Atuliflapon

Cat. No.: HY-122908

CAS No.: 2041075-86-7

Molecular Formula: $C_{24}H_{26}N_6O_3$

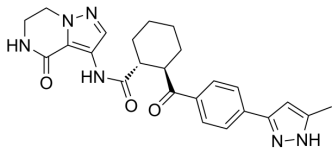
Molecular Weight: 446.50

Target: FLAP

Pathway: Immunology/Inflammation

Storage:

Powder	-20°C	3 years
	4°C	2 years
In solvent	-80°C	6 months
	-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 125 mg/mL (279.96 mM; Need ultrasonic)

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	2.2396 mL	11.1982 mL	22.3964 mL
5 mM	0.4479 mL	2.2396 mL	4.4793 mL
10 mM	0.2240 mL	1.1198 mL	2.2396 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: ≥ 2.08 mg/mL (4.66 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.08 mg/mL (4.66 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.08 mg/mL (4.66 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Atuliflapon (AZD5718) is an orally active inhibitor of FLAP (5?Lipoxygenase activating protein), with an IC_{50} of 2 nM. Atuliflapon is used in the study for coronary artery disease[1].

IC_{50} & Target

IC50: 2 nM (FLAP)[1].

In Vitro

Atuliflapon demonstrates a dose dependent and greater than 90% suppression of leukotriene production over 24 h[1]. Atuliflapon exhibits an IC_{50} of 39 nM for LTB_4[1].

	MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	Atuliflapon exhibits t1/2 of 0.45 h and 2.1 h in rat and dog by iv injection, respectively[1]. Atuliflapon shows no inhibition of 5-LO pathway activity in rodent blood[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Daniel Pettersen, et al. Discovery and Early Clinical Development of an Inhibitor of 5-Lipoxygenase Activating Protein (AZD5718) for Treatment of Coronary Artery Disease. J Med Chem. 2019 May 9;62(9):4312-4324.

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