

bioGenous™ Tissue Digestion Solution

Catalog: K601008

Product Description

bioGenous™ Tissue Digestion Solution is designed to gently and rapidly digest normal tissue samples into cell suspensions or cell clumps, facilitating subsequent organoid construction. It is broadly applicable to a wide range of normal mammalian tissue specimens (including intestines, liver, lungs, stomach, pancreas, etc.) and is ideal for use prior to primary in vitro culture.

Product Information

Component	Catalog#	Volume	Storage& Stability
bioGenous™ Tissue Digestion Solution (Basal Medium)	K601008-A100/A500	100 mL/500 mL	2-8°C, 24 months
bioGenous™ Tissue Digestion Solution (Supplement 20X)	K601008-B100/B500	5 mL/25 mL	-20°C, 24 months

Materials & Reagents Required But Not Included

The following extended materials and reagents required for organoid maintenance can be purchased from www.biogenous.cn.

Manufacturer	Reagents	Catalog#
bioGenous™	Epithelial Organoid Basal Medium	B213151
	Fetal Bovine Serum, FBS	

Preparation of Tissue Digestion Solution

Under sterile conditions, prepare the tissue digestion solution as follows. Below is an example for preparing 10 mL of the complete tissue digestion solution. Adjust quantities proportionally for different volumes as needed.

1. Thaw bioGenous™ Tissue Digestion Solution (Supplement 20X) at 4°C. After thawing, mix thoroughly.
Note: It is recommended to aliquot the thawed bioGenous™ Tissue Digestion Solution (Supplement 20X) and store it accordingly to avoid repeated freeze-thaw cycles.
2. Add 500 µL of bioGenous™ Tissue Digestion Solution (Supplement 20X) to 9.5 mL of bioGenous™ Tissue Digestion Solution (Basal Medium). Mix thoroughly.
Note: The prepared complete tissue digestion solution can be stored at 2-8°C and is recommended for use within 24 hours, or stored at -20°C for up to one month.

Directions for Use

1. Before digestion, use surgical scissors or a scalpel to cut the tissue into fragments approximately 1-3 mm³ in size.
2. Add an appropriate volume of Tissue Digestion Solution, equivalent to 25-50 times the volume of the original tissue, based on the size of the tissue block. Place the mixture in a 37°C incubator or shaking incubator for

tissue digestion. The digestion time may vary depending on the tissue type, source, and individual differences, generally ranging from 30 to 120 minutes.

Note: During this process, it is crucial to carefully monitor the digestion to avoid over-digestion, which can significantly reduce organoid formation efficiency. Microscopic examination of the digestion suspension can be performed during the process, and digestion should be considered complete when a substantial number of single cells or cell clusters smaller than 70 μm are observed.

3. After confirming that the tissue digestion is complete, add 2-5% Fetal Bovine Serum (FBS), and mix thoroughly by pipetting to terminate the digestion.
4. The digestion suspension obtained from the previous step can be directly used for cell separation procedures such as centrifugation or filtration through a mesh. Before using the separated cells, wash the sample by centrifugation at least twice using Epithelial Organoid Basal Medium (recommended centrifugation speed: 200-300 x g , 3 min).

Quality Control

All components are negative for bacterial and fungal contamination. Certificate of authenticity (COAs) for all other products are available upon request.

Safety Information

Read the Safety Data Sheets (SDSs) and follow the manufacture's instruction.

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Contact and Support

For questions, suggestions, and technical supports, please contact us at E-mail: info@biogenous.cn.

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