

SGC-AAK1-1

Chemical Properties

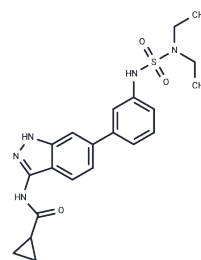
CAS No. : 2247894-32-0

Formula: C₂₁H₂₅N₅O₃S

Molecular Weight: 427.52

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Actual storage temperature shall be subject to the COA.



Biological Description

Description	SGC-AAK1-1, a potent and selective inhibitor of AAK1 (AP2-associated kinase 1), has an IC ₅₀ of 270 nM and a K _i of 9 nM, and serves as a chemical probe.
Targets(IC ₅₀)	AAK1,Wnt/beta-catenin,AAK1 (AP2 associated kinase 1)
In vitro	phosphorylation of AP2M1 (T156)significantly reduced by SGC-AAK1-1 (1.25 μM) and activates WNT-driven BAR activity compared in a dose-dependent manner in HT1080 cells. SGC-AAK1-1 blocks AAK1 kinase activity, resulting in increased β-catenin protein stability and β-catenin-dependent transcription.

Solubility Information

Solubility	DMSO: 40 mg/mL (93.56 mM),Sonication and heating to 60°C are recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (4.68 mM),Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.3391 mL	11.6954 mL	23.3907 mL
5 mM	0.4678 mL	2.3391 mL	4.6781 mL
10 mM	0.2339 mL	1.1695 mL	2.3391 mL
50 mM	0.0468 mL	0.2339 mL	0.4678 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Agajanian MJ, et al. WNT Activates the AAK1 Kinase to Promote Clathrin-Mediated Endocytosis of LRP6 and Establish a Negative Feedback Loop. Cell Rep. 2019 Jan 2;26(1):79-93.e8.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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