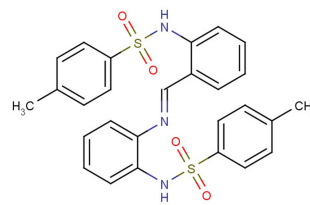


MP-A08

Chemical Properties

CAS No.:	219832-49-2
Formula:	C ₂₇ H ₂₅ N ₃ O ₄ S ₂
Molecular Weight:	519.64
Appearance:	N/A
Storage:	0-4°C for short term (days to weeks), or -20°C for long term (months).

**Biological Description**

Description	MP-A08 is a highly selective ATP competitive inhibitor of sphingosine kinase (SPHK1) that targets both SphK1 and SphK2 (K _i : 6.9 ± 0.8 µM and 27 ± 3 µM, respectively).
Targets(IC ₅₀)	Others: None
In vitro	MP-A08 inhibit SphK2, cause a decrease in EC barrier integrity in vitro in both cell type. MP-A08 blocks pro-proliferative signalling pathways causes mitochondrial-associated apoptosis in an SK-dependent manner. It also reduces the growth of human lung adenocarcinoma tumours in a mouse xenograft model by both inducing tumour cell apoptosis and inhibiting tumour angiogenesis [2]
In vivo	MP-A08 inhibits the growth of human lung tumour xenografts in mice.

Solubility Information

Solubility	DMSO: 50 mg/mL (96.22 mM) (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.924 mL	9.622 mL	19.244 mL
5 mM	0.385 mL	1.924 mL	3.849 mL
10 mM	0.192 mL	0.962 mL	1.924 mL
50 mM	0.038 mL	0.192 mL	0.385 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 °C for 6 months; - 20 °C for 1 month. Please use it as soon as possible.

Reference

1. Pitman MR et al. A selective ATP-competitive sphingosine kinase inhibitor demonstrates anti-cancer properties. *Oncotarget*, 2015 Mar 30, 6(9):7065-83.
2. Dimasi DP et al. Examining the Role of Sphingosine Kinase-2 in the Regulation of Endothelial Cell Barrier Integrity. *Microcirculation*, 2016 Apr, 23(3):248-65.

Inhibitors · Natural Compounds · Compound Libraries

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