

Product Name: SK1-I

Catalog No.: 3711

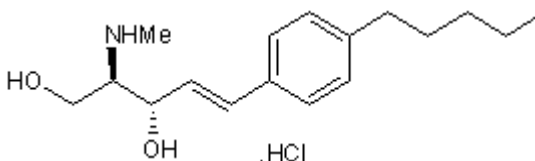
Batch No.: 3

CAS Number: 1072443-89-0

IUPAC Name: 1,2,4-Trideoxy-4-(methylamino)-1-(4-pentylphenyl)-D-*erythro*-pent-1-enitol hydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₇H₂₇NO₂.HCl
Batch Molecular Weight: 313.86
Physical Appearance: White solid
Solubility: water to 100 mM
DMSO to 100 mM
Storage: Store at -20°C
Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.15 (Dichloromethane:7N NH₃ in Methanol [9:1])
HPLC: Shows >99.7% purity
Chiral HPLC: Shows >99.1% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure
Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	65.05	8.99	4.46
Found	64.88	8.93	4.49

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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Description:

Sphingosine kinase (SphK) inhibitor. Isoenzyme-selective for SphK1; displays no activity at SphK2. Also displays no inhibitory activity against a range of protein kinases including PKC, PKA, ERK1, EGFR and CDK2. Exhibits potent antileukemic activity in vivo; inhibits the growth of both U937 and Jurkat T cells. Also suppresses proliferation and induces apoptosis in several human glioblastoma cell lines.

Physical and Chemical Properties:

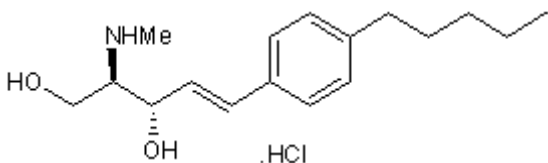
Batch Molecular Formula: C₁₇H₂₇NO₂.HCl

Batch Molecular Weight: 313.86

Physical Appearance: White solid

Minimum Purity: >98%

Batch Molecular Structure:



References:

Paugh et al (2008) A selective sphingosine kinase 1 inhibitor integrates multiple molecular therapeutic targets in human leukemia. *Neoplasia* **112** 1382.

Kapitonov et al (2009) Targeting sphingosine kinase 1 inhibits Akt signaling, induces apoptosis, and suppresses growth of human glioblastoma cells and xenografts. *Cancer Res.* **69** 6915. PMID: 19723667.

Paugh et al (2009) Interleukin-1 regulates the expression of sphingosine kinase 1 in glioblastoma cells. *J.Biol.Chem.* **284** 3408. PMID: 19074142.

Storage: Store at -20°C

Solubility & Usage Info:

water to 100 mM
DMSO to 100 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

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