest[™] Matrix-modified surfaces for 3 days. Scale bar: 300µm.

GelNest[™] Matrix

In Vitro Blood Vessel Formation Test

- 1. Replace the complete growth medium with starvation medium for cells: DMEM medium containing 0.2% FBS, 2mM L-glutamine, 1mM sodium pyruvate, 100U/mL penicillin, and 100µg/mL streptomycin. Starve the cells for 24 hours.
- Spread 50µL of GelNest[™] Matrix evenly on the bottom of a 96-well plate. To prevent the gel from adhering to the pipette tip, aspirate and blow FBS once in the pipette tip to wash the inner wall of the pipette tip with FBS.
- 3. Place the 96-well plate in a 37°C cell culture incubator and incubate for 30 minutes to solidify the gel.
- 4. Digest the endothelial cells and perform cell counting.
- 5. Add 5x10⁴ HUVEC cells to the 96-well plate containing the gel, totaling 200µL of cell suspension. Place the 96-well plate in the incubator for cultivation.
- 6. Vascular-like network structures will form within 3 to 12 hours. This is the optimal observation time.
- 7. At the optimal observation time, carefully remove the culture medium and stain with culture medium containing a 1/1000 concentration of Calcein AM (green). Image the cells using a microscope and record the morphology and characteristics of the vascular network. This experiment can be used in the fields of angiogenesis and cardiovascular disease research.



GelNest Matrix

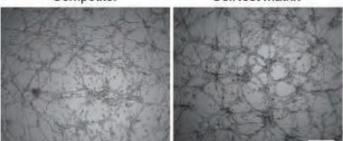


Figure 4. Results of endothelial cells forming a vascular network after 9 hours of cultivation on competitor' s matrix gel and GelNest[™] Matrix. Scale bar: 300µm.

Cell Invasion Test in Cell Culture Insert

- HT-1080 cells cultured in MEM medium supplemented with 10% fetal bovine serum (FBS) are used in this experiment. When the cell
 density reaches 80% to 90%, take 20µL of GelNest[™] Matrix Gel and dilute it 50 times with serum-free MEM to a final volume of 1000 µL.
 Gently blow and mix the matrix gel with a pipette for thorough mixing. Add 100µL of the diluted gel mixture to the center of the insert,
 evenly covering the surface of the insert with the gel mixture. Incubate the culture dish at 37°C for 1 hour to allow gel formation.
- 2. After trypsinization of the cells (generally, for a 6-well plate, digest with 200µL of trypsin at 37°C for 3 minutes, then terminate the digestion with 10% serum and centrifuge at 300g for 3 minutes), resuspend the cells in serum-free MEM and perform cell counting. Take 750µL of cell suspension at a starting concentration of 1 x 106/mL (estimated to be 10 wells, with 7.5x104 cells per well, totaling 750,000 cells), and dilute with serum-free MEM to a final volume of 1.5mL. Then, add 150µL of cell suspension to the upper chamber of each insert, resulting in 7.5x104 cells/well. For the experimental group, 800µL of medium containing 10% fetal bovine serum (FBS) as a chemoattractant will be added to the lower chamber. In contrast, the control group will receive 800µL of medium without FBS in the lower chamber. Culture the cells in a humidified incubator at 37°C and 5% CO2 overnight.
- Discard the culture medium in the inserts and wash twice with PBS. Then, stain the cells on the lower surface of the membrane with crystal violet for 10 minutes. Subsequently, wash the inserts twice with PBS to remove unbound crystal violet. Gently remove the cells inside the inserts with a wet cotton swab and allow them to air-dry. Observe and image the invaded cells under a microscope. To elute the bound crystal violet, dilute acetic acid to 33% (v/v) with ddH2O. Add 400µL of 33% acetic acid to each insert and shake on a shaker for 10 minutes. Next, transfer the eluent from the lower chamber to a 96-well transparent microplate. Measure the absorbance at 590nm using an ELISA reader.

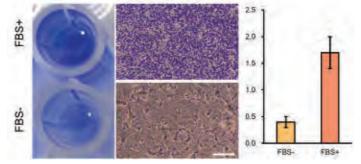


Figure 5. Results of HT-1080 cells cultured on competitor' s matrix gel-modified surface and GelNest[™] Matrix Gel-modified surfaces forming a vascular network after 9 hours. Scale bar: 200µm. The results indicate that FBS can significantly induce cells to penetrate the semi-permeable membrane of the extracellular matrix and enter the lower surface of the insert.

