

Tissue Homogenizer Series

SAMPLE PRE-TREATMENT

Tissue Homogenizer-Low Temperature
SWE-FP
-50 °C Freezing Chamber



Tissue Homogenizer Low Temperature
SWE FP PLUS
-50°C , Freezing Chamber ,
Grinding Hard Tissue



Tissue Homogenizer-3D Frozen
SWE-3D
-50 °C Freezing Chamber



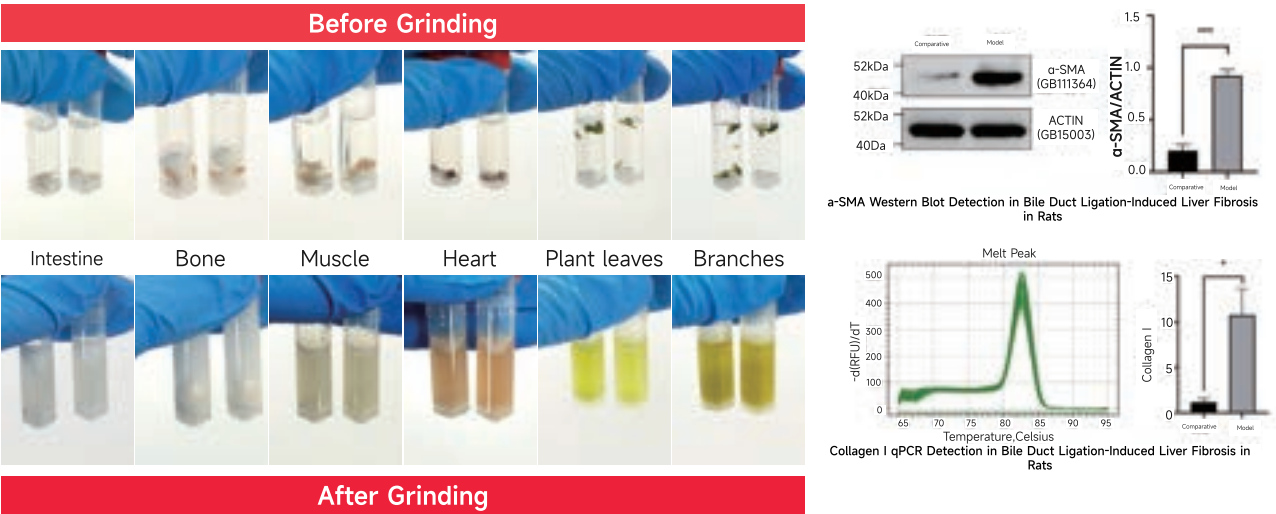


Tissue
Homogenizer-3D
SWE-D6
Room Temperature



Tissue Homogenizer
-Vertical
SWE-C6
Room Temperature

Outstanding Grinding | Thorough Protein/RNA Extraction Superior Experimental Results High-scoring Frequently Cited Literature



Servicebio homogenizer can meet the requirements of rapid processing of multi-sample in various fields such as research institutes, universities, agriculture, biomedicine, food testing, etc. The samples after grinding can be used for WB, PCR, biochemical, ELISA, LC/MS, etc. The grinding is more thorough, and better protects proteins and RNA from degradation, helping you to publish high-impact articles!

The following are excerpts from highly cited literature. For more references on tissue homogenizer, please visit the official website of Servicebio: www.servicebio.com

