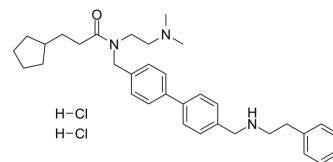


SB-699551

Cat. No.:	HY-103100
CAS No.:	864741-95-7
Molecular Formula:	C ₃₄ H ₄₇ Cl ₂ N ₃ O
Molecular Weight:	584.66
Target:	5-HT Receptor
Pathway:	GPCR/G Protein; Neuronal Signaling
Storage:	4°C, sealed storage, away from moisture * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



SOLVENT & SOLUBILITY

In Vitro	DMSO : 100 mg/mL (171.04 mM; Need ultrasonic)					
	H ₂ O : 1 mg/mL (1.71 mM; ultrasonic and warming and heat to 60°C)					
	Preparing Stock Solutions	Solvent Concentration	Mass	1 mg	5 mg	10 mg
			1 mM	1.7104 mL	8.5520 mL	17.1040 mL
			5 mM	0.3421 mL	1.7104 mL	3.4208 mL
10 mM			0.1710 mL	0.8552 mL	1.7104 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 (4.28 mM); Clear solution; Need ultrasonic					
	2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: 2.5 mg/mL (4.28 mM); Clear solution; Need ultrasonic					
	3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: 2.5 mg/mL (4.28 mM); Clear solution; Need ultrasonic					

BIOLOGICAL ACTIVITY

Description	SB-699551 is a potent and selective 5-HT _{5A} antagonist with a pK _i of 8.3 ^[1] . SB-699551 inhibits tumorsphere formation. SB-699551 reduces phosphorylation of AKT at serine residue 473 (S473), WNK1, PRAS40. SB-699551 shows anticancer activity and has the potential for the research of breast tumor ^{[2][3]} .
IC ₅₀ & Target	5-HT _{5A} Receptor 8.3 (pKi)

REFERENCES

- [1]. David R Thomas, et al. SB-699551-A (3-cyclopentyl-N-[2-(dimethylamino)ethyl]-N-[(4'-[[[(2-phenylethyl)amino]methyl]-4-biphenyl]methyl]propanamide dihydrochloride), a novel 5-HT_{5A} receptor-selective antagonist, enhances 5-HT neuronal function: Evidence for an autoreceptor role for the 5-HT_{5A} receptor in guinea pig brain. *Neuropharmacology*. 2006 Sep;51(3):566-77.
- [2]. Curtin PC, et al. The 5-HT_{5A} receptor regulates excitability in the auditory startle circuit: functional implications for sensorimotor gating. *J Neurosci*. 2013 Jun 12;33(24):10011-20.
- [3]. Gwynne WD, et al. Antagonists of the serotonin receptor 5A target human breast tumor initiating cells. *BMC Cancer*. 2020 Aug 5;20(1):724.
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Caution: Product has not been fully validated for medical applications. For research use only.

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