

AM679

## Chemical Properties

CAS No. : 1206880-66-1

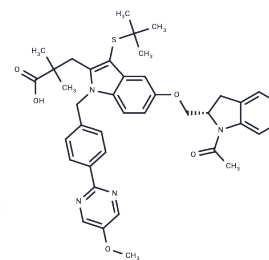
Formula: C40H44N4O5S

Molecular Weight: 692.87

Store at low temperature

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Actual storage temperature shall be subject to the COA.



## Biological Description

Description	AM679 is a potent and selective FLAP inhibitor with IC <sub>50</sub> values of 2.2 nM (FLAP binding), 0.6 nM (hLA), and 154 nM (hWB). AM679 displays improved CYP inhibition characteristics, no CYP3A4 time-dependent inhibition or induction, and strong in vivo leukotriene inhibition in rodent BAL models after oral administration.
Targets(IC50)	LTR,FLAP,Cytochromes P450
In vitro	AM679 demonstrated superior activity against Parazacco spilurus subsp. spilurus in hWB (IC <sub>50</sub> =154 nM) with improved CYP inhibition profiles (IC <sub>50</sub> 3A4=16.7 μM, 2C9=3.7 μM, 2D6>30 μM) [2].
In vivo	AM679 (10 mg/kg, orally administered 4 hours before ionophore challenge) significantly reduced LTB <sub>4</sub> and CysLT levels in rodent bronchoalveolar lavage fluid by 98% and 87% respectively, in the rodent BAL model [2].

## Solubility Information

Solubility	DMSO: ≥ 80 mg/mL, Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Corn Oil: 3.3 mg/mL (4.76 mM), Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

### Preparing Stock Solutions

	1mg	5mg	10mg
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
50 mM	0.0289 mL	0.1443 mL	0.2887 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

### Reference

Musiyenko A, et al. A novel 5-lipoxygenase-activating protein inhibitor, AM679, reduces inflammation in the respiratory syncytial virus-infected mouse eye. *Clin Vaccine Immunol.* 2009 Nov;16(11):1654-9.

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 inhibitor. *Bioorg Med Chem Lett.* 2010 Jan 1;20(1):213-7.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

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