1	Pu, Y., et al.GOLM1 restricts colitis and colon tumorigenesis by ensuring Notch signaling equilibrium in intestinal homeostasis.Signal Transduction and Targeted Therapy6(1),p. 148(2021).PMID 33850109 IF 38.104
2	Qi, Y., et al.A Lactose-Derived CRISPR/Cas9 Delivery System for Efficient Genome Editing In Vivo to Treat Orthotopic Hepatocellular Carcinoma.Advanced Science7(17),p. 2001424(2020).PMID 32995132 IF 17.521
3	Pang, Z., et al.Multifunctional Gold Nanoclusters for Effective Targeting, Near-Infrared Fluorescence Imaging, Diagnosis, and Treatment of Cancer Lymphatic Metastasis.ACS Nano16,16019-16037(2022).PMID 36130729 IF 17.1
4	Xu, D., et al.Self-Homeostasis Immunoregulatory Strategy for Implant-Related Infections through Remodeling Redox Balance.ACS Nano17,4574-4590(2023).PMID 36811805 IF 17.1
5	Wang, M., et al.DNA-PK inhibition by M3814 enhances chemosensitivity in non-small cell lung cancer.Acta Pharmaceutica Sinica B11(12),p. 3935-3949(2021).PMID 35024317 IF 14.903
6	Pan, X., et al.SWD1 epigenetically chords fungal morphogenesis, aflatoxin biosynthesis, metabolism, and virulence of Aspergillus flavus.Journal of Hazardous Materials455,131542(2023).PMID 37172387 IF 13.6
7	Yin, H., et al.Short-term exposure to high relative humidity increases blood urea and influences colonic urea-nitrogen metabolism by altering the gut microbiota.Journal of Advanced Research35,p. 153-168(2022).PMID 35003799 IF 12.822
8	Wan, J., et al.Balancing the stability and drug activation in adaptive nanoparticles potentiates chemotherapy in multidrugresistant cancer. Theranostics11(9),p. 4137-4154(2021).PMID 33754053 IF 11.6
9	Sun, Y., et al.A Novel Strategy for Treating Inflammatory Bowel Disease by Targeting Delivery of Methotrexate through Glucan Particles.Advanced Healthcare Materials9(6),p. 1901805(2020).PMID 32092235 IF 11.092
10	Zhou, B.-h., et al.Drp1/Mff signaling pathway is involved in fluoride-induced abnormal fission of hepatocyte mitochondria in mice.Science of The Total Environment725,p. 138192(2020).PMID 32278173 IF 10.753
11	Li, Y.-J., et al.Gemcitabine loaded autologous exosomes for effective and safe chemotherapy of pancreatic cancer.Acta Biomaterialia101,p. 519-530(2020).PMID 31629893 IF 10.633
12	Dong, J., et al.Inhibiting NLRP3 inflammasome activation prevents copper-induced neuropathology in a murine model of Wilson's disease.Cell Death & Disease12(1),p. 87(2021).PMID 33462188 IF 9.685
13	Yue, X., et al.Intermittent hypoxia treatment alleviates memory impairment in the 6-month-old APPswe/PS1dE9 mice and reduces amyloid beta accumulation and inflammation in the brain.Alzheimers Research & Therapy13(1),p. 194(2021).PMID 34844651 IF 8.823
14	Liu, J., et al.Ferritin-dependent cellular autophagy pathway promotes ferroptosis in beef during cold storage.Food Chemistry412,135550(2023).PMID 36706507 IF 8.8
15	Ye, L., et al.Inhibition of IP3R/Ca2+ Dysregulation Protects Mice From Ventilator-Induced Lung Injury via Endoplasmic Reticulum and Mitochondrial Pathways.Frontiers in immunology12,p. 729094-729094(2021).PMID 34603302 IF 8.786

Servicebio Tissue Homogenizer Greatly Improved Sample Processing Procedure

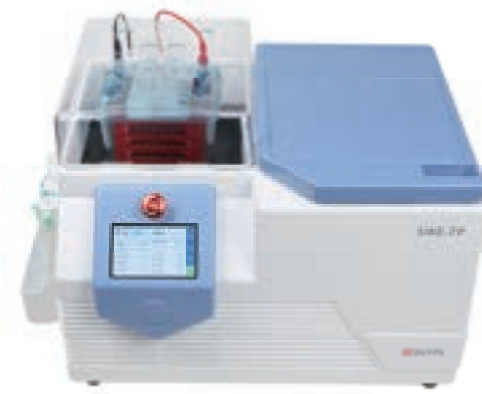
- 1 Capable of dry grinding, wet grinding, and homogenization of samples.
- 2 Simultaneously processes 24 samples, enabling rapid and high-throughput sample preparation (upgradeable to process 192 samples in a single run).
- 3 Compatible with different capacity adapters: 0.5 mL, 1.5 mL, 2 mL, 5 mL, 10 mL, 15 mL, 50 mL.
- 4 Wide range of sample types can be processed:
a.Suitable for grinding and crushing various plant tissues, including roots, stems, leaves, flowers, fruits, seeds, etc.
b.Suitable for grinding and crushing various animal tissues, including brain, heart, lungs, stomach, liver, thymus, kidneys, intestines, lymph nodes, muscles, bones, etc.
c.Suitable for grinding and crushing food and pharmaceutical components for analysis and testing.
- 5 Uses sealed disposable centrifuge tubes to effectively prevent cross-contamination between samples.
- 6 Strong experimental reproducibility; setting the same grinding frequency and time yields consistent grinding results.
- 7 Cooling function: Optional settings of room temperature, -50 °C .
- 8 Upgraded model SWE-FP/SWE-FP PLUS/SWE-3D features a built-in freezing platform for sample low-temperature protection and meets cooling requirements for Western Blot electrophoresis experiments.

Reduce Protein and RNA Degradation with Full-cycle Cryogenic Grinding

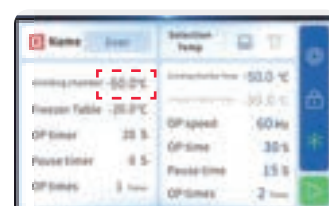
Tissue Homogenizer-Low Temperature^{SWE-FP}

Experiment Scenario 1

The grinding process generates heat, leading to degradation of proteins/RNA within the sample and compromising the accuracy of the experiment.



Low temperature -50 °C grinding throughout the process, reducing degradation of proteins and RNA



Experiment Scenario 2

Capable of processing up to 192 samples simultaneously within 1 minute (standard configuration: 24 samples) [with multiple adapters available]



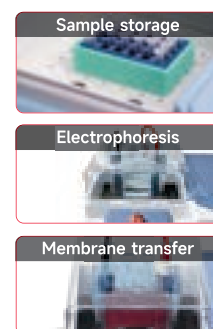
96-well plate×2



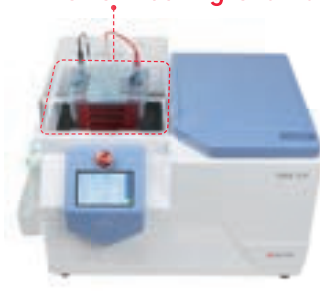
2 mL×24

Experiment Scenario 3

Experiments requiring low temperatures, such as WB electrophoresis and membrane transfer, find that methods like ice baths provide an unstable cold environment and are cumbersome.



-20° C Freezing Chamber



Experiment Scenario 4

Grinding machines available on the market may develop a noise after prolonged use, or may break down and become inoperable.

All Servicebio Homogenizers Use



Servicebio Slider Drive

- ✓ No-wear Shaft
- ✓ Noise Stability
- ✓ Durable

Common Grinders on the Market Typically Use



Linear Bearing Transmission Prone to Shaft Breakage

Frequent shaft failures increase both the financial and time costs of subsequent maintenance.

Tissue Homogenizer Low Temperature^{SWE-FP PLUS}

Experiment Scenario 1

The bones are too hard to grind effectively, resulting in inadequate extraction of proteins/nucleic acids, which compromises subsequent experimental outcomes.

Pair with Bone-specific Adapter

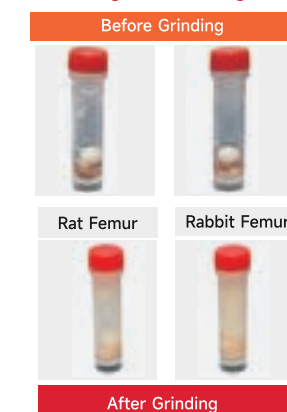


WE-FP-0224F 2mL*24

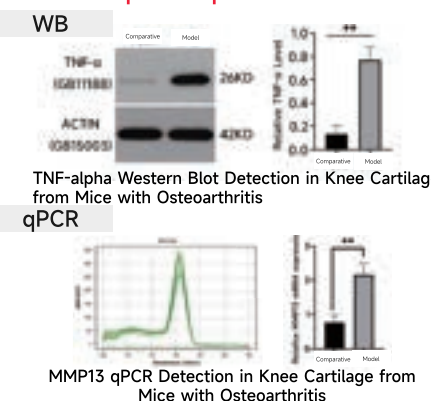


SWE-FP-0512F 5mL*12

Grinding Effect Diagram



Thorough Grinding Yields Favourable Subsequent Experimental Results



Experiment Scenario 2

The grinding process generates heat, leading to degradation of proteins/RNA within the sample and compromising the accuracy of the experiment.

Grinding Chamber -50°C



Low temperature grinding throughout the process, reducing degradation of proteins and RNA



Experiment Scenario 3

Capable of processing up to 192 samples simultaneously within 1 minute (standard configuration: 24 samples) [with multiple adapters available]



96-well plate×2



2 mL×24

Experiment Scenario 4

Experiments requiring low temperatures, such as WB electrophoresis and membrane transfer, find that methods like ice baths provide an unstable cold environment and are cumbersome.

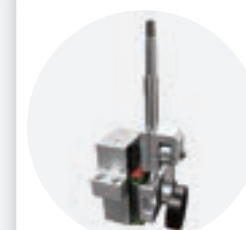


-20° C Freezing Chamber



Experiment Scenario 5

Grinding machines available on the market may develop a noise after prolonged use, or may break down and become inoperable.



Servicebio Slider Drive

- ✓ No-wear Shaft
- ✓ Noise Stability
- ✓ Durable

Tissue Homogenizer-3D Frozen^{SWE-3D}

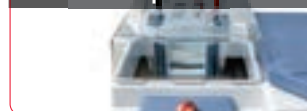
Experiment Scenario 1

The grinding process generates heat, leading to degradation of proteins/RNA within the sample and compromising the accuracy of the experiment.

Sample storage



Electrophoresis



Membrane transfer



Low temperature -50 °C grinding throughout the process, reducing degradation of proteins and RNA



Experiment Scenario 2

Tough tissues such as skin and blood vessels are difficult to grind sufficiently, which affects subsequent experimental results.

Fuller grinding, routine tissues can be ground in as fast as 15s.



Thorough grinding yields favourable experimental results.

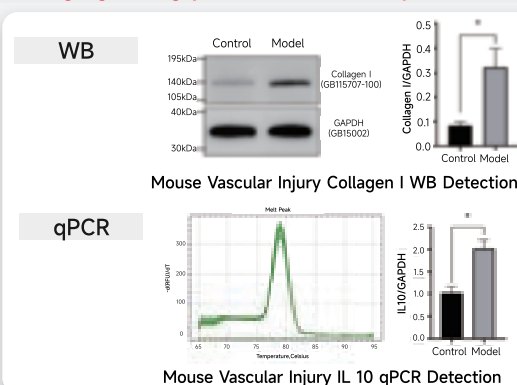


Simultaneous processing of up to 24 samples



2 mL×24

Thorough grinding yields favourable experimental results.



Tissue Homogenizer-3D^{SWE-D6}

Experiment Scenario

✓ Special "∞" motion pattern, especially suitable for tough samples.

Fuller grinding, routine tissues can be ground in as fast as 15s.



Simultaneous processing of up to 24 samples (Multiple adapters available)



2 mL×24

Tissue Homogenizer (Vertical)^{SWE-C6}

Experiment Scenario 1

Employing a vertical oscillation system for high-speed reciprocating motion, suitable for grinding and pulverising samples such as plants, animals, foodstuffs, and pharmaceuticals.



Servicebio Slider Drive

- ✓ No-wear Shaft
- ✓ Noise Stability
- ✓ Durable

Experiment Scenario 2

The need to process larger sample volumes simultaneously, enhance experimental efficiency, and maintain consistency between batches.

Capable of processing up to 192 samples simultaneously within 1 minute (standard configuration: 24 samples) [with multiple adapters available]



96-well Plate×2



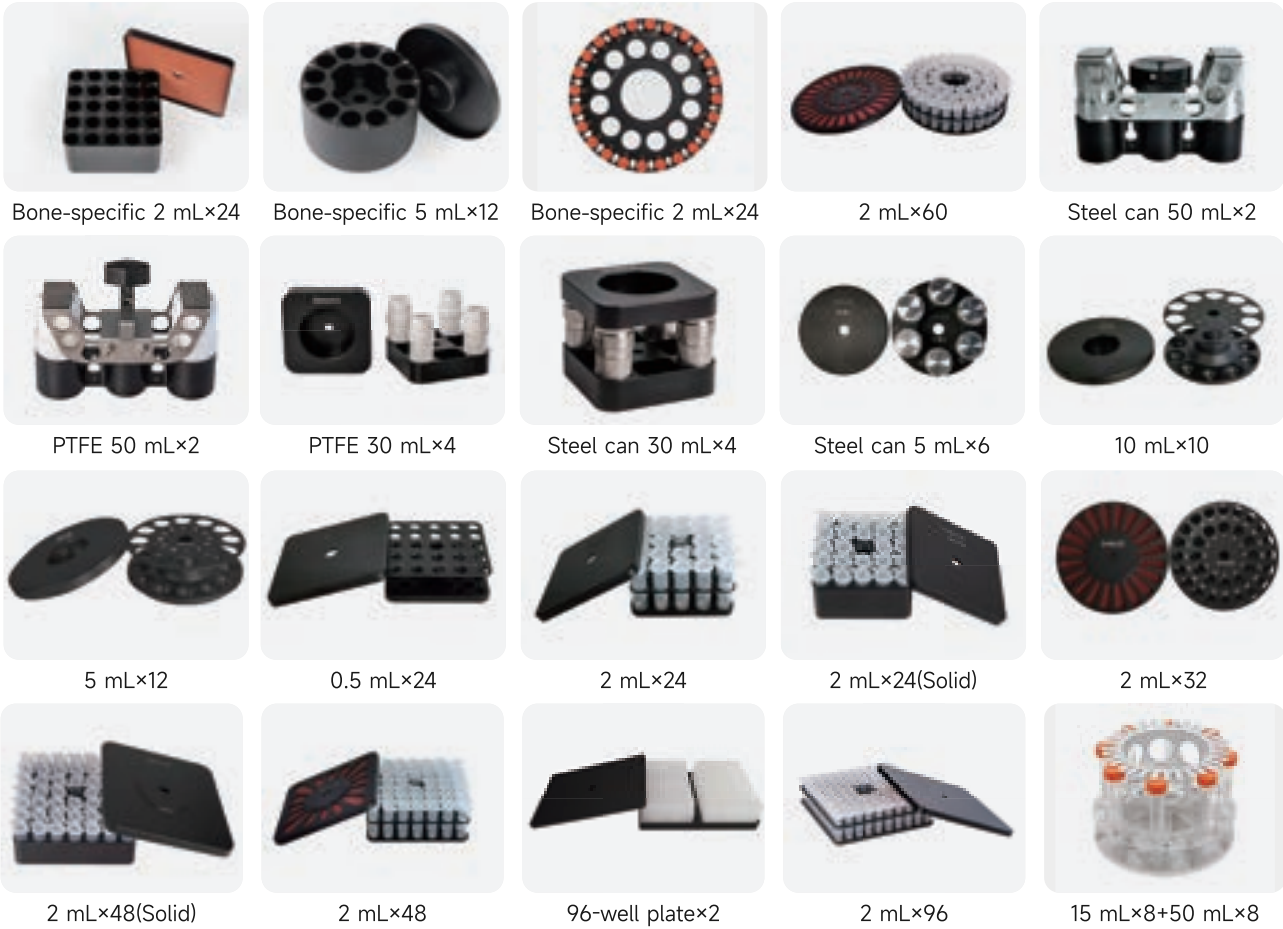
2 mL×24



Cat. No.	SWE-C6		SWE-FP	SWE-FP PLUS	SWE-D6	SWE-3D
Operating Mode	Vertical oscillation system with high-speed reciprocating motion				Presents a 3D "∞" shaped motion in space	
Temperature	Room temperature	-50°C		-50°C	Room temperature	-50°C
Temperature Control Precision	N/A	±1°C		±1°C	N/A	±1°C
Actual Speed	2100 rpm				4500 rpm (8 m/s)	
Standard Spec.	24*2 mL				24*2 mL	
Maximum Sample Volume	192 pcs				24 pcs	
Adapter Specification	0.5 mL×24, 2 mL×24, 2 mL×32, 2 mL×48, 2 mL×60, 2 mL×96, 5 mL×12, 10 mL×10, steel can 5mL×6, steel can 15mL×8, steel can 30 mL×4, steel can 50mL×2, PTFE 30mL×4, PTFE 50 mL×2, 96-well Plate×2				3D 2mL×24; 3D 5mL×12 (Special Adapter Models)	
Freezing Table	N/A	YES		YES	N/A	YES
Adapter Fixing Method	Nut				Knob cover with safety locking device	
Working Time	0-9999 s					
Dimensions	296×452×376 mm	650×420×430 mm		650×420×430 mm	296×452×376 mm	650×420×430 mm
Screen Size	5 inches					
Emergency Stop Button	YES					
Electromagnetic Safety Lock	Screen click control with automatic power-off unlocking. the cover cannot be opened during operation until the grinding program ends, fully protected.					
Maximum Feeding Size	No requirements, adjustable according to the adapter.					
Power-on Password	Yes (can be switched off)	Yes (can be switched off)			Yes (can be switched off)	Yes (can be switched off)
Weight	26.2 kg	54 kg		54 kg	26.2 kg	54 kg
Power Parameters	110 V AC, 60 Hz, 200 W	110 V AC, 60 Hz, 500 W		110 V AC, 60 Hz, 500 W	110 V AC, 60 Hz, 200 W	110 V AC, 60 Hz, 500 W
Cooling Method	Low temperature pre-cooling: adapter can reach -80°C or liquid nitrogen pre-cooling	Compressor cooling		Compressor cooling	Low temperature pre-cooling: adapter can reach -80°C or liquid nitrogen pre-cooling	Compressor cooling
