Gastrin (Human) Solution (10 mM)

Cat. No.: PB180603

Size: 0.1mL

General Information

Product Form	Liquid
Solvent	DMSO
Concentration	10 mmol/L
Storage	-5~-20°C
Whether to avoid light	Shading light
Shipping	Ice bag
Expiration date	12 months

Background

Gastrin, also known as gastric mucosal regenerator, is an endogenous polypeptide hormone produced by the stomach. Its main functions include acting as a selective agonist at the cholecystokinin type 2 receptor (CCK2 receptor) and stimulating gastric acid secretion. By binding to the cholecystokinin B receptor (CCKBR), gastrin triggers an increase in intracellular Ca^{2+} concentration, promotes phosphatidylinositol production, and activates the protein kinase C (PKC) signaling pathway.

In addition, gastrin is involved in regulating the proliferation and differentiation of gastric epithelial cells, which plays an important role in the study of gastrointestinal organoids.

In the field of organoid culture, gastrin is widely used in the culture system of intestinal and liver organoids to prolong the survival time of the organoids and maintain their functional properties.

Common working concentration: 10 nM.

Notes

1. This product is only used for scientific research or further research, not for diagnosis and treatment.
2. This product was sterilized by 0.1 μm filtration and can be used directly after melting.
3. It is necessary to pay attention to the aseptic operation and avoid the contamination.
4. Before using, the product should be thawed at 2-8°C and shaken thoroughly; repeated freeze-thaw cycles are not advised..
5. If precipitation happens after thawing, the contents can be resuspended by pipetting or vortex mixing. After incubating the solution at 37°C for 20 to 30 minutes or letting it stand at room temperature for about an hour, check to see if the precipitate dissolves as intended. If the product dissolves completely, it can be used as usual.
6. This product is a concentrated solution and should be diluted prior to use as required.
7. The product should be used within a month if stored regularly at 2-8°C. Keep in a frozen state at -5~-20°C for extended storage. Long-term storage at room temperature or between 2-8°C is not recommended. When lesser amounts are required, aliquoting is advised to prevent repeated freeze-thaw cycles.