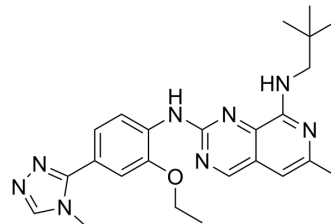


BOS-172722

Cat. No.:	HY-112162		
CAS No.:	1578245-44-9		
Molecular Formula:	C ₂₄ H ₃₀ N ₈ O		
Molecular Weight:	446.55		
Target:	Mps1		
Pathway:	Cell Cycle/DNA Damage; Cytoskeleton		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	2 years
		-20°C	1 year



SOLVENT & SOLUBILITY

In Vitro

1M HCl : 65 mg/mL (145.56 mM; ultrasonic and adjust pH to 2 with HCl)
 DMSO : < 1 mg/mL (insoluble or slightly soluble)

Concentration	Solvent	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	2.2394 mL	11.1970 mL	22.3939 mL
	5 mM	0.4479 mL	2.2394 mL	4.4788 mL
	10 mM	0.2239 mL	1.1197 mL	2.2394 mL

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

BIOLOGICAL ACTIVITY

Description

BOS-172722 is an inhibitor of monopolar spindle 1 (MPS1) checkpoint with an IC₅₀ of 11 nM and 63 nM for MPS1 (1 mM ATP) and P-MPS1, respectively. BOS-172722 also has potential for the study of various forms of breast cancer^[1].

IC₅₀ & Target

2 nM (MPS1)^[1].

In Vitro

BOS-172722 is an inhibitor of monopolar spindle 1 (MPS1) checkpoint with an IC₅₀ of 2 nM. BOS-172722 also has potential for the treatment of various forms of breast cancer^[1].
 MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo

BOS-172722 shows excellent PK in mouse, rat, and dog^[1].
 BOS-172722 (50 mg/kg) results in an increased suppression of MPS1 autophosphorylation at 6 and 24 h^[1].
 MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Dog ^[2] .
Dosage:	1 mg/kg (iv), 5 mg/kg (po) (Pharmacokinetic Analysis).
Administration:	IV and PO.
Result:	T _{1/2} = 12 h, C _{max_{po}} = 7770 nmol/L, AUC _{po} = 147035 h*nmol/L.

REFERENCES

[1]. ARYL SULFONOHYDRAZIDES. WO 2014037750 A1.

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

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