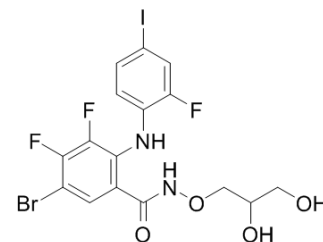


## PD318088

<b>Cat. No.:</b>	HY-12062		
<b>CAS No.:</b>	391210-00-7		
<b>Molecular Formula:</b>	C <sub>16</sub> H <sub>13</sub> BrF <sub>3</sub> IN <sub>2</sub> O <sub>4</sub>		
<b>Molecular Weight:</b>	561.09		
<b>Target:</b>	MEK		
<b>Pathway:</b>	MAPK/ERK Pathway		
<b>Storage:</b>	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 (178.22 mM)  
 \* "≥" means soluble, but saturation unknown.

Concentration	Mass		
	1 mg	5 mg	10 mg
<b>1 mM</b>	1.7822 mL	8.9112 mL	17.8225 mL
<b>5 mM</b>	0.3564 mL	1.7822 mL	3.5645 mL
<b>10 mM</b>	0.1782 mL	0.8911 mL	1.7822 mL

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

#### In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline  
 Solubility: ≥ 2.75 mg/mL (4.90 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)  
 Solubility: ≥ 2.75 mg/mL (4.90 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil  
 Solubility: ≥ 2.75 mg/mL (4.90 mM); Clear solution

### BIOLOGICAL ACTIVITY

#### Description

PD318088 is a potent, allosteric and non-ATP competitive MEK1/2 inhibitor, an analog of PD184352 (HY-50295). PD318088 binds simultaneously with ATP in a region of the MEK1 active site that is adjacent to the ATP-binding site. PD318088 can be used for cancer research<sup>[1]</sup>.

#### IC<sub>50</sub> & Target

MEK

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## CUSTOMER VALIDATION

- ACS Comb Sci. 2019 Dec 9;21(12):805-816.

See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

## REFERENCES

- [1]. Ohren JF, et al. Structures of human MAP kinase kinase 1 (MEK1) and MEK2 describe novel noncompetitive kinase inhibition. Nat Struct Mol Biol. 2004 Dec;11(12):1192-7.
- [2]. Han S, et al. Identification of coumarin derivatives as a novel class of allosteric MEK1 inhibitors. Bioorg Med Chem Lett. 2005 Dec 15;15(24):5467-73.
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**Caution: Product has not been fully validated for medical applications. For research use only.**

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