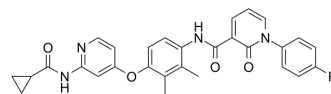


RIPK3-IN-1

Cat. No.:	HY-131064		
CAS No.:	2361139-70-8		
Molecular Formula:	C ₂₉ H ₂₅ FN ₄ O ₄		
Molecular Weight:	512.53		
Target:	RIP kinase		
Pathway:	Apoptosis		
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 : 5 mg/mL (9.76 mM; ultrasonic and warming and heat to 80°C)

Solvent	Mass	Concentration		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	1.9511 mL	9.7555 mL	19.5111 mL
	5 mM	0.3902 mL	1.9511 mL	3.9022 mL
	10 mM	---	---	---

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

BIOLOGICAL ACTIVITY

Description

RIPK3-IN-1 is a RIPK3 type II DFG-out inhibitor with an IC₅₀ of 9.1 nM. RIPK3-IN-1 inhibits RIPK1 and RIPK2 with IC₅₀s of 5.5 and >10 μM. RIPK3-IN-1 is also a c-Met kinase inhibitor with an IC₅₀ of 1.1 μM^[1].

IC₅₀ & Target

IC₅₀: 9.1 nM (RIPK3), 5.5 μM (RIPK1), >10 μM (RIPK2)^[1]

In Vitro

RIPK3-IN-1 (Compound 18) also inhibits ABL, BRAF/V599E, MAP4K3, and SRC with IC₅₀s of 0.37, 0.15, 0.012, and 0.075 μM, respectively^[1].

Necroptosis is a programmed form of cell death and has been associated with a variety of diseases, including ischemia reperfusion injury, neurodegenerative disorders, pancreatic cancer, and autoimmune diseases such as inflammatory bowel disease (IBD). Upon stimulation of death receptors (such as the family of TNF receptors), signaling can initiate a necroptotic cell death process. This involves formation of a necrosome, which includes receptor interacting protein kinases 1 and 3 (RIPK1, RIPK3) in a cytosolic complex^[1].

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

CUSTOMER VALIDATION

- Cell Death Discov. 2022 Feb 26;8(1):88.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Amy C Hart, et al. Identification of RIPK3 Type II Inhibitors Using High-Throughput Mechanistic Studies in Hit Triage. ACS Med Chem Lett. 2019 May 6;11(3):266-271.

Caution: Product has not been fully validated for medical applications. For research use only.

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