

WAY-100635

Chemical Properties

CAS No. : 162760-96-5

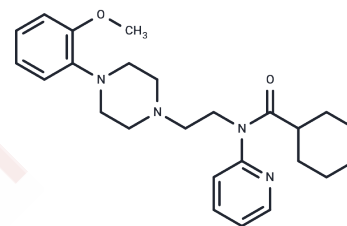
Formula: C₂₅H₃₄N₄O₂

Molecular Weight: 422.56

Store at low temperature

Storage: Pure form: -20°C for 3 years | In solvent: -80°C for 1 year

Actual storage temperature shall be subject to the COA.



Biological Description

Description	WAY-100635 is a potent 5-HT 1A receptor antagonist with an IC ₅₀ = 0.91 nM that abrogates the reduction in hippocampal CA1 pyramidal neuron firing frequency during conditioned reflexes; it also acts as a dopamine D4 receptor agonist with an affinity of 3.3 nM.
Targets(IC50)	5-HT Receptor,Dopamine Receptor
In vitro	The functional properties and binding affinities of WAY-100635 are evaluated in HEK 293 cells stably expressing dopamine D 2L or D 4.4 receptors [1]. WAY-100635 has binding affinities of 940, 370, and 16 nM on D 2L, D 3, and D 4.2 receptors, respectively. Saturation analyses shows that the K _d of [3 H] WAY-100635 at D 4.2 receptors is 2.4 nM. WAY-100635 is potent agonist in HEK-D 4.4 cells with EC 50 of 9.7 nM. WAY-100635 possesses high affinity for D 4.4 receptor (3.3 nM) [1].
In vivo	Treatment with WAY-100635 (1 mg/kg; subcutaneous injection; male Sprague-Dawley rats) abolishes the reduction of the severity of abstinence signs induced by Rhodiola rosea administration in nicotine-dependent rat [2]. Animal Model: Male Sprague-Dawley rats (220-240 g) [2] Dosage: 1 mg/kg Administration: Subcutaneous injection (Pharmacokinetic study) Result: Reduced total abstinence score, increased immobility time and the burying behavior was increased.

Solubility Information

Solubility	DMSO: 50 mg/mL (118.33 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 (4.73 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	2.3665 mL	11.8326 mL	23.6653 mL
5 mM	0.4733 mL	2.3665 mL	4.7331 mL
10 mM	0.2367 mL	1.1833 mL	2.3665 mL
50 mM	0.0473 mL	0.2367 mL	0.4733 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

Chemel BR, Roth BL, Armbruster B, Watts VJ, Nichols DE. WAY-100635 is a potent dopamine D4 receptor agonist. *Psychopharmacology (Berl)*. 2006 Oct;188(2):244-51.

Mannucci C, Navarra M, Calzavara E, Caputi AP, Calapai G. Serotonin involvement in *Rhodiola rosea* attenuation of nicotine withdrawal signs in rats. *Phytomedicine*. 2012 Sep 15;19(12):1117-24.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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