GelNest™ Matrix

GelNest[™] Matrix Quality Assurance



GelNest™ Matrix Selection Guide

Product	Growth	Phenol	Decomposed ad Applications	Normal		Low Endotoxin
FIOUUCI	Factor	Red	Recommended Applications	2 Bottles/Bag	1 Bottle/Bag	1 Bottle/Bag
GelNest™ Matrix	Normal	Yes	General 2D, 3D cell culture	211211	211212	211312
GelNest™ Matrix, without Phenol Red	Normal	No	Requires colorimetric identification (such as fluorescence) or sensitivity to steroids	211221	211222	211322
GelNest™ Matrix, low growth factor	Low	Yes	2D, 3D cell culture with higher accuracy requirements for matrix components and requires	211231	211232	211332
GelNest™ Matrix, low growth factor, without Phenol Red	Low	No	2D, 3D cell culture with higher accuracy requirements for matrix components and requires colorimetric identification or sensitivity to steroids	211241	211242	211342
GelNest™ Matrix, high concentration	Normal	Yes	In vivo tumor formation, thrombosis test, angiogenesis experiment, general cell culture,	211251	211252	211352
GelNest™ Matrix, high concen- tration, without Phenol Red	Normal	No	etc.	211261	211262	211362
GelNest [™] Matrix, for stem cells	Low	Yes	hESC stem cell culture	211271	211272	211372
GelNest™ Matrix, for organ-like structures, without Phenol Red	Low	No	Organoid culture and differentiation	211281	211282	211382
GelNest™Matrix (for Angiogenesis Experiments)	Normal	Yes	Angiogenesis Experiments	/	/	211492

Storage and Operation Instructions

To store GelNest[™] Matrix, it is recommended to keep it in a -20 ° Cfreezer until ready for use. Prior to initial use, thaw the gel and divide it into single-use portions. Store these portions in a -80°C freezer for a maximum of 2 years. Please note that GelNest[™] Matrix Gel should not be stored in a frost-free freezer.

GelNest[™] Matrix is in a liquid state at 4 ° C and transitions into a gel state at 37 ° C. It starts to solidify into a gel when the temperature exceeds 10°C. For optimal performance, it is advised to pre-chill the pipette tips and conduct the procedures on ice.

Organoid culture kit



Product Introduction

iPSC Induced Organoid Differentiation Kit is an efficient and reliable tool for differentiating iPSCs into desired organoid cells. This kit provides a complete set of culture mediums and growth factors, capable of simulating the in vivo developmental environment, promoting directional differentiation of iPSCs into target organoid cells. By using this kit, researchers can easily obtain a large number of high-quality target organoid cells for research and applications.

Product Advantages

- Efficiency: The iPSC Induced Organoid Differentiation Kit is carefully designed and optimized to achieve efficient directional differentiation of iPSCs into target organoid cells. This efficiency can greatly improve the work efficiency of researchers and reduce the time and cost of experiments.
- Reliability: This kit uses rigorously verified culture mediums and growth factors to ensure the reliability and repeatability of the differentiation process. The iPSC Induced Organoid Differentiation Kit undergoes strict quality control to ensure that each batch of kits has consistent effects.
- Flexibility: The iPSC Induced Organoid Differentiation Kit is suitable for different types of iPSCs, including iPSCs of different origins and genetic backgrounds. This flexibility allows the kit to be widely used in various research and application fields.

Detection Items

pH value: Detect 7.5, within the required range (7-8) Bacteria, fungi: Negative Mycoplasma: Negative

Product	Description	Packaging	Cat.No.
iPSC-Derived Liver Organoid Culture Kit	Supply the differentiation from iPSCs to liver organoids with essential culture media and growth factors.	1 set/bag, each set contains: 1 bottle of 100 mL basic culture medium. 1 vial of 1	210721
iPSC-Derived Biliary Organoid Culture Kit	Supply the differentiation from iPSCs to biliary organoids with essential culture media and growth factors. This has potential clinical application value for treating liver diseases and developing new drugs and treatment methods.	mL growth factor A, 1 vial of 1 mL growth factor B	210731

Serum free supplement



B-27, 50X serum-free supplement is provided in a 50-fold concentrated form. Just add 1/50 of the volume to the culture medium to reach the final concentration. This high-concentration design makes B-27 serum-free supplement easy to use, reduces storage space and transportation costs, and ensures consistency each time it is used.

