SAG Hydrochloride Solution (10 mM)

Cat. No. : PB180612

Size : 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

SAG hydrochloride is a potent Smo receptor agonist that specifically activates the Hedgehog signaling pathway, with a Kd value of 59 nM and an EC_{50} value of 3 nM. The activity of Gli transcription factors is regulated by the Hedgehog signaling pathway through Smo proteins, and it is essential for the determination of cell fate, tissue homeostasis, and embryonic development.

In the field of organoid culture, SAG hydrochloride is frequently employed in conjunction with other critical signaling molecules (including Activin A and SHH pathway agonists), to synergistically improve the developmental potential of organoids. This combinatorial strategy can more accurately replicate the in vivo microenvironment and facilitate the structural and functional maturation of organoids, thereby supplying a critical instrument for drug screening and disease modeling.

Notes

1. This product was sterilized by 0.1 μm filtration and can be used directly after melting.
2. It is necessary to pay attention to the aseptic operation and avoid the contamination.
3. Before using, the product should be thawed at 2-8°C and shaken thoroughly; repeated freeze-thaw cycles are not advised.
4. 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.
5. This product is a concentrated solution and should be diluted prior to use as required.
6. 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.
7. This product is for research use only.
8. May cause respiratory tract irritation, cause severe eye irritation, cause skin irritation, and is harmful if consumed. Please take proper precautions when operating.