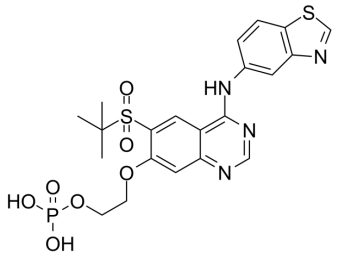
GSK2983559 free acid

Cat. No.:	HY-112038
CAS No.:	1579965-12-0
Molecular Formula:	$C_{21}H_{23}N_4O_7PS_2$
Molecular Weight:	538.53
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 (9.28 mM; ultrasonic and warming and heat to 80°C)

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	1.8569 mL	9.2845 mL	18.5691 mL
5 mM	0.3714 mL	1.8569 mL	3.7138 mL
10 mM	---	---	---

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

GSK2983559 free acid (compound 3) is an orally active and potent receptor interacting protein 2 (RIP2) kinase inhibitor. GSK2983559 free acid can block many proinflammatory cytokine responses in vivo and in human inflammatory bowel disease explant samples[1].

IC_{50} & Target

RIPK2

In Vitro

GSK2983559 (1-1024 nM; 2 h) blocks MDP-induced IL-8 in THP-1 cells[2].

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

Cell Viability Assay[2]

Cell Line:	THP-1 cells
Concentration:	1-1024 nM
Incubation Time:	2 hours

Result:	Inhibited IL-8 production with an IC_{50} of 1.34 nM.

In Vivo

GSK2983559 (oral gavage; 3 and 10 mg/kg; once) inhibits effectively MDP-induced IL-6 in mouse[2].

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

Animal Model:	C57BL/6 mice (female) injected with MDP (100 μg)[2]
Dosage:	3 and 10 mg/kg
Administration:	Oral gavage; 3 and 10 mg/kg; once
Result:	Suppressed serum IL-6 levels in a dose-dependent manner.

REFERENCES

[1]. Shuwei Wu, et al. Design, synthesis, and structure-activity relationship of novel RIPK2 inhibitors. Bioorg Med Chem Lett. 2022 Sep 2;75:128968.

[2]. Haile PA, et al. Discovery of a First-in-Class Receptor Interacting Protein 2 (RIP2) Kinase Specific Clinical Candidate, 2-((4-(Benzo[d]thiazol-5-ylamino)-6-(tert-butylsulfonyl)quinazolin-7-yl)oxy)ethyl Dihydrogen Phosphate, for the Treatment of Inflammat

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA