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Product Brochure



RESEARCH EQUIPMENT

Multi channel tissue grinder

ZZYM

Multi-channel tissue grinder for fast, high-efficiency extraction of DNA, RNA, and proteins from soil, tissues, bacteria, fungi, and spores.

<https://www.labballmill.com/products/research-equipment/multi-channel-tissue-grinder.html>

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Product Overview

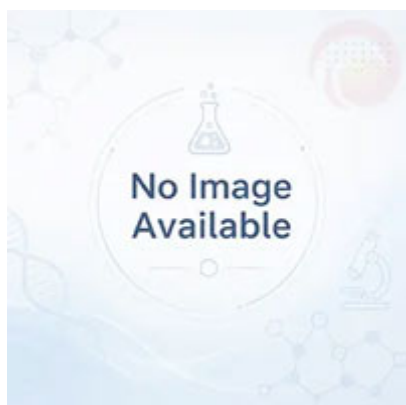
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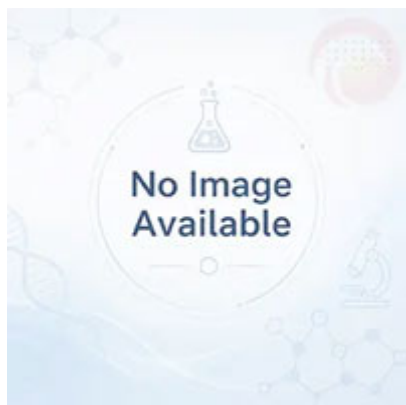
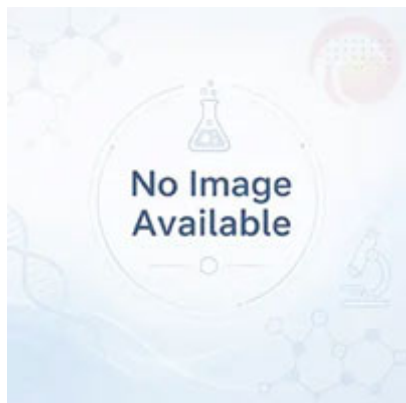
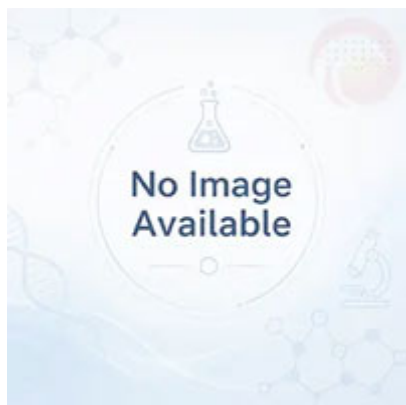




Product Introduction

The multi-channel tissue grinder is a special, fast, high-efficiency, multi-tube grinding system. Supports the extraction and purification of original DNA, RNA and protein from a variety of samples including soil, plant and animal tissues/organs, bacteria, yeast, fungi, spores, paleontological specimens, etc. Other substances can also be ground. Supports dry grinding, wet grinding and mixed grinding and homogenization. This product can support 24 different samples for grinding processing, improve grinding efficiency and quality, reduce labor costs, and reduce manual operation errors.





1. Suitable for grinding and crushing various plant tissues such as roots, stems, leaves, flowers, fruits and other samples
2. Suitable for grinding and crushing various animal tissues including brain, heart, lung, stomach, liver, bone, hair and other samples
3. Suitable for grinding and crushing samples of fungi and bacteria such as yeast and E. coli.
4. Suitable for grinding and crushing food and medicines
5. Suitable for grinding and crushing volatile samples such as coal, oil shale, wax products, etc.
6. Suitable for plastics, polymers, including PE, PS, textiles, resins, etc.

Technical parameters

model	ZZYM-24
LCD display	Microcomputer controls large-screen LCD to display working status
Adapter handling sample volume	24 × (0.2 - 0.5 ML) / 16 × 2 ML / 8 × (7 - 10) ML / 8 × 15 ML / 4 × 25 ML / 2 × 50 ML
Standard configuration	Two adapters available
Homogenization speed	10 - 70 Hz/sec
Shockproof principle	German technology schleifen-1 working method
Adapter material	PTFE or alloy steel
Grinding method	Wet grinding, dry grinding, low temperature grinding are all available
Large feed size	No requirement, adjust according to adapter
Final discharge particle size	5μm
Number of grinding platforms	(Number of acceptable grinding jars) >2
Fastening device with automatic centering	yes
Safety lock at work	Full protection
Grinding Kit Materials	Hard steel, polytetrafluoroethylene (Teflon)
power supply	Two-phase 220V/50HZ
working hours	0 seconds to 99 minutes, user can set by himself;
Grinding ball diameter	0.1 - 30 mm
Grinding ball material	Alloy steel, chromium steel, zirconia, tungsten carbide, quartz sand;
accelerate	Reach maximum speed in 2 seconds
slow down	Reach low speed in 2 seconds
Noise level	<50 dB
Overall dimensions	280×400×530
weight	40 KG

Working Principle

The multi-channel tissue grinder uses high-frequency vertical oscillation to select different grinding beads to grind samples with different properties directly in the centrifuge tube. The samples and grinding balls in the grinding tube collide with each other. The resulting grinding shear force and impact force completely break the tissue, thereby separating and extracting the original DNA and RNA.

Product Features

1. You can place the centrifuge tube directly into the adapter, or you can pre-freeze the adapter.
2. The grinding process is fully enclosed, and samples move independently to avoid cross-infection.
3. Built-in program controller, parameter setting is simple and convenient
4. Adopt silent design to reduce interference to the surrounding environment
5. Equipped with a lock, which has the function of stopping when the cover is opened and has high safety.
6. Vertical oscillation, more complete grinding, and good consistency in grinding the same sample multiple times.

Accessories & Customization

Accessories

Grinding jars, heating elements, sample holders, control modules and other matching accessories can be selected according to the product configuration.

Customization

For voltage, capacity, chamber size, process temperature or application requirements, please contact TENCAN for a suitable configuration.