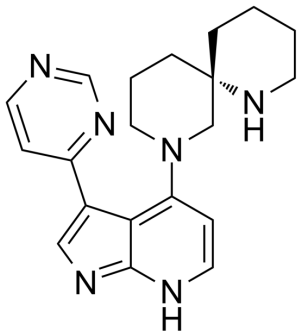
BDP9066

Cat. No.:	HY-111424
CAS No.:	2226507-04-4
Molecular Formula:	$C_{20}H_{24}N_6$
Molecular Weight:	348.44
Target:	Ras
Pathway:	GPCR/G Protein
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 : 10 mg/mL (28.70 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.8699 mL	14.3497 mL	28.6993 mL
	5 mM	0.5740 mL	2.8699 mL	5.7399 mL
	10 mM	0.2870 mL	1.4350 mL	2.8699 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: ≥ 1 mg/mL (2.87 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 1 mg/mL (2.87 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

BDP9066 is a potent and selective myotonic dystrophy-related Cdc42-binding kinase MRCK inhibitor with an IC_{50} of 64 nM for MRCKβ in SCC12 cells, K_i values of 0.0136 nM and 0.0233 nM for MRCKα/β in house determinations, respectively. BDP9066 has therapeutic effect on skin cancer by reducing substrate phosphorylation.

IC_{50} & Target

IC50: 64 nM (MRCKβ in SCC12 cells), Ki: 0.0136 nM/0.0233 nM (MRCKα/β)[1].

In Vitro

BDP9066 shows antiproliferative effects with greatest activity in hematologic cancer cells. BDP9066 inhibits MLC phosphorylation and blocks SCC12 squamous cell carcinoma motility and invasion[1].

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

In Vivo	BDP9066 topical application significantly decreases phosphorylated MRCKα S1003 staining and tumor volumes[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Unbekandt M, et al. Discovery of Potent and Selective MRCK Inhibitors with Therapeutic Effect on Skin Cancer. Cancer Res. 2018 Apr 15;78(8):2096-2114.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA