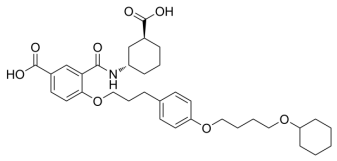
HAMI 3379

Cat. No.:	HY-112248A
CAS No.:	1245653-57-9
Molecular Formula:	$C_{34}H_{45}NO_8$
Molecular Weight:	595.72
Target:	Leukotriene 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 : 100 mg/mL (167.86 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	1.6786 mL	8.3932 mL	16.7864 mL
	5 mM	0.3357 mL	1.6786 mL	3.3573 mL
	10 mM	0.1679 mL	0.8393 mL	1.6786 mL

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

BIOLOGICAL ACTIVITY

Description

HAMI 3379 is a potent and selective $CysLT_2$ receptor antagonist. HAMI 3379 has a protective effect on acute and subacute ischemic brain injury, and attenuates microglia-related inflammation[1][2].

IC_{50} & Target

$CysLT_2$

In Vitro

In a $CysLT_2$ receptor reporter cell line, HAMI3379 antagonizes leukotriene D_4- (LTD_4-) and leukotriene C_4- (LTC_4-) induced intracellular calcium mobilization with IC_{50} values of 3.8 nM and 4.4 nM respectively. HAMI3379 exhibits very low potency on a recombinant $CysLT_1$ receptor cell line (IC_{50}>10000 nM). HAMI3379 does not exhibit any agonistic activity on both CysLT receptor cell lines[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo

HAMI 3379 (0.025-0.4 mg/kg; ip) with 0.1-0.4 mg/kg significantly reduces the infarct volume and percentage increase in the ischemic/contralateral hemispheric ratio[2].

HAMI3379 (0.1 mg/kg; ip) administered at 0 and 1 h after reperfusion reduces infarct volume, attenuated brain edema, reduced neurological score, and increased holdingangle[2].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Male Sprague-Dawley rats (250-300 g) after MCAO[2]
Dosage:	0.025, 0.05, 0.1, 0.2, 0.4 mg/kg
Administration:	IP
Result:	Significantly reduced the infarct volume and percentage increase inthe ischemic/contralateral hemispheric ratio (an index ofbrain edema) with 0.1-0.4 mg/kg. Significantly reduced the neurological deficit score.

REFERENCES

[1]. F Wunder, et al. Pharmacological characterization of the first potent and selective antagonist at the cysteinyl leukotriene 2 (CysLT(2)) receptor. Br J Pharmacol. 2010 May;160(2):399-409.

[2]. Q J Shi, et al. HAMI 3379, a CysLT2R antagonist, dose- and time-dependently attenuates brain injury and inhibits microglial inflammation after focal cerebral ischemia in rats. Neuroscience. 2015 Apr 16;291:53-69.

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