Feature	Description	Packaging	Cat.No.
50X	 Does not contain any animal-derived components, avoiding the risk of infection and batch differences that may be brought by the use of fetal bovine serum. Provides appropriate nutrients and growth factors for various cell types. Suitable for the culture of various cell types, including neurons, muscle cells, stem cells, etc. 		211611
50X, minus Vitamin A	 Contains antioxidant mixtures to reduce oxidative damage. Suitable for the culture of neural progenitor cells and stem cells to prevent stem cells from differentiating into neurons. (Does not contain retinoic acid, and the retinoic acid in the standard B-27 supplement can replace retinoic acid to stimulate the differentiation of neural precursor cells/stem cells (NSCs)) Intends to be used with Neurobasal or Neurobasal-A medium. 	5mL/bottle, 2bottles/pack	211621
50X, minus insulin	 Used in cultures that require strict control of insulin concentration, such as the growth of hippocampal and other central nervous system neurons, to meet these specific needs. Intends to be used with Neurobasal medium or Neurobasal-A medium. 		211631

Common Applications The culture additive (B-27 serum-free additive, 50X) is mainly used for:

- Serum substitute
 Growth of hippocampal neurons
- iPSC differentiation Growth of various CNS neurons
- Organoid culture
 Additive in neuronal cell base medium

Detection Items and Data

Bacteria, fungi: negative Mycoplasma: negative Lactate dehydrogenase-elevating virus (LDEV): PCR negative Endotoxin: <4EU/mL

The culture additive (B-27 serum-free additive, without vitamin A, 50X) is mainly used for:

- As a supplement to neural cell base medium (prenatal/embryonic cells), neural base medium-A (postnatal/adult cells) or DMEM/F12 medium, it supports serum-free culture of central nervous system (CNS) and peripheral nervous system (PNS) embryonic and adult neural stem cells (NSCs) or neural progenitor cells.
- Compared with ITS or N-2 supplements, B-27 supplement without vitamin A can promote the growth of neural precursor cells/stem cells (NSCs), and can also replace ITS and N-2 supplements (or variants) when differentiating ES cells (such as embryoid bodies) into nestin-positive neural precursor cells in culture.
- It can also be used for gene function and neural development, neural differentiation research, and the study of the application of stem cells in genetic and degenerative disease replacement therapies.

The culture additive (B-27 serum-free additive, without insulin, 50X) is mainly used for:

- Supplement to neural base medium, can give prenatal and embryonic neurons the best survival ability.
- Supplement to neural base medium-A, can give newborn and adult neuron cells the best survival ability.
- As a supplement to RPMI 1640, it has been proven to support the differentiation of pluripotent stem cells into cardiomyocytes.
- Areas of application include neural development, neural differentiation, diabetic neuropathy, and pluripotent stem cell differentiation research.

Growth Factor



Growth factors play a crucial role in organoid culture. They help to simulate the in vivo developmental environment, promoting the directional differentiation of induced pluripotent stem cells (iPSCs) into target organoid cells. This aids in obtaining a large number of high-quality target organoid cells for research and applications. In essence, the growth factors provide the necessary signals to guide and stimulate the stem cells to develop into organ-like structures in the culture.

Detection Items and Data

Bacteria, fungi: Negative Mycoplasma: Negative Lactic Dehydrogenase Elevating Virus (LDEV): PCR Negative Endotoxin: <4EU/mL

Description	Packaging	Cat.No.			
Wnt3A, R-spondin 3, Noggin, Mouse origin, 10X conditioned culture media	100 mL/bottle, 1 bottle/pack	211511			

Product Advantages

- Promote cell growth and proliferation: carefully designed and optimized to achieve efficient directional differentiation of cells into target cells
- Versatile: suitable for different types of cells, including cells of different origins and genetic backgrounds. This flexibility allows it to be widely used in various research and application fields.

