Data Sheet (Cat.No.TQ0138)

TargetMol
A DRUG SCREENING EXPERT

K145 hydrochloride

Chemical Properties

CAS No.:	1449240-68-9
Formula:	C18H25ClN2O3S
Molecular Weight:	384.92
Appearance:	N/A
Storage:	0-4℃ for short term (days to weeks), or -20℃ for long term (months).

Biological Description

Description	K145 is a specific inhibitor of SphK2 (IC50: 4.30 μM), while no inhibition of SphK1 at concentrations up to 10 μM.
In vitro	K145 inhibited the activity of SphK2 in a dose-dependent manner with an IC50 of 4.30 uM. The Lineweaver-Burk analysis revealed a Ki of 6.4±0.7 uM for SphK2 and indicated that K145 is a substrate competitive inhibitor (with sphingosine). K145 accumulates in U937 cells, suppresses the S1P level, and inhibits SphK2. K145 also exhibited inhibitory effects on the growth of U937 cells as well as apoptotic effects in U937 cells, and that these effects may be through the inhibition of downstream ERK and Akt signaling pathways.

Solubility Information

Solubility	Water: 125 mg/mL (324.74 mM) DMSO: 48 mg/mL (124.7 mM) (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.598 mL	12.99 mL	25.979 mL
5 mM	0.52 mL	2.598 mL	5.196 mL
10 mM	0.26 mL	1.299 mL	2.598 mL
50 mM	0.052 mL	0.26 mL	0.52 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 ℃ for 6 months; - 20 ℃ for 1 month. Please use it as soon as possible.

Reference

1. Liu K, et al. Biological characterization of 3-(2-amino-ethyl)-5-[3-(4-butoxyl-phenyl)-propylidene]-thiazolidine-2,4-dione (K145) as a selective sphingosine kinase-2 inhibitor and anticancer agent. PLoS One. 2013;8(2):e56471.

Inhibitors · Natural Compounds · Compound Libraries

Tel:781-999-4286 E-mail:info@targetmol.com Address:36 Washington Street,Wellesley Hills,MA 02481