

K145 (hydrochloride)

Catalog No: tcsc1918



Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Size: 100mg



Specifications

CAS No:

1449240-68-9

Formula:

$C_{18}H_{25}ClN_2O_3S$

Pathway:

Immunology/Inflammation

Target:

SPHK

Purity / Grade:

>98%

Solubility:

H2O : 126.7 mg/mL (329.16 mM; Need ultrasonic and warming); DMSO : 50 mg/mL (129.90 mM; Need ultrasonic)

Alternative Names:

SphK2 inhibitor

Observed Molecular Weight:

384.92

Product Description

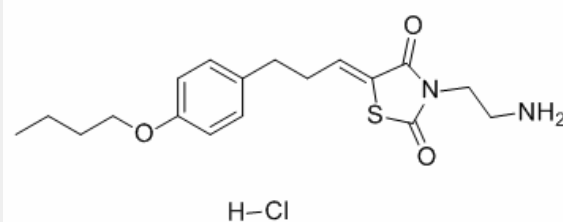
K145 is a selective SphK2 inhibitor with an IC₅₀ of 4.30±0.06 μM , while no inhibition of SphK1 at concentrations up to 10 μM.

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 K_i 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].



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