Application Directions

Stem cell research, cancer research, developmental biology, and regenerative medicine. Specifically, it can be used to promote the growth and differentiation of stem cells into specific cell types, which is crucial in these research areas.

CHEMICAL RESISTANCE CHART

		1	1													1	
	ABS	Acetal	HDPE	LDPE	PC	PP	Santo- prene	Sili cone	Reagent	ABS	Acetal	HDPE	LDPE	PC	PP	Santo- prene	Sili cone
A tolda ha	-		_	_			1		Damana	-				-	-	1	
Acetaldehyde Acetamide	D —	A	C A	C A	C¹ D	A ¹ A ¹	_	A B	Benzene Benzene Sulfonic Acid	D	A ¹	D A	D A1	D D	D D	D _	D D
Acetate Solvent	-	-	A	Â	-		_	C	Benzoic Acid	-	В	A	A' A'			-	B
Acetic Acid	D	D	A	A² A	B1	B	A	C	Benzol	D	A	-	C ¹	B¹ D	B ¹ B	D	D
Acetic Acid 20%	C D	C D	A	A D	A ¹ B ¹	A A	A C	B B	Benzonitrile	_ D	- A	-	-	A ¹	- C1		A¹ D
Acetic Acid 80% Acetic Acid, GlacialD	D		A D	B ¹	B ¹ A ¹	A D	B	в	Benzyl Chloride Bleach	B	D	_	_	_			_
Acetic Acid, Vapors	-	-	-	-	-	_	-	A	Bleaching Liquors	_	-	-	A1	-		-	В
Acetic Anhydride	C1	D	C	D	D	B¹	D	С	Borax (Sodium Borate)	-	B	A	A ²	-	A1 B	-	В
Acetone, 50% water Acetone	D	Ā		-	— D	A A	– A	A² D	Boric Acid Brewery Slop	_	A B	A _	<u>A</u> ²	_	A	A	A _
Acetonitrile	D	-	Ā	B ¹ A	D		D	D	Bromine	D	D	D	D		D	_	D
Acetophenone	-	-	C	D	D	A¹ C	-	-	Bromoform	-	-	D	D	C¹ D	D	-	-
Acetyl Bromide	_ D	- D	-	D	— D	_ D	— A	_ C	Butadiene	_ В	A	D _	D	D D	С	_	D D
Acetyl Chloride (dry) Acetylene	U _	A	_	D	D	A1	- A	B	Butane Butanol (Butyl Alcohol)	D _	A	_	C ¹ B ²	B ¹	A ¹ A ¹	B	B
Acrylonitrile	D	-	A	Ā	D	A ¹	D	D	Butter	В	A	-	– –	- D.	- A	D	B
Adipic Acid	-	-	A	A	-	B^2	-	-	Buttermilk	В	A	-	A1	A¹ D	A1	-	A
Alanine	-	-	A	A	A	A	-	-	Butyl Amine Butyl Ether	_		-	C ¹		B ¹ D	_	B¹ D
	Δ1	A	A	B ²	B1	B1	A	D	Butyl Phthalate	_		Ā	C ¹	D	B ²		
- Benzyl	A ¹ D	A	В	D	-	A	D	-	Butyl acetate	-	A	В	Č ¹	D	B1	-	A1 D
- Butyl - Diacetone	A ¹	A	A	A	A ²	A	B _	B D	Butylene Butyric Acid	_ D	A	_ D	B¹ D	D D	-	Ā	D D
- Ethyl	- B ¹		A	B ¹ B	— B ²	B² A	Ā	B	Calcium Bisulfate	_		_	_	D	B ¹	- A	C
- Hexyl	-	A ¹ A	-	Ā	-	-	-	В	Calcium Bisulfide	-	D	-	B¹	-	A	-	С
- Isobutyl	В _	A	A	A ²	-	A ¹	_	A A	Calcium Bisulfite Calcium Bromide 38%	_	D _	A _	A ¹	D	A _	_	A _
- Isopropyl - Methyl	D	A	A	A ² A ¹	A ² B ¹	A ² A ²	Ā	A	Calcium Bromide 38%	_	A	_	- B ¹	- C ²	A	_	Ā
- Octyl	A ¹	A	-	- A.	-	-	-	В	Calcium Chlorate	-	A	-	D'	-	-	-	-
