Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

K145

Catalog No: tcsc1917

Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Size: 100mg

Specifications

CAS No:
1309444-75-4

Formula:
$C_{18}H_{24}N_2O_3S$

Pathway:
Immunology/Inflammation

Target:
SPHK

Purity / Grade:
>98%

Solubility:
10 mM in DMSO

Alternative Names:
SphK2 inhibitor

Observed Molecular Weight:
348.46

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Product Description

K145 is a selective SphK2 inhibitor with an IC50 of 4.30±0.06 μM , while no inhibition of SphK1 at concentrations up to 10 μM.

IC50 value: 4.3 uM [1]

Target: SphK2

in vitro: K145 inhibited the activity of SphK2 in a dose-dependent manner with an IC50 of 4.30±0.06 uM , while no inhibition of SphK1 at concentrations up to 10 uM was observed. 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 down-stream ERK and Akt signaling pathways [1].

in vivo: K145 also significantly inhibited the growth of U937 tumors in nude mice by both intraperitoneal and oral administration, thus demonstrating its in vivo efficacy as a potential lead anticancer agent [2].