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产品名称: **TBPB**
产品别名: **TBPB**

生物活性:				
Description	TBPB is an allosteric M1 mAChR agonist($EC_{50}=289$ nM) that regulates amyloid processing and produces antipsychotic-like activity in rats. IC_{50} value: 289 nM(EC_{50}) [2] Target: M1 mAChR agonist in vitro: TBPB activates M(1) through an allosteric site rather than the orthosteric acetylcholine binding site, which is likely critical for its unprecedented selectivity. Whole-cell patch-clamp recordings demonstrated that activation of M(1) by TBPB potentiates NMDA receptor currents in hippocampal pyramidal cells but does not alter excitatory or inhibitory synaptic transmission, responses thought to be mediated by M(2) and M(4) [1]. in vivo: TBPB was efficacious in models predictive of antipsychotic-like activity in rats at doses that did not produce catalepsy or peripheral adverse effects of other mAChR agonists [1].			
Solvent&Solubility	In Vitro: DMSO : 22.5 mg/mL (55.62 mM; Need ultrasonic and warming)			
		Solvent Mass Concentration	1 mg	5 mg
	Preparing	1 mM	2.4719 mL	12.3594 mL
	Stock Solutions	5 mM	0.4944 mL	2.4719 mL
		10 mM	0.2472 mL	1.2359 mL
*请根据产品在不同溶剂中的溶解度选择合适的溶剂配制储备液; 一旦配成溶液, 请分装保存, 避免反复冻融造成的产品失效。 储备液的保存方式和期限: -80℃, 6 months; -20℃, 1 month。 -80℃ 储存时, 请在 6 个月内使用, -20℃ 储存时, 请在 1 个月内使用。				
References	[1]. Jones CK, et al. Novel selective allosteric activator of the M1 muscarinic acetylcholine receptor regulates amyloid processing and produces antipsychotic-like activity in rats. J Neurosci. 2008 Oct 8;28(41):10422-33. [2]. Miller NR, et al. Synthesis and SAR of analogs of the M1 allosteric agonist TBPB. Part II: Amides, sulfonamides and ureas—the effect of capping the distal basic piperidine nitrogen. Bioorg Med Chem Lett. 2008 Oct 15;18(20):5443-7.			