Product Data Sheet

PF-05381941

Cat. No.: HY-120823 CAS No.: 1474022-02-0 Molecular Formula: $C_{27}H_{26}N_6O_2$ Molecular Weight: 466.53

Target: MAP3K; p38 MAPK

Pathway: MAPK/ERK Pathway

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: 100 mg/mL (214.35 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.1435 mL	10.7174 mL	21.4348 mL
	5 mM	0.4287 mL	2.1435 mL	4.2870 mL
	10 mM	0.2143 mL	1.0717 mL	2.1435 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: \geq 2.5 mg/mL (5.36 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (5.36 mM); Clear solution
- 3. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 1.39 mg/mL (2.98 mM); Clear solution

BIOLOGICAL ACTIVITY

Description	PF-05381941 is a potent dual inhibitor of TAK1/p38 α , with IC $_{50}$ s of 156 and 186 nM, respectively ^[1] .		
IC ₅₀ & Target	p38α 186 nM (IC ₅₀)	TAK1 156 nM (IC ₅₀)	
In Vitro	PF-05381941 inhibits LPS-stimulated release of TNF- α from human peripheralmononuclear (PMN) cells with an IC ₅₀ of 8 nM ^[1] .		

REFERENCES
1]. Kilty I, et al. TAK1 inhibition in the DFG-out conformation. Chem Biol Drug Des. 2013;82(5):500-505.

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

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$

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