# RIP2 kinase inhibitor 2

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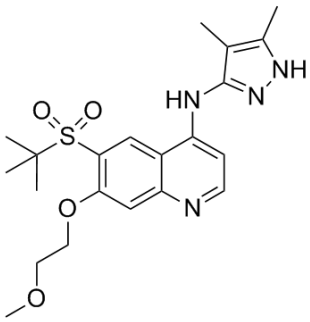
|---|---|
| **Cat. No.:** | HY-19761 |
| **CAS No.:** | 1581270-11-2 |
| **Molecular Formula:** | $C_{21}H_{28}N_4O_4S$ |
| **Molecular Weight:** | 432.54 |
| **Target:** | RIP kinase |
| **Pathway:** | Apoptosis |
| **Storage:** | Powder -20°C 3 years<br>4°C 2 years<br>In solvent -80°C 6 months<br>-20°C 1 month |



## 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.

## REFERENCES

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



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