bioGenous™ G-27-VA Supplement

Catalog: S223151

Product Description

bioGenous™ G-27-VA is a customized version of bioGenous™ G-27, free of Vitamin A (retinyl acetate). It is an optimized serum-free supplement designed for organoid and neural cell culture systems where precise control over Vitamin A levels is required. Retinoic acid, the active metabolite of Vitamin A, plays a critical role in the growth and differentiation of various cell types. However, for specific lineages of organoid or neural cell cultures—particularly those sensitive to retinoic acid—the removal of Vitamin A helps maintain stem cell pluripotency and reduces unwanted differentiation. This product can be used with bioGenous™ organoid basal medium series (B213151, B213152, B213153) and other necessary growth factors to formulate a complete culture medium for organoid or cell cultures.

Product Information

Component	Catalog#	Volume	Storage & Stability
bioGenous™ G-27-VA (50x)	S223151	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-VA Supplement (50X) on ice or at 4°C.
   ***Note**: After thawing, avoid repeated freeze-thaw cycles.*
2. Under sterile conditions, add G-27-VA 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 (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% CO_2 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

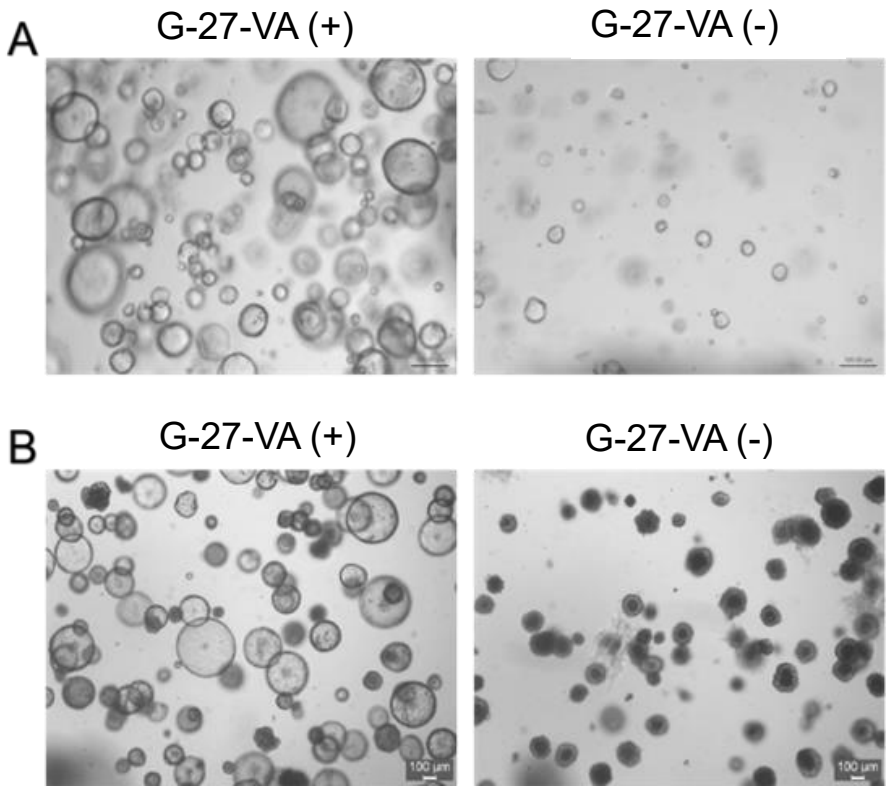

Figure 1: Comparison of organoids cultured with bioGenous™ G-27-VA Supplement (50X). (A) Bright-field image of mouse liver duct organoids cultured in vitro for 7 days.
(B) Bright-field image of mouse airway organoids cultured in vitro for 12 days. (Scare bar:100 μm)

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.

Last updated on 30th August, 2024