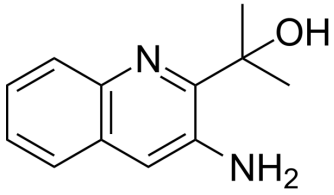
Aloproxalap

Cat. No.:	HY-147240
CAS No.:	1824609-67-7
Molecular Formula:	$C_{12}H_{14}N_2O$
Molecular Weight:	202.25
Target:	Others
Pathway:	Others

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 : 100 mg/mL (494.44 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	4.9444 mL	24.7219 mL	49.4438 mL
	5 mM	0.9889 mL	4.9444 mL	9.8888 mL
	10 mM	0.4944 mL	2.4722 mL	4.9444 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: ≥ 2.5 mg/mL (12.36 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (12.36 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Aloproxalap is a quinoline-based aldehyde scavenger that can be used in studies of diseases with toxic aldehyde accumulation, such as inflammatory diseases of the eye and skin, respiratory diseases such as pneumonia, organ diseases, and viral infection-related syndromes[1][2].

In Vivo

Aloproxalap (compound I-6) (100 or 200 mg/kg, i.p. or p.o., everyday, 6 days) can effectively improve inflammation of the colon in acute ulcerative colitis (UC) female Swiss Webster mice[1].

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

Animal Model:	Acute ulcerative colitis (UC) in female Swiss Webster mice[1]

Dosage:	100 mg/kg, 200 mg/kg
Administration:	Intraperitoneal injection for 100 mg/kg, oral gavage for 200 mg/kg; everyday; 6 days
Result:	Inhibited weight loss in intraperitoneal injection mice significantly while there was no significant difference in the oral gavage group compared to the control group. Both significantly reduced colonic histopathological parameters.

Animal Model:	Male non-naïve beagle dogs[2]
Dosage:	3 mg/kg
Administration:	Intravenous injection; once
Result:	The pharmacokinetic parameters of Acloproxalap (compound I-1)

Parameter	Acloproxalap (compound I-1)
$t_{1/2}$	1.82 h
T_{max}	0.518 h
Clearance	12.2 mL/kg/min
steady-state volume	1385 mL/kg
AUC_{0-t}	4103 ng/mL*h
AUC_{0-inf_obs}	4137 ng/mL*h

Animal Model:	Male non-naïve beagle dogs[2]
Dosage:	10 mg/kg
Administration:	Oral gavage; once
Result:	The pharmacokinetic parameters of Acloproxalap (compound I-1)

Parameter	Acloproxalap (compound I-1)
$t_{1/2}$	3.02 h
T_{max}	0.518 h
C_{max}	3558 ng/mL
AUC_{0-t}	9361 ng/mL*h

AUC_{0-inf_obs}	9546 ng/mL*h
BioA	75%

REFERENCES

[1]. Susan Macdonald, et al. Treatment of inflammatory disorders. US20190105322

[2]. Todd Brady, et al. Pharmaceutical formulations and uses thereof. WO2021231792

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