

MP Biomedicals

FastPrep® System - CoolPrep™ Adapters

One Call

One Source

A World of
Life Science

CRYOGENIC GRINDING

Protect your thermosensitive molecules!



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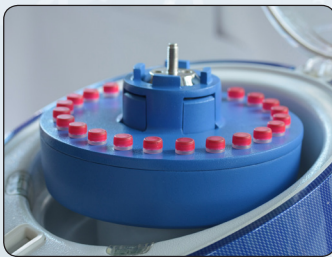
CoolPrep™ Adapters – Your Must-have for thermosensitive samples

During mechanical lysis, the temperature increases drastically and can damage your sample molecules. Cryogenic grinding is the easiest and safest way to prevent from heating.



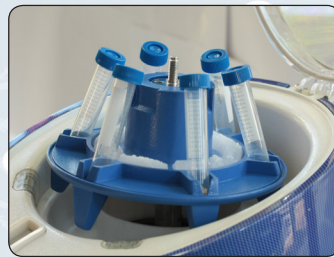
- **Protects thermosensitive molecules** from heat degradation thanks to a special design including a tray for dry-ice.
- **Prevents the increase of sample temperature** during the homogenization process by keeping the temperature of your samples at 2°C.
- **Ensures a highly effective grinding process of any sample** even the most elastic by making them brittle.

3 interchangeable CoolPrep™ Adapters for FastPrep® instruments



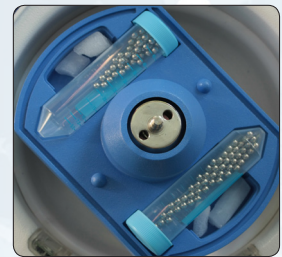
CoolPrep™ Adapter

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

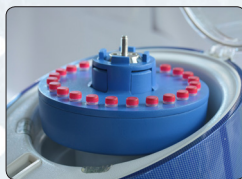
Principle

STEP 1



Add dry ice to the well tray base.

STEP 2



Install the well tray to the top of the well tray base and load Lysing Matrix tube samples.

STEP 3



After securing the adapter by screwing on the ratchet nut, close the 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 well tray base is in direct contact with the sample tubes. Due to a high heat transfer capacity and FastPrep® precise settings of lysis parameters, 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

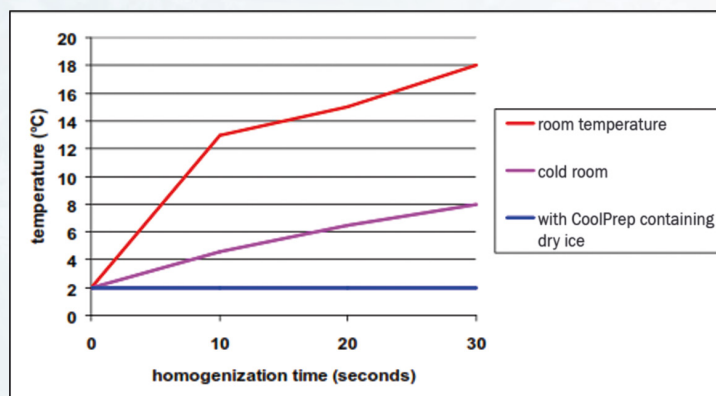
S. cerevisiae yeast cells are lysed with the FastPrep-24™ 5G instrument and Lysing Matrix C tubes.

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.



www.mpbio.com/sampleprep

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

ASK FOR A TRIAL 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



Visit us on www.mpbio.com/demo or Contact us at custserv.eur@mpbio.com

FastPrep® System Complete Solutions

POWERFUL

FastPrep® Homogenizers

From low & 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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