



A Geno Technology, Inc. (USA) brand name

# **Molecular Grinding Resin**<sup>™</sup>

A Grinding Resin for Proteomics & Molecular Biology Applications

(Cat. # 786-138, 786-138PR, 786-138P)



#### INTRODUCTION

Molecular Grinding Resin<sup>™</sup> has been specifically developed for effectively grinding biological samples for extraction of DNA, RNA and proteins. The resin is high tensile micro-particles, which effectively disrupt nuclei and other cell organelles. Molecular Grinding Resin<sup>™</sup> does not bind protein or nucleic acids. Simply mix the biological sample with Molecular Grinding Resin<sup>™</sup> and grind or homogenize the sample. Unlike sand or other grinding materials, Molecular Grinding Resin<sup>™</sup> is easy to work with and does not damage genomic DNA or high molecular mass proteins. We routinely use Molecular Grinding Resin<sup>™</sup> for isolation of 100kb genomic DNA and RNA.

Molecular Grinding Resin<sup>™</sup> can be used with any homogenization technique, including high speed mechanical grinding such as Polytron and high-energy sonicators. Molecular Grinding Resin<sup>™</sup> is also available with disposable matching pestles and tubes.

## ITEM(S) SUPPLIED

Cat. #	786-138	786-138PR	786-138P
Molecular Grinding Resin <sup>™</sup>	5 x 0.5ml resin	5 x 0.5ml resin	-
Grinding Pestles (RNase free)	-	100	100
Grinding Tubes (RNase free)	-	100	100

## STORAGE CONDITIONS

Molecular Grinding Resin is supplied as a 50% suspension in water. Shipped at ambient temperature. Upon arrival, Molecular Grinding Resin<sup>™</sup> can be stored at 4-25°C in extraction buffer of your choice.

#### **PROTOCOL**

- 1. Centrifuge the Molecular Grinding Resin tube containing resin for 2 minutes at ~ 2,500x g and remove the water.
- Add 0.5ml extraction buffer of your choice into the *Molecular* Grinding Resin<sup>™</sup> vials. Resuspend by vigorous mixing or vortexing.
- 3. Use a wide bore pipette tip and transfer 30-40µl of the resin into a 1.5ml microfuge tube. Alternatively, use 30µl resin per 0.5ml sample or liquid volume.

**NOTE**: Wide bore pipette tip must have tip opening 2-3 mm wide to allow easy transfer of resin. A wide bore tip may be prepared by cutting the tip off an ordinary pipette tip. During pipetting, use the pipette tip to stir the resin while pulling resin into the pipette tip.

- 4. Use a tight fit pestle or other device to grind the sample.
- 5. Centrifuge for 5 minutes at ~ 10,000x g to collect the supernatant and remove the resin and cellular debris.

**NOTE**: Time and speed can be adjusted as per the sample and experiment requirements.

### RELATED PRODUCTS

Download our Sample Preparation Handbook



http://info.gbiosciences.com/complete-protein-sample-preparation-handbook For other related products, visit our website at <u>www.GBiosciences.com</u> or contact us.

Last saved: 7/15/2016 CMH



www.GBiosciences.com