- Propyl	B¹ D	A	-	A ²	-	A	A	A	Calcium Chloride (30% in water)	B	D	A	B ²	-	A² A	-	A
Allyl Chloride Aluminium Acetate (satured)	D _	_	A _	_	_	A A	_	– D	Calcium Chloride (saturated) Calcium Fluoride	A 	D _	A _	_	_	A _	_	A _
Aluminium Chloride	A	-	A	B ²	A1	Â	_	B	Calcium Hydroxide 10%	-	A	A	_	_	A	_	A
Aluminium Chloride 20%	-	C	A	B ²	A ¹	A	-	В	Calcium Hydroxide (saturated)	А	-	A	-	-	A	-	A
Aluminium Fluoride Aluminium Hydroxide	A B	C A	A	A ²	-	A A	-	B 	Calcium Hydroxide Calcium Hypochlorite 30%	_	D _	A A	A ²	D	A ² A	_	A _
Aluminium Nitrate	-	B ¹	-	A ² A ²	B¹ A¹	A ²	_	В	Calcium Hypochlorite (saturated)	A	-	Â	_	_	Â	-	_
Aluminium Phosphate	-	-	-	-	-	-		A	Calcium Hypochlorite	-	D	A	A1	D	A1	-	В
Aluminium Potassium Sulfate 10%	-	C C	A	A ²	A1	A	_	A	Calcium Nitrate Calcium Oxide	A D	D	B _	A1	A ²	A ²	-	B1
Aluminium Potassium Sulfate 100% Aluminium Sulfate	- A ²		A	A ²	A² A	A A	Ā	A A	Calcium Sulfate	C	A D		B ¹ B ¹	— A ²	A	_	A _
Alums	- A-	-	-	A² A	-	A	-	A ¹ B	Calcium Sulfide	-	-	-		- -	A	-	-
Amines	-	D	B	C ¹	-	B^2	-		Calgon	-	A	-	-	-	A	-	A
Ammonia 10% Ammonia Nitrate	_	D C	A _	C ¹	D _	A² A	_	_	Cane Juice Carbolic Acid (Phenol)	_ D	A	_	_ D	D	C ¹ B	_	A D
Ammonia, anhydrous	D	D	A	B ²	D	A	-	С	Carbon Bisulfide	-	A	-	_	-	D	_	-
Ammonia, liquid	-	D	A	C1	D	A ²	-	-	Carbon Dioxide (dry)	В	A	-	A ¹	-	A ²	-	В
Ammonium Acetate Ammonium Bifluoride	A2		A _	A A ²	_	A A	_	_	Carbon Dioxide (wet) Carbon Disulfide	В	A _	_ D	A1 D	— D	A ² D	-	В
Ammonium Carbonate	A ²	D	В	B ²	-	Â	-	С	Carbon Monoxide	-	A	-		-	A	-	A ²
Ammonium Caseinate	-	D	-	-	-	-	-	-	Carbon Tetrachloride	D	B1	C	A² D	D	D	-	A² D
Ammonium Chloride Ammonium Fluoride 25%	A ² D	B	A	A ²	A ²	A	_	C _	Carbon Tetrachloride (dry) Carbon Tetrachloride (wet)	D D	-	C C	D	_	D	_	D D
Ammonium Hydroxide	B	C	Â	A1	D	A⁴ A		A	Carbonated Water	_	A1 A	_	A	_	B	_	_
Ammonium Glycolate	-	-	A	A	В	А	-	-	Carbonic Acid	-	B1	В	R ²	A1	A	-	A
Ammonium Nitrate Ammonium Oxalate	_	A ² B	A	A1	-	A	_	_	Catsup Cellulose Acetate	B	B _	_	_	_	A	_	
Ammonium Oxalate	A ²	D	A	A ²	A ¹	A A	_	D	Chloral Hydrate	А	_	D	_	-	AD	_	-
Ammonium Phosphate, Dibasic	A ² A ²	B ² B	-	A ²	A ²	A	-	A	Chloric Acid	-	D	-	-	-	-	-	-
Ammonium Phosphate, Monobasic Ammonium Phosphate, Tribasic	-	B		A C	_	A A	_	A A	Chlorinated Glue Chlorine Water	_	D D	_ C	-	-	- D		_ D
