

## SK1-I hydrochloride

## Chemical Properties

CAS No. : 2366222-05-9

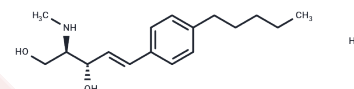
Formula: C<sub>17</sub>H<sub>28</sub>ClNO<sub>2</sub>

Molecular Weight: 313.86

Keep away from direct sunlight

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	SK1-I hydrochloride is the salt form of SK1-I(BML-258). SK1-I is a selective and competitive sphingosine kinase 1 (SphK1) inhibitor and sphingosine analog that is inactive against SphK2 and a variety of other protein kinases, and possesses anti-leukemic potential to inhibit tumor cell growth and promote apoptosis.
Targets(IC50)	S1P Receptor
In vitro	The effect of SK1-I hydrochloride on cancer cell growth, survival, and apoptosis is closely related to the TP53 status. Treatment of HCT116 cells with a defective TP53 mutation and normal HCT116 cells with SK1-I hydrochloride (0-10 $\mu$ M) for 24 hours revealed that the growth and survival rate of normal HCT116 cells decreased significantly. In protein blot analysis, after treating both cell types with SK1-I hydrochloride (0-20 $\mu$ M) for 12 hours, it was found that CASP3 cleavage was increased in normal HCT116 cells, making them more prone to apoptosis [1].
In vivo	In the C57BL/6 male mouse model, pretreatment with SK1-I hydrochloride (intraperitoneal injection, 75mg/kg, a single dose administered 24 hours before baseline mean arterial pressure measurement) showed a significant hypotensive effect, significantly reducing the baseline mean arterial pressure (MAP) [2].

### Preparing Stock Solutions

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	1mg	5mg	10mg
1 mM	3.1861 mL	15.9307 mL	31.8613 mL
5 mM	0.6372 mL	3.1861 mL	6.3723 mL
10 mM	0.3186 mL	1.5931 mL	3.1861 mL
50 mM	0.0637 mL	0.3186 mL	0.6372 mL

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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

Lima S, et al. TP53 is required for BECN1- and ATG5-dependent cell death induced by sphingosine kinase 1 inhibition. *Autophagy*. 2018;14(6):942-957.

Greig FH, et al. Requirement for sphingosine kinase 1 in mediating phase 1 of the hypotensive response to anandamide in the anaesthetised mouse. *Eur J Pharmacol*. 2019 Jan 5;842:1-9.

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Tel: 781-999-4286    E\_mail: info@targetmol.com    Address: 34 Washington Street, Wellesley Hills, MA 02481