

MP Biomedicals

FastPrep® System - CoolPrep™ Adapters

One Call

One Source

A World of
Life Science

CRYOGENIC GRINDING

Protect your thermosensitive molecules!



www.mpbio.com, www.mgp.cz



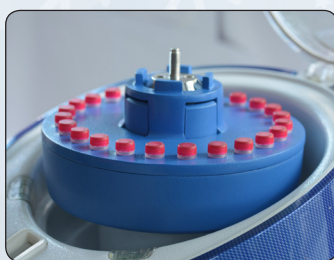
CoolPrep™ Adapters – Your Must-have for thermosensitive samples

During mechanical lysis, the temperature increases dramatically which can damage the molecules in your sample. Cryogenic grinding is the easiest and safest way to prevent this overheating and to protect your sample.



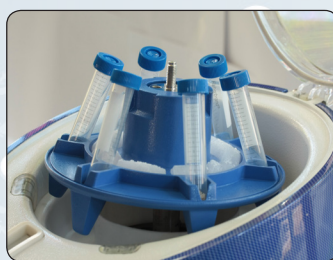
- **Protects thermosensitive molecules** from heat degradation due to an innovative design encompassing a cooling chamber.
- **Prevents the increase of sample temperature** during the homogenization process by maintaining sample temperature at 2°C.
- **Ensures a highly effective grinding process of any sample** even the most elastic by making them brittle.

3 interchangeable CoolPrep™ Adapters for FastPrep® instruments



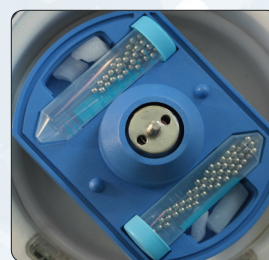
CoolPrep™ Adapter

24 x 2 ml samples



CoolTeenPrep™ Adapter

6 x 15 ml samples



CoolBigPrep™ Adapter

2 x 50 ml samples

Description	Cat. No
CoolPrep™ Adapter	116002528
CoolTeenPrep™ Adapter	116002530
CoolBigPrep™ Adapter	116002531

Description	Cat. No
FastPrep-24™ 5G Instrument	116005500
FastPrep-96™ Instrument	116010500

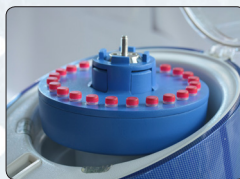
Principle

STEP 1



Add dry ice to the cooling chamber.

STEP 2



Install the adapter lid and load your lysing Matrix tube samples.

STEP 3



After securing the adapter by screwing on the ratchet nut, close the FastPrep® lid, select speed and time and press run.

Based on passive temperature control technology, the use of CoolPrep™ Adapters ensures an efficient cooling of the samples as dry-ice, placed into the cooling chamber is in direct contact with the sample tubes. Due to a high heat transfer capacity and Fastprep® precise lysis parameter settings, the samples can be repeatably homogenized with no increase in temperature.

CoolPrep™ Adapters are ideally suited for extractions of any temperature unstable or sensitive biological compounds such as RNA, siRNA, metabolites, intermediates, and enzymes from even the hardest samples to lyse. **Most samples can be processed in 40 seconds or less.**

Temperature profile after cryogenic lysis with the CoolPrep™ Adapter

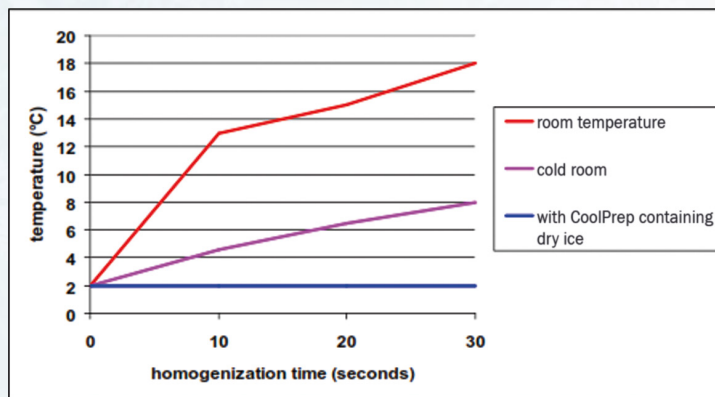
S. cerevisiae yeast cells are lysed with the FastPrep-24™ 5G instrument and Lysing Matrix C tubes.

Lysing Matrix tubes containing yeast cells and 1 ml buffer are incubated on ice before the homogenization process and the temperature of the sample is 2 °C.

Samples are processed for 10 sec to 30 sec with the FastPrep-24™ 5G instrument in 3 conditions:

1. FastPrep-24™ 5G instrument stored at room temperature and 24 x 2 ml sample holder, without dry ice (red curve)
2. FastPrep-24™ 5G instrument stored in a cold room and 24 x 2 ml sample holder, without dry ice (purple curve)
3. FastPrep-24™ 5G instrument stored at room temperature and CoolPrep™ adapter containing dry ice (blue curve)

While there is a temperature increase of samples processed in conditions 1 and 2, temperature remains the same after homogenization of yeast cells with the CoolPrep™ adapter containing dry ice.



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Use the FastPrep-24™ 5G together with CoolPrep™ Adapters

ASK FOR A FREE DEMO TODAY!

- Convenient and Easy-to-use
- No maintenance
- Perfect grinding efficiency
- Valuable tool for preserving the integrity of RNA, isolating native proteins and protecting enzymatic activity



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FastPrep® System Complete Solutions

POWERFUL

FastPrep® Homogenizers

From low to high throughput sample preparation



FLEXIBLE

Interchangeable adapters

Various sizes & temperature conditions



VERSATILE

Lysing Matrix Tubes

Unique compositions of matrix
2-50 ml tubes



READY-TO-USE

Extraction Kits

DNA - RNA - Proteins



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