Ammonium Phosphate, Tribasic Ammonium Sulfate	- A ²		A		— A ²	A	_	A	Chlorine Water Chlorine Anhydrous Liquid	_		Ċ	B¹ D	C	D	_	D
Ammonium Sulfite	-	B ¹ D	В	B ²	-	А	-	-	Chlorine (dry)	-	A1 D	В	D	_	D	-	D
Ammonium Thiosulfate Amyl Acetate	_ D	B	-	Ā	_ D	-	- D	– D	Chloroacetic Acid Chlorobenzene (Mono)	_ D	D D	A D	D	D D	C ¹	D D	D D
Amyl Alcohol		B ¹ A	A	C ¹ B ²	B ¹	B ¹	A	D	Chlorobromomethane			_	C ¹ A	-	C ¹	-	D
Amyl Chloride	A1 D	A	В	B ² D	-	B¹ D	-	D	Chloroform	D	A	D	C ¹	D	C ¹ D	D	D
Aniline	D	A1	В	С	D	A ¹	D	В	Chlorosulfonic Acid	-	D	D		C¹ A		-	D
Chloralhydrate Aniline Hydrochloride	_ D	_	_		– D	_ D	_	_ D	Chocolate Syrup Chromic Acid 5%	 B	A	Ā	A	B	A ² D		c
Antifreeze	B	D	-	-	-	D	-	С	Chromic Acid 10%	В	D	A	Α	В	D	D	С
Antimony Trichloride	A ²	-	В	B ²	A ²	А	A	-	Chromic Acid 30%	В	D	A	A	С	D	D	C
AquaRegia(80%HCI,20%HNO ₃) Arochlor 1248	D _	D _	D _	R ¹	D —	B¹ D	D _	D B	Chromic Acid 50% Chromium Salts	D	D _	A _	A B	D	D _	D _	C
Aromatic Hydrocarbons	_	A	-	C ¹ C	_	D	-	D	Cider	-	A	_	B	A	A	-	B ¹
Arsenic Acid	A ²	D	В	B ²	A1	А	В	A	Citric Acid	D	B ¹ B	A	D	A1	A	A	A
Arsenic Salts Asphalt	-	-	_	B	_ D	-	_	— D	Citric Oils Coffee	_	B	B _	_	_	A	_	Ā
Barium Carbonate	- A ²	B ² A		A ¹ B ²		B¹ A	_	_	Copper Chloride	A	A	_	_	_	A	_	
Barium Chloride	A ² A ²	A	В	A ¹ B	A² A	A	-	Α	Copper Cyanide	-	A	-	B ²	D	A	-	A1 A
Barium Cyanide	-	B	-		-	D	-	_	Copper Fluoborate	_	B	-	-	-	_	-	-
Barium Hydroxide Barium Nitrate	A ²	D B ²	_	B ²	D D	B A	_	A B	Copper Nitrate Copper Sulfate 5%	_	A	— A	B ²	D	A	_	Ā
Barium Sulfate	A ²		В	B ² B ²	D		-	Ă	Copper Sulfate >5%	-	D	A	A ² A ²	A ¹ A ¹	A	-	A
Barium Sulfide	A ²	B ² A	A	B ²	-	B ¹ B	-	A	Cream	_	A	-	-	-	A	-	-
Beer Beet Sugar Liquids	A ² B	A ¹ B	A _	A ²	A ²	A ¹	_	A A	Creosote Cresols	A D	D	A D	-	— D	- D	– D	D D
Benzaldehyde	B	A	B	A ¹ A ¹	D	A1 D	D	D	0100010	U			C¹	U			
Benz enamine	-	-	B	Â	D	А	-	-									
		1															

A- No effect **B**- Minor effect C-Moderate effect

- No data available

Explanation of
footnotes:1- Satisfactory to 72 °F (22 °C)
2- Satisfactory to 120 °F (48 °C)
3- Satisfactory to 90 °F (32 °C)
4- Satisfactory to 200 °F (93 °C)

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ISO 9001



ISO 11137



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