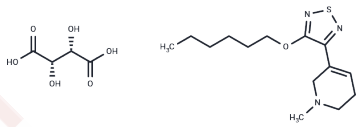
Data Sheet (Cat.No.T39010)

TargetMol

Xanomeline tartrate

Chemical Properties



CAS No. : 152854-19-8

Formula: C18H29N3O7S

Molecular Weight: 431.5

Storage: Keep away from direct sunlight,Keep away from moisture,Store under nitrogen
Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	Xanomeline tartrate (LY 246708 tartrate) is an M1 and M4 mAChR agonist with antipsychotic-like activity that improves cognition and can be used in studies of schizophrenia and Alzheimer's disease.
Targets(IC50)	Others,AChR
In vitro	Xanomeline tartrate (LY 246708) (0.1-10 μM; CNS4U) shows an overall increase in average firing rate, indicating the functional presence of M1 receptors in hiPSC-derived neurons[1].
In vivo	In Male Cebus apella monkeys, Xanomeline tartrate (0.5-3 mg / kg ; s.c. ; 1-3 hours) can induce salivation and vomiting in some monkeys[3].

Solubility Information

Solubility	DMSO: 247.5 mg/mL (573.58 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 5 mg/mL (11.59 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.3175 mL	11.5875 mL	23.175 mL
5 mM	0.4635 mL	2.3175 mL	4.635 mL
10 mM	0.2317 mL	1.1587 mL	2.3175 mL
50 mM	0.0463 mL	0.2317 mL	0.4635 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Kreir M, et al. Role of Kv7.2/Kv7.3 and M1 muscarinic receptors in the regulation of neuronal excitability in hiPSC-derived neurons. Eur J Pharmacol. 2019;858:172474.
Shekhar A, et al. Selective muscarinic receptor agonist xanomeline as a novel treatment approach for schizophrenia. Am J Psychiatry. 2008;165(8):1033-1039.
Andersen MB, et al. The muscarinic M1/M4 receptor agonist xanomeline exhibits antipsychotic-like activity in Cebus apella monkeys. Neuropsychopharmacology. 2003;28(6):1168-1175.