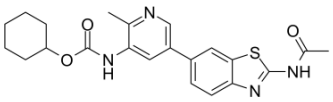
PK68

Cat. No.:	HY-128348		
CAS No.:	2173556-69-7		
Molecular Formula:	$C_{22}H_{24}N_4O_3S$		
Molecular Weight:	424.52		
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 : 30 mg/mL (70.67 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.3556 mL	11.7780 mL	23.5560 mL
	5 mM	0.4711 mL	2.3556 mL	4.7112 mL
	10 mM	0.2356 mL	1.1778 mL	2.3556 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: ≥ 3 mg/mL (7.07 mM); Clear solution
2. Add each solvent one by one: **10% DMSO >> 90% (20% SBE-β-CD in saline)**
   Solubility: ≥ 3 mg/mL (7.07 mM); Clear solution
3. Add each solvent one by one: **10% DMSO >> 90% corn oil**
   Solubility: ≥ 3 mg/mL (7.07 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

PK68 is a potent and selective type II inhibitor of **receptor-interacting kinase 1 (RIPK1)** with an **IC_{50}** of ~90 nM, displays inhibition of RIPK1-dependent necroptosis. PK68 powerfully ameliorates TNF-induced systemic inflammatory response syndrome, and with great potential for use in the treatment of inflammatory disorders and cancer metastasis[1].

IC_{50} & Target

IC50: ~ 90 nM (RIPK1)[1]

REFERENCES

[1]. Hou J, et al. Discovery of potent necroptosis inhibitors targeting RIPK1 kinase activity for the treatment of inflammatory disorder and cancer metastasis. Cell Death Dis. 2019 Jun 24;10(7):493.

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