

Bug Crasher GM-01

2-in-1 Equipment to handle Vortex and Spin down. Also can be used for crushing with beads and metal crusher. Very reasonable for samples whose the hardness known.

Features

- 2-in-1 Bench-top equipment to handle Stirring and Spin down
- Capacity: 12pcs x 1.5/2 mL Micro tube
- Possible for Beads crushing of E. coli and soft samples.

Applications

- Crushing of Microbe (nearly same hardness as E. coli and Blue-green algae)
- Drying plants or Crushing frozen leaves and petals
- Spin down in Ethanol precipitation of DNA

Crushing of Microbe

When crushing E. coli, Yeast, Blue-green algae, etc. and extracting DNA and proteins, mixing-stirring of the sample with glass and zirconia beads. After crushing, spin down can be done as it is. In the case of RNA, making sample frozen is effective.

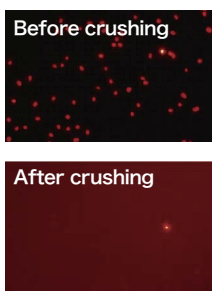


Photo: Fluorescent microscope image of Blue-green algae. Experimental data provided by Tokyo University of Pharmacy and Life Sciences, Faculty of Life Science.

Ethanol precipitation by Spin down function

The advantages of this unit is that number of simultaneous processing and the efficiency outperform those of crushing with mortar. 12pcs 1.5/2.0 mL Microtubes can be loaded (Max. 6pcs when using Metal crusher due to its weight) and both Stirring and Spin down can be performed. Although Spin down function is Max. 1300 xg, possible for Ethanol precipitation of nucleic acids.

Model	GM-01
Stirring method	High-speed inversion
Stirring force adjustment	10 steps (Level 1 to A) *Effective of Level A is equivalent to that of Delta Mixer at 2600r/min.
Centrifugal speed	500 to 4500rpm (Setting per 500rpm)
Centrifugal force	Max. 1300xg
Ambient temperature	0°C to 40°C
Operation mode	Switchable Stirring/Centrifuge Continuous/Timer/Flush in Each mode.
Capacity	12pcs x 1.5/2.0mL Microtube (Self-stand and Screw type can be used) * Up to 6pcs when using Metal crusher.
Timer	0 to 50sec/1min to 99hr50min (Pauses when lid is open)
Digital display	Stirring level/Rotation number and Time/Centrifugal force
Safety devices/functions	Braking when lid open during operation. Motor stopping when lid open during stop
Dimensions/Weight	210 x 268 x 176mm, Approx. 3.5kg
Power supply	AC100 to 240V/0.5A

* Since the crushing force mildly, not suitable for crushing animal tissue. When crushing animal tissue Beads Crusher on 86-87/page recommended.



Crushing of plant tissue

Tissues such as soft plant leaves can be crushed with zirconia beads or optional Metal crusher. In the case of RNA, making sample frozen is effective.

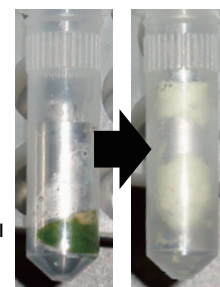


Photo: Photo: Freeze crushing of Eustoma leave. Experimental data provided: Akita Prefectural University, Faculty of Bioresource Sciences

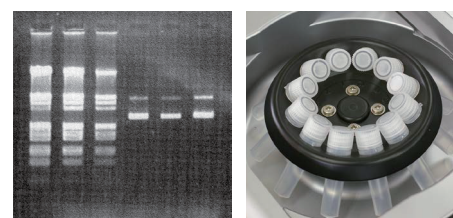


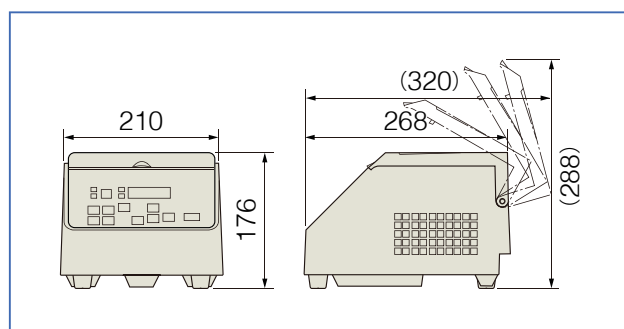
Photo of Electrophoresis is the comparison results for Ethanol precipitation and Centrifuge.

Optional parts

Product Name/Model	Remarks
Metal crusher	For 2mL Microtube (Conical bottom), ϕ 7.5x23mm, 6pcs

*Metal crusher is made of stainless steel SUS304.

Dimensions



● Protuberances not included in Dimensions. ● Vessels of photo not included.

Selection guide

- Constant temperature incubator shaker
- CO₂ incubator shaker
- Shaker
- Mixer
- Rotator
- Stirrer
- Bead beater
- homogenizer
- Ultrasonic homogenizer
- Aluminum block bath
- Minimize bath
- Water bath
- Shaking water bath
- Immersion cooler
- Hybridization oven
- Constant temperature chamber
- Centrifugal concentrator
- Cold trap
- Freeze dryer
- Electrophoresis and blotting apparatus
- Constant temperature circulating system [Chiller]
- Appendix