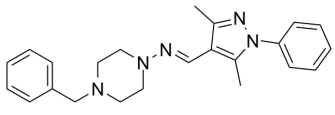
SANT-1

Cat. No.:	HY-100224
CAS No.:	304909-07-7
Molecular Formula:	$C_{23}H_{27}N_5$
Molecular Weight:	373.49
Target:	Smo; Hedgehog
Pathway:	Stem Cell/Wnt
Storage:	Powder -20°C 3 years 4°C 2 years In solvent -80°C 2 years -20°C 1 year



SOLVENT & SOLUBILITY

In Vitro

DMSO : 25 mg/mL (66.94 mM; ultrasonic and warming and heat to 60°C)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.6774 mL	13.3872 mL	26.7745 mL
	5 mM	0.5355 mL	2.6774 mL	5.3549 mL
	10 mM	0.2677 mL	1.3387 mL	2.6774 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: ≥ 2.5 mg/mL (6.69 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.08 mg/mL (5.57 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.08 mg/mL (5.57 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

SANT-1, a potent Smo antagonist, inhibits Hedgehog signaling. SANT-1 shows IC_{50}s of 20 nM and 30 nM in Shh-LIGHT2 and SmoA1-LIGHT2 assay, respectively[1].

IC_{50} & Target

IC50: 20 nM (Shh signaling), 30 nM (SmoA1)[1]

In Vitro

SANT-1 is a potent Smo antagonist, binds directly to Smo, and inhibits Hedgehog signaling, with IC_{50}s of 20 nM and 30 nM in Shh-LIGHT2 and SmoA1-LIGHT2 cells, respectively[1].

SANT-1 (1 μM, for 24 or 48 hours) decreases the proliferation of medulloblastoma cells[2].

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

Cell Viability Assay[2]

Cell Line:	Medulloblastoma cells
Concentration:	1 μM
Incubation Time:	24 hours or 48 hours
Result:	Inhibited cellular proliferation in primary tumorspheres.

CUSTOMER VALIDATION

- Biomed Pharmacother. 2023 Mar 15;161:114523.
- Front Cell Dev Biol. 13 May 2021.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Chen JK, et al. Small molecule modulation of Smoothened activity. Proc Natl Acad Sci U S A. 2002 Oct 29;99(22):14071-6.

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