AM679

Cat. No.: HY-14460

CAS No.: 1206880-66-1

Molecular Formula: $C_{40}H_{44}N_4O_5S$

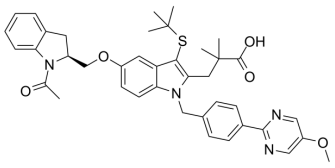
Molecular Weight: 692.87

Target: FLAP

Pathway: Immunology/Inflammation

Storage:

Powder	-20°C	3 years
	4°C	2 years
In solvent	-80°C	2 years
	-20°C	1 year



SOLVENT & SOLUBILITY

In Vitro

DMSO : ≥ 100 mg/mL (144.33 mM)

* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	1.4433 mL	7.2164 mL	14.4327 mL
	5 mM	0.2887 mL	1.4433 mL	2.8865 mL
	10 mM	0.1443 mL	0.7216 mL	1.4433 mL

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

In Vivo

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: 2.75 mg/mL (3.97 mM); Suspended solution; Need ultrasonic
2. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.75 mg/mL (3.97 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

AM679 is a potent, selective 5-lipoxygenase-activating protein (FLAP) inhibitor with an IC_{50} of 2 nM in a human FLAP membrane binding assay. AM679 markedly reduces the respiratory syncytial virus-driven ocular pathology as well as the synthesis of cysteinyl leukotrienes (CysLTs) in the eye[1].

In Vitro

AM679 is a potent, selective inhibitor of FLAP, as demonstrated in an in vitro human FLAP membrane binding assay with IC_{50} of 2 nM and when assayed as an inhibitor of ex vivo ionophore-challenged mouse and human blood LTB4 synthesis with IC_{50} s of 55 nM and 154 nM, respectively[1].

AM679 is a potent and selective FLAP inhibitor with IC_{50}s of 2.2 nM/0.6 nM/154 nM for FLAP binding/hLA/hWB respectively[2].

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

In Vivo	AM679 shows potent inhibition of leukotrienes in human blood and in a rodent bronchoalvelolar lavage challenge model[2]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Stock, N, et al. 5-Lipoxygenase-activating protein inhibitors. Part 2: 3-{5-((S)-1-Acetyl-2,3-dihydro-1H-indol-2-ylmethoxy)-3-tert-butylsulfanyl-1-[4-(5-methoxy-pyrimidin-2-yl)-benzyl]-1H-indol-2-yl}-2,2-dimethyl-propionic acid (AM679)-A potent FLAP inhib

[2]. Musiyenko, A, et al. A novel 5-lipoxygenase-activating protein inhibitor, AM679, reduces inflammation in the respiratory syncytial virus-infected mouse eye. Clinical and Vaccine Immunology (2009), 16(11), 1654-1659.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA