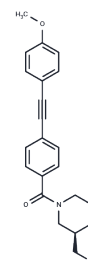


ML289

Chemical Properties

CAS No. : 1382481-79-9
Formula: C₂₂H₂₃NO₃
Molecular Weight: 349.42
Storage: 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	ML289 (VU0463597) is a potent, selective, and CNS-penetrant negative allosteric modulator of mGlu3 (IC ₅₀ =0.66 μM), with over 15-fold selectivity compared to mGlu2 and no activity against mGlu5.
Targets(IC ₅₀)	GluR
In vitro	ML289 (VU0463597) is a central nervous system (CNS)-penetrant probe that functions as a negative allosteric modulator of the metabotropic glutamate receptor 3 (mGlu3)[1].

Solubility Information

Solubility	DMSO: 225 mg/mL (643.92 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 (14.31 mM), Sonication is recommended. <i>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.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.8619 mL	14.3094 mL	28.6189 mL
5 mM	0.5724 mL	2.8619 mL	5.7238 mL
10 mM	0.2862 mL	1.4309 mL	2.8619 mL
50 mM	0.0572 mL	0.2862 mL	0.5724 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

Sheffler DJ, et al. Development of a novel, CNS-penetrant, metabotropic glutamate receptor 3 (mGlu3) NAM probe (ML289) derived from a closely related mGlu5 PAM. *Bioorg Med Chem Lett.* 2012;22(12):3921-3925.

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