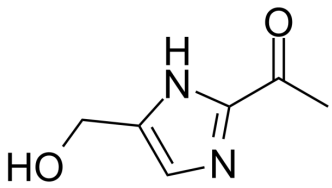
A6770

Cat. No.:	HY-139094
CAS No.:	1331754-16-5
Molecular Formula:	$C_6H_8N_2O_2$
Molecular Weight:	140.14
Target:	LPL Receptor
Pathway:	GPCR/G Protein
Storage:	Powder -20°C 3 years In solvent -80°C 6 months -20°C 1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 30 mg/mL (214.07 mM; Need ultrasonic and warming)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	7.1357 mL	35.6786 mL	71.3572 mL
	5 mM	1.4271 mL	7.1357 mL	14.2714 mL
	10 mM	0.7136 mL	3.5679 mL	7.1357 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Add each solvent one by one: PBS
   Solubility: 10 mg/mL (71.36 mM); Clear solution; Need ultrasonic and warming

BIOLOGICAL ACTIVITY

Description

A6770 is an orally active, potent sphingosine 1-phosphate (S1P) lyase (S1PL) inhibitor. A6770 is phosphorylated and the phosphorylated form directly inhibits S1P lyased.A6770, a potential key metabolite of THI, induces a [^{3}H]dhS1P increase[1][2] .

In Vitro

A6770 causes concentration-dependent increases in [^{3}H] dhS1P with the EC_{50} ranging from 30 to 200 μM under the normal condition[1].
A6770 leads to S1PL inhibition rather than SPHK activation or SPP inhibition[2].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo

A6770 (1, 10, 100mg/kg; po; single dose) induces reductions in peripheral lymphocyte number in rats[2]
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Mamoru Ohtoyo, et al. Scintillation Proximity Assay to Detect the Changes in Cellular Dihydrosphingosine 1-Phosphate Levels. Lipids. 2016 Oct;51(10):1207-1216.

[2]. Mamoru Ohtoyo, et al. Component of Caramel Food Coloring, THI, Causes Lymphopenia Indirectly via a Key Metabolic Intermediate. Cell Chem Biol. 2016 May 19;23(5):555-560.

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