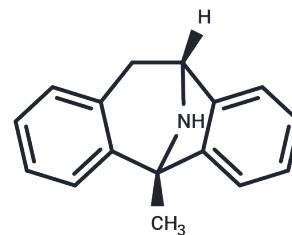


Dizocilpine

Chemical Properties

CAS No. :	77086-21-6
Formula:	C ₁₆ H ₁₅ N
Molecular Weight:	221.3
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	Dizocilpine (MK-801) is a selective non-competitive NMDA receptor antagonist with a K _d of 37.2 nM that exhibits anticonvulsant effects. It acts by binding to a site within the NMDA-associated ion channel, blocking the flow of Ca ²⁺ , and is commonly used to establish schizophrenia models.
Targets(IC50)	NMDAR,iGluR

Solubility Information

Solubility	DMSO: 255 mg/mL (1152.28 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 (22.59 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	4.5188 mL	22.5938 mL	45.1875 mL
5 mM	0.9038 mL	4.5188 mL	9.0375 mL
10 mM	0.4519 mL	2.2594 mL	4.5188 mL
50 mM	0.0904 mL	0.4519 mL	0.9038 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

Wong EH et al., Proc Natl Acad Sci U S A, 1986, 83(18), 7104-7108.

Wang M, Liang X, Zhang Q, et al. Homocysteine can aggravate depressive like behaviors in a middle cerebral artery occlusion/reperfusion rat model: a possible role for NMDARs-mediated synaptic alterations. Nutritional Neuroscience. 2022: 1-13

Wise-Faberowski L et al., J Neurosurg Anesthesiol, 2006, 18(4), 240-246.

Zhou H, Shi H, Li X, et al. Involvement of Cyclin Dependent Kinase 5 in M4 Muscarinic Acetylcholine Receptor-Mediated Cholinergic Transmission within the Mouse Dorsal Striatum[J]. 2021

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