

bioGenous™ G-27 Supplement

Catalog: S223152

Product Description

bioGenous™ G-27 Supplement (50X) is a chemically defined, serum-free additive specifically designed for the culture of organoids and neuronal cells. This supplement is formulated to mimic the nutritional environment of *in vivo* cell growth and has been specially optimized to support the growth and differentiation of organoids and neuronal cells. This supplement ensures optimal survival and functionality of organoids and neuronal cells *in vitro*, making it an ideal support for cell biology research. Additionally, this product can be used in combination with bioGenous™ organoid basal medium and other necessary growth factors to prepare a complete culture medium for organoid cultivation.

Product Information

Component	Catalog#	Volume	Storage & Stability
bioGenous™ G-27 (50x)	S223152	10 mL	-20°C, store protected from light, 12 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™	Organoid Culture ECM (Reduced Growth Factor)	M315066
bioGenous™	Epithelial Organoid Basal Medium (Serum-free)	B213154
bioGenous™	Organoid Dissociation Solution	E238001
bioGenous™	Recombinant Human EGF	568-EGF
bioGenous™	Recombinant Human Noggin	807-NOG
bioGenous™	Recombinant Human R-spondin1	861-RS1

Preparation of Complete Medium

1. Thaw bioGenous™ G-27 Supplement (50X) on ice or at 4°C.
Note: After thawing, avoid repeated freeze-thaw cycles.
2. Under sterile conditions, add G-27 Supplement (50X) to the basal medium at a 1:50 ratio (20 mL/L) to replace serum and prepare the complete culture medium for organoids or neuronal cells.
3. Store the prepared complete medium at 2-8°C, protected from light, for up to two weeks.

Directions for Use

1. Use Tissue Digestion Solution (E238001) and Organoid Basal Medium (Catalog No. 213154) to isolate tissue cells following standard experimental procedures.

2. Resuspend the tissue cells using Organoid Culture ECM (M315066) on ice.
3. Seed the ECM and cell suspension into cell culture plates.
4. Place the culture plates in a 37°C, 5% CO₂ incubator for 15-25 min to allow the ECM to solidify.
5. Remove the culture plates and slowly add the complete medium, being careful not to disturb the ECM structure. Monitor regularly and change the medium every 3 days.

Applications

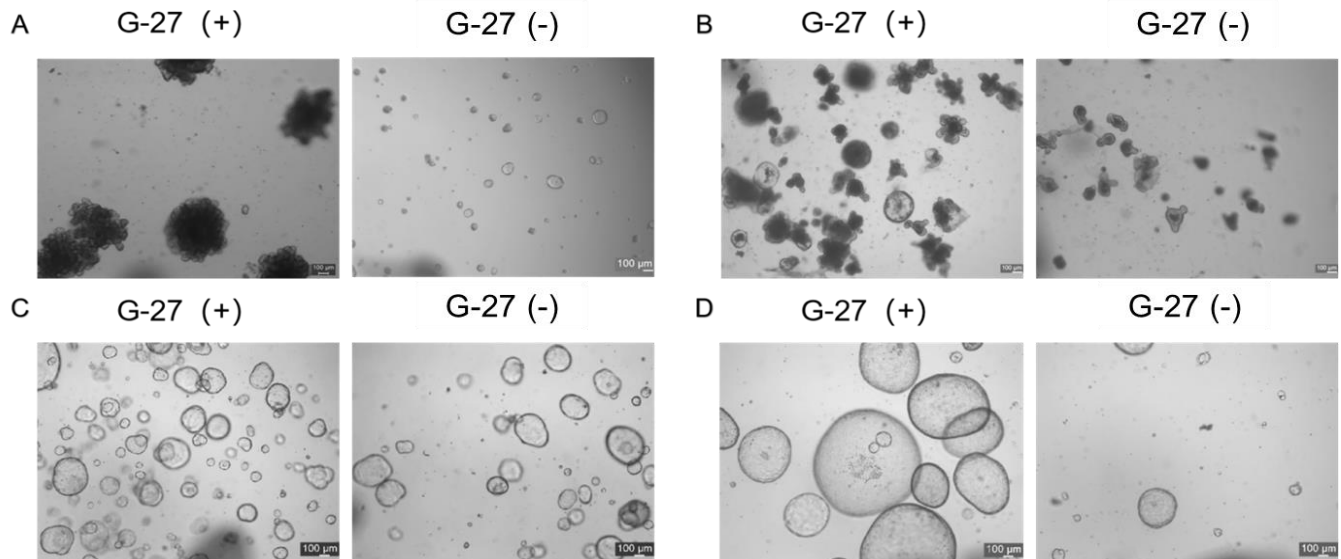


Figure 1: Comparison of organoids cultured with bioGenous™ G-27 Supplement (50X). (A) Bright-field image of human intestinal organoids cultured in vitro for 7 days. (B) Bright-field image of mouse intestinal organoids cultured in vitro for 5 days. (C) Bright-field image of gastric cancer organoids cultured in vitro for 9 days. (D) Bright-field image of mouse cholangiocyte organoids cultured in vitro for 7 days. (Scale bar: 100 µm)

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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