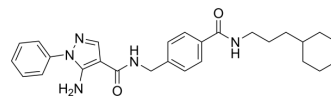


SR-318

Cat. No.:	HY-135674
CAS No.:	2413286-32-3
Molecular Formula:	C ₂₇ H ₃₃ N ₅ O ₂
Molecular Weight:	459.58
Target:	p38 MAPK; TNF Receptor
Pathway:	MAPK/ERK Pathway; Apoptosis
Storage:	4°C, protect from light * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



SOLVENT & SOLUBILITY

In Vitro	DMSO : 125 mg/mL (271.99 mM; Need ultrasonic)				
		Solvent Concentration	Mass		
	Preparing Stock Solutions		1 mg	5 mg	10 mg
		1 mM	2.1759 mL	10.8795 mL	21.7590 mL
		5 mM	0.4352 mL	2.1759 mL	4.3518 mL
	10 mM	0.2176 mL	1.0879 mL	2.1759 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: ≥ 2.08 mg/mL (4.53 mM); Clear solution				
	2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.08 mg/mL (4.53 mM); Clear solution				
	3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.08 mg/mL (4.53 mM); Clear solution				

BIOLOGICAL ACTIVITY

Description	SR-318 is a potent and highly selective p38 MAPK inhibitor with IC ₅₀ s of 5 nM, 32 nM and 6.11 μM for p38α, p38β and p38α/β, respectively. SR-318 potently inhibits the TNF-α release in whole blood with an IC ₅₀ of 283 nM. SR-318 has anti-cancer and anti-inflammatory activity ^[1] .	
IC ₅₀ & Target	p38α 5 nM (IC ₅₀)	p38β 32 nM (IC ₅₀)
In Vitro	SR-318 presents a potent and selective type-II inhibitor of p38α/β that can be used as a chemical probe for targeting this particular inactive state of these two p38 isoforms ^[1] .	

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

REFERENCES

[1]. Röhm S, et al. Fast Iterative Synthetic Approach toward Identification of Novel Highly Selective p38 MAP Kinase Inhibitors. J Med Chem. 2019 Dec 12;62(23):10757-10782.

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

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