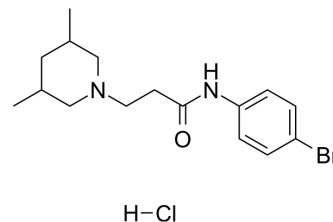


SMANT hydrochloride

Cat. No.:	HY-108508
CAS No.:	1177600-74-6
Molecular Formula:	C ₁₆ H ₂₄ BrClN ₂ O
Molecular Weight:	375.73
Target:	Smo; Hedgehog
Pathway:	Stem Cell/Wnt
Storage:	4°C, sealed storage, away from moisture and light * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light)



SOLVENT & SOLUBILITY

In Vitro	DMSO : 83.33 mg/mL (221.78 mM; ultrasonic and warming and heat to 60°C)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	Preparing Stock Solutions	1 mM	2.6615 mL	13.3074 mL	26.6149 mL
		5 mM	0.5323 mL	2.6615 mL	5.3230 mL
		10 mM	0.2661 mL	1.3307 mL	2.6615 mL
Please refer to the solubility information to select the appropriate solvent.					
In Vivo	<ol style="list-style-type: none"> Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.08 mg/mL (5.54 mM); Clear solution Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.08 mg/mL (5.54 mM); Clear solution Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.08 mg/mL (5.54 mM); Clear solution 				

BIOLOGICAL ACTIVITY

Description	SMANT hydrochloride is a Smoothened (Smo) signaling inhibitor. SMANT hydrochloride is antagonist of Smo accumulation within the primary cilium (PC). SMANT hydrochloride has an equivalent activity in inhibiting SmoM2 (oncogenic form of Smo) and wild-type Smo ^[1] .
IC₅₀ & Target	Smo, SmoM2 ^[1]
In Vitro	SMANT (0-10 μM, NIH/3T3 cells) hydrochloride inhibits Hh induced Smo accumulation at the primary cilium (IC ₅₀ : 1.1 μM) ^[1] . SMANT (0-10 μM, NIH/3T3 cells) hydrochloride inhibits Smo and SmoM2 activity, and blocks the stimulatory action of SAG in

Gli-luciferase assay^[1].

SMANT (0-10 μ M) hydrochloride inhibits proliferation of cerebellar granule-cell neural progenitors (CGNP) (isolated from Ptch1^{+/-} neonates) induced by Shh^[1].

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

REFERENCES

[1]. Wang Y, et al. Selective identification of hedgehog pathway antagonists by direct analysis of smoothed ciliary translocation. ACS Chem Biol. 2012 Jun 15;7(6):1040-8.

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