

CryoGrinder

For cryogenic sample homogenization

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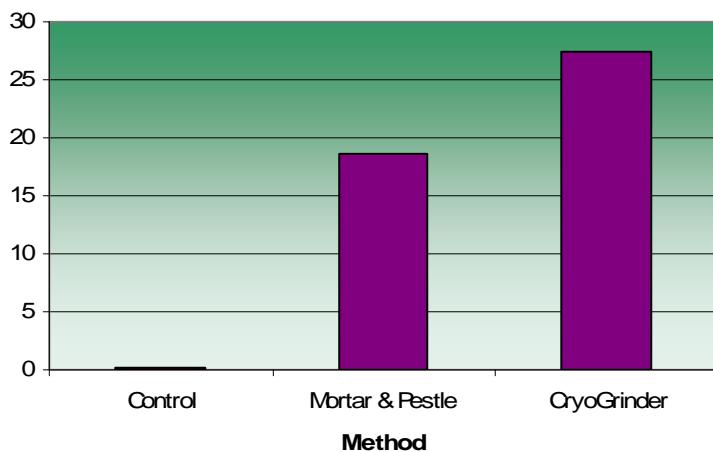
Sample Preparation Products



Benefits

- ❖ Composed of a durable porcelain-zirconium composite that ensures fine grinding
- ❖ Small well size contains sample and allows for efficient recovery (up to 95%) of homogenized tissue
- ❖ Motor driven using cordless torque wrench
- ❖ Compact size allows for easy storage and processing of multiple samples in a small area (mortar is 1" square and 1.5" tall)
- ❖ Autoclavable

Relative Enzyme Activity Liberated from Muscle by Cryogenic Homogenization



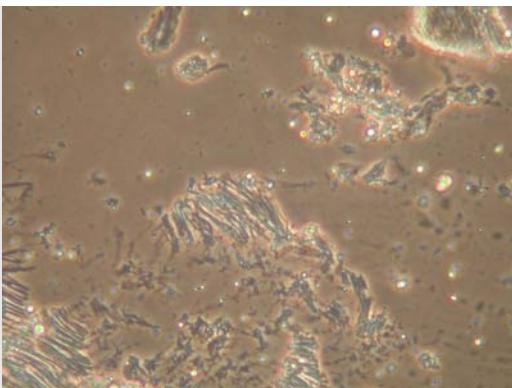
Description

The CryoGrinder is a very effective tool for the cryogenic homogenizing of tissue samples of 0.5 gm or less. The small well of the mortar is formed to fit the pestle so to ensure efficient grinding. Both the mortar and pestle are composed of a porcelain-zirconium composite that is well suited for grinding samples in liquid nitrogen. To use, the mortars are pre-chilled in liquid nitrogen using the Cryo-Cooler (or similar device) before samples are placed in the wells. The pestle is connected to a motorized torque wrench using a 1/4" hex adaptor, and the pestle is pressed down on the sample while the wrench is running. Tissues are ground in seconds. The resulting powder can be easily tapped into a tube for efficient recovery.

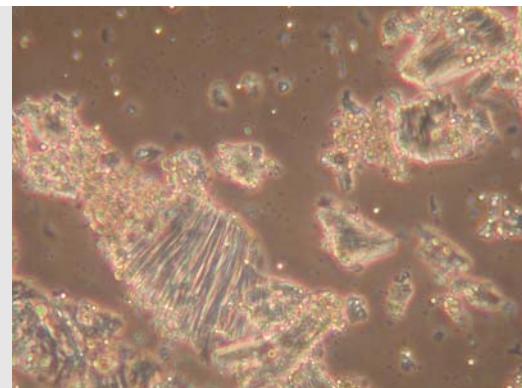
CryoGrinder – Applications and Accessories

Key Features

- ❖ Sample is contained in a small well which allows for high recovery as compared to traditional mortar and pestles (e.g., 95% vs. 72%).
- ❖ Motorized pestle provides even, repeatable grinding.
- ❖ Small size of mortar/pestle set allows for the processing of numerous samples in a small area.
- ❖ When used with the Cryo-Cooler, mortar and pestles can be kept cold for prolonged periods.



Muscle homogenized with the CryoGrinder yields tissue with disrupted fibers.



Traditional mortar and pestle has a lower efficiency of disrupting muscle fibers as illustrated above.

Applications

- ❖ Cryogenic grinding of samples for RNA isolation
- ❖ Homogenization of difficult to grind samples
- ❖ Pulverizing of tissue samples for the isolation of heat-labile analytes

CryoGrinder and Accessories

Product Number	Description	Quantity	Price
CG 08-01	CryoGrinder Kit (mortar and pestle sets, wrench)	4 sets	\$215
CG 08-02	CryoGrinder Set (mortar and pestles)	2 sets	\$95
CG 08-03	Torque Wrench (cordless)	1 each	\$29
CG 08-04	Cryo-Cooler	1 each	\$520
SP 2600-01	Cryogenic Workstation	1 each	\$2100

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