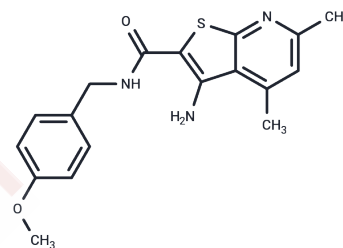


VU0152100

Chemical Properties

CAS No. : 409351-28-6
 Formula: C₁₈H₁₉N₃O₂S
 Molecular Weight: 341.43
 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	VU0152100 is an effective and selective allosteric potentiator of M4 mAChR (EC ₅₀ : 380 ± 93 nM).
Targets(IC ₅₀)	AChR
In vitro	VU0152100 was selective for M4 relative to M1, M2, M3, and M5. VU0152100 dose-dependently potentiated the response to an EC ₂₀ concentration of ACh (EC ₅₀ : 1.9 ± 0.2 μM) and increased the maximal response to ACh to approximately 130%. VU0152100 (10 μM) also increased the potency of ACh to induce GIRK-mediated thallium flux, as manifest by a robust (≈30-fold) leftward shift in the ACh CRC from 77 ± 1.2 nM (veh) to 2.35 ± 0.5 nM [1].
In vivo	Systemic administration of VU0152099 and VU0152100 provides robust brain levels of these compounds, the effects of VU0152099 and VU0152100 were evaluated in reversing amphetamine-induced hyperlocomotion in rats using a dose of 56.6 mg/kg i.p. for each compound with a 30-min pretreatment interval [1].

Solubility Information

Solubility	DMSO: 55 mg/mL (161.09 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: 2 mg/mL (5.86 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	2.9289 mL	14.6443 mL	29.2886 mL
5 mM	0.5858 mL	2.9289 mL	5.8577 mL
10 mM	0.2929 mL	1.4644 mL	2.9289 mL
50 mM	0.0586 mL	0.2929 mL	0.5858 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

Brady AE, et al. Centrally active allosteric potentiators of the M4 muscarinic acetylcholine receptor reverse amphetamine-induced hyperlocomotor activity in rats. *J Pharmacol Exp Ther.* 2008 Dec;327(3):941-53.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481