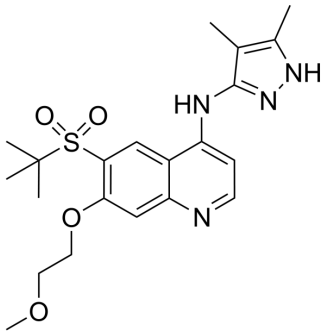
RIP2 kinase inhibitor 2

Cat. No.:	HY-19761
CAS No.:	1581270-11-2
Molecular Formula:	$C_{21}H_{28}N_4O_4S$
Molecular Weight:	432.54
Target:	RIP kinase
Pathway:	Apoptosis
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 : 5 mg/mL (11.56 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.3119 mL	11.5596 mL	23.1192 mL
	5 mM	0.4624 mL	2.3119 mL	4.6238 mL
	10 mM	0.2312 mL	1.1560 mL	2.3119 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: ≥ 0.5 mg/mL (1.16 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 0.5 mg/mL (1.16 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 0.5 mg/mL (1.16 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

RIP2 kinase inhibitor 2 is a receptor interacting protein-2 (RIP2) kinase inhibitor extracted from patent WO/2014043437 A1, compound example 9.

IC_{50} & Target

RIP2 Kinase[1]

In Vitro

RIP2 kinase inhibitor 2 is a novel prodrug of a quinazolyl amine that inhibits RIP2 kinase. Receptor interacting protein-2 (RIP2) kinase is a TKL family serine/threonine protein kinase involved in innate immune signaling. Following activation, RIP2

kinase associates with NODI or NOD2 and appears to function principally as a molecular scaffold to bring together other kinases (TAK1, IKKα/β/γ) involved in NF-κB and mitogen-activated protein kinase activation[1].

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

PROTOCOL

Animal Administration [1]

Rats[1]

Rats are orally pre-dosed with the RIP2 kinase inhibitor 2, at doses of 0.016, 0.16 and 1.6 mg/kg (n=8 rats/group), followed by dosing with L18-MDP (50 μg/rat) 0.25 hours after pre-dosing with the compound. The IL8 cytokine levels and percentage levels are calculated as the mean±standard error of the mean (n=8 rats/group).

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

CUSTOMER VALIDATION

- Atherosclerosis. 2023 Dec 27, 117436.
- Eur J Pharmacol. 2023 Mar 24;947:175679.

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REFERENCES

[1]. Linda N. Casillas, et al. Amino-quinolines as kinase inhibitors. PCT Int. Appl. (2014), WO 2014043437 A1 20140320.

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