Transport Screws	Yes (2 at the bottom)	Yes (2 at the bottom)			N/A	N/A
Advantages	Small size, cost-effective	Lowest cooling temperature can be -50°C. Low temperature freezing chamber protects samples and meets low-temperature needs for Western Blot experiments, electrophoresis, and transfer membranes.		Particularly suitable for bone tissue; grinding chamber temperatures can be lowered to -50°C to prevent protein/nucleic acid degradation; the -20°C freezing platform accommodates low-temperature requirements for Western blot electrophoresis, film transfer and similar procedures.	Small size, 3D operation, and high grinding efficiency;	The ∞-shaped blade operates at high speeds, particularly suited for robust tissues such as blood vessels; the grinding chamber maintains temperatures as low as -50°C to prevent protein/nucleic acid degradation; the -20°C freezing platform accommodates low-temperature requirements for Western blot electrophoresis and membrane transfer.



Tissue Homogenizer Adapters



Name	Cat. No.	Spec.	Applicable Model
Tissue Homogenizer Adapters	SWE-FP-0224F	2 mL*24(Bone-specific)	SWE-FP PLUS
	SWE-FP-0512F	5mL*12(Bone-specific)	
	SWE-FP-D524	0.5 mL*24	
	SWE-FP-0224	2 mL*24	
	SWE-FP-0224S	2 mL*24(Solid)	
	SWE-FP-0232	2 mL*32	
	SWE-FP-0248	2 mL*48	
	SWE-FP-0248S	2 mL*48(Solid)	
	SWE-FP-0260	2 mL*60	
	SWE-FP-0512	5 mL*12	
	SWE-FP-1010	10 mL*10	SWE-FP SWE-C6 SWE-FP PLUS
	SWE-FP-5008	15ML*8+50ML*8	
	SWE-FP-0506B	Steel Can 5 mL*6	
	SWE-FP-1508B	Steel Can 15 mL*8	
	SWE-FP-3004B	Steel Can 30 mL*4	
	SWE-FP-5002B	Steel Can 50 mL*2	
	SWE-FP-3004Z	Polytetrafluoroethylene 30 mL*4	
	SWE-FP-5002Z	Polytetrafluoroethylene 50 mL*2	
	SWE-FP-0296	2 mL*96	
	SWE-FP-9602	96-well plate*2	
	SWE-FP-5008	15ML*8+50ML*8	SWE-FP SWE-C6
	SWE-3D-0224	3D 2 mL*24	
	SWE-3D-0512	3D 5 mL*12	
	SWE-3D-0224F	2ML*24(Bone-specific)	
			SWE-D6
			SWE-3D

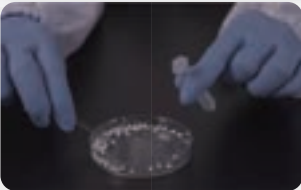


Beads Pen

Precise Pressing
Strictly Sterilized



Cleanliness during use reduces
the risk of RNA and protein
degradation.



Not only is it difficult to
pick up with tweezers,
but the exposed
environment is also prone
to contamination;



Once the zirconium beads
are contaminated, there is
a risk of causing sample
degradation.

>> Product Features

- Easy to use by direct press. No need to clip, no risk of spillage.
- Cleanliness during use reduces the risk of RNA and protein degradation.
- Two materials optional: zirconia & steel beads.
- Three specifications optional: 2 mm, 3 mm, 4 mm.
- Beads pen capacity: 20 mL.

The following models of bead pen are irradiated and sterilized						
Product Name	Cat. No.	Spec.	Beads Output Per Time / Piece	Volume	Pen Color	Beads Color
Beads Pen (Sterile, RNase & DNase Free)	SYM-02Z	Piece (Zirconia Beads 2 mm)	1, 2, 3, 4, 5	20 mL 70g (2000 pcs)	Green	White
	SYM-03Z	Piece (Zirconia Beads 3 mm)	1, 2, 3, 4	20 mL 70g (600 pcs)	Green	White
	SYM-04Z	Piece (Zirconia Beads 4 mm)	1, 2, 3	20 mL 70g (400 pcs)	Green	White
Beads Pen (Sterile)	SYM-02B	Piece (Steel Beads 2 mm)	1, 2, 3, 4, 5	20 mL 90g (2000 pcs)	Blue	Silver
	SYM-03B	Piece (Steel Beads 3 mm)	1, 2, 3, 4	20 mL 90g (600 pcs)	Blue	Silver
	SYM-04B	Piece (Steel Beads 4 mm)	1, 2, 3	20 mL 90g (400 pcs)	Blue	Silver

Grinding Beads

Grinding Beads (Steel)



Grinding Beads (Glass)



Grinding Beads (Zirconia, RNase Free)



Name	Cat. No.	Spec.	Applicable Model
Grinding Beads (Steel)	G0101-200G	1 mm 200 g	Universal
	G0102-200G	2 mm 200 g	Universal
	G0103-200G	3 mm 200 g	Universal
	G0104-200G	4 mm 200 g	Universal
Grinding Beads (Zirconia)	G0201-150G	1 mm 150 g	Universal
	G0202-150G	2 mm 150 g	Universal
	G0203-150G	3 mm 150 g	Universal
	G0204-150G	4 mm 150 g	Universal
	G0206-150G	6 mm 150 g(For Hard Tissue)	Universal
	G0208-130G	8mm 130 g(For Hard Tissue)	Universal
	G0200-130G	10 mm 130 g(For Hard Tissue)	Universal
	G0210-100G	0.1 mm 100 g	Universal
Grinding Beads(Glass)	G0250-100G	0.5 mm 100 g	Universal
	G0310-40G	0.1 mm 40 g	Universal
	G0350-40G	0.5 mm 40 g	Universal
Grinding Tube 2.0 mL (DNase & RNase Free)	HT-200-M	500 pcs/bag,10 bags/ctn	Universal
Grinding Tube 2.0mL(Standing, Screw Cap,Sterile,DNase&RNase Free)	HT-200-REM	500 pcs/bag,10 bags/ctn	Please use with the corresponding adapter
Grinding Tube 2.0mL(Sterile,Screw Cap,DNase&RNase Free)	HT-200V-REM	500 pcs/bag,10 bags/ctn	Universal