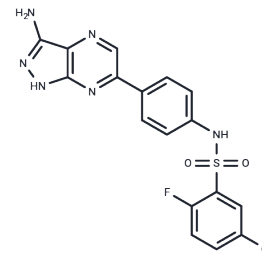


SGK1-IN-1

Chemical Properties

CAS No. :	1279829-87-6
Formula:	C17H12ClFN6O2S
Molecular Weight:	418.83
Storage:	Store at low temperature Powder: -20°C for 3 years In solvent: -80°C for 1 year <i>Actual storage temperature shall be subject to the COA.</i>



Biological Description

Description	SGK1-IN-1 (compound 14n) is a highly potent SGK1 (Serum/Glucocorticoid Regulated Kinase 1) inhibitor, with inhibitory activities of 41 nM, 128 nM, and 310 nM against hSGK1/2/3 at 500 μM ATP, respectively, and can be used for studying SGK1-related cancers and metabolic diseases.
Targets(IC50)	SGK
In vitro	<p>Method: Kinase inhibition assays were conducted to evaluate the selectivity and activity of SGK1-IN-1 (14n) against SGK family members at different ATP concentrations. Additionally, its inhibitory effect on GSK3β phosphorylation was assessed in U2OS cells.</p> <p>Result: SGK1-IN-1 showed strong activity against hSGK1 (IC₅₀ = 1 nM), good activity against hSGK2, moderate activity against hSGK3 (IC₅₀ = 41 nM), and exhibited cellular activity with an IC₅₀ of 0.69 μM in U2OS cells.[1]</p>

Solubility Information

Solubility	H ₂ O: 1.5 mg/mL (3.58 mM), when pH is adjusted to 12 with 1M NaOH. DMSO: 40 mg/mL (95.5 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: 2 mg/mL (4.78 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	2.3876 mL	11.938 mL	23.876 mL
5 mM	0.4775 mL	2.3876 mL	4.7752 mL
10 mM	0.2388 mL	1.1938 mL	2.3876 mL
50 mM	0.0478 mL	0.2388 mL	0.4775 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

ARYL SULFONOHYDRAZIDES.WO 2013041119 A1.

Halland N, et al. Discovery of N-[4-(1H-Pyrazolo[3,4-b]pyrazin-6-yl)-phenyl]-sulfonamides as Highly Active and Selective SGK1 Inhibitors. ACS Med Chem Lett. 2014 Oct 23;6(1):73-8.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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