

**POWTEQ®**



**Biological Homogenizer LM50(R40)**

## ◇ Biological Homogenizer LM50(R40)

Biological Homogenizer LM50(R40) is specially designed for homogenizing biological samples with high speed, efficiency and throughput. By strong centrifugal and friction force, the original DNA, RNA and protein of samples can be released completely which is convenient for subsequent extraction and purification. With different adapters, it could process max 24 samples at one batch rapidly by normal centrifuge tubes or cryogenic tubes. With related auxiliary reagents, diverse of samples (incl. soil, plants and animal tissues/organs, germ, yeast, fungus, spore, palaelodids specimen etc.) cell disruption can be achieved.



\*LM50R40 Biological Homogenizer adopts compressor refrigeration;

\*High efficiency of refrigeration, precise temperature control ensure the liveness of biological samples.

\*LM50R40:Temperature control ranged from -40-20°C.

### ○ Application field

Plant and animal tissues/organs, bacteria, yeasts, fungi, spores, paleontological specimens, etc

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### ○ Working principle

Through Shearing and abrading force between grinding balls and samples generated by 3D high speed motion, and combined with auxiliary reagent (for cell wall/membrane lysis meanwhile protecting nucleic acid protein) to achieve aimed DNA, RNA and protein.

### ○ Performance advantages

- 1.7" colorful touch screen, easy operation;
- 3D vibratory pulverizing and centrifugal separation integrated, saving operation time and environment pollution avoided;
- Low speed crushing ensures the yield of DNA/RNA, especially suitable for genome preparation;
- Suited for both centrifuge tube and cryogenic vials in size of 2ml/5ml;
- Different SOPs could be programed (such as crushing time, cycles, temperature, centrifugal time, rotate speed, stop interval time etc.) for various application.

### ○ Technical Data

Process capacity	24x2ml / 48x2ml / 12x5ml
Vibration linear speed	2.0-6.5m/s
Centrifugal speed	Max. 1000-6000rpm
3D rotate speed	Max. 1000-4000rpm
Storable SOPs	99 SOPs
Cycling times	1-99 times
Max single grinding time	99min59sec
Rated power(LM50)	640W
Rated power(LM50R40)	890W

