

## Deschloroclozapine

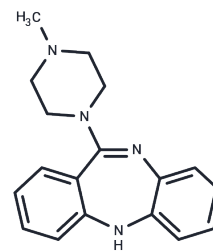
## Chemical Properties

CAS No. : 1977-07-7

Formula: C<sub>18</sub>H<sub>20</sub>N<sub>4</sub>

Molecular Weight: 292.38

Storage: Store at low temperature, Keep away from direct sunlight, 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	Deschloroclozapine, a metabolite of Clozapine, is a highly potent muscarinic DREADDs agonist that binds to DREADD receptor subtypes [hM3Dq] and [hM4Di] with K <sub>i</sub> values of 6.3 nM and 4.2 nM, respectively.
Targets(IC50)	AChR, Serotonin Transporter

## Solubility Information

Solubility	DMSO: 127.5 mg/mL (436.08 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: 4 mg/mL (13.68 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

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	1mg	5mg	10mg
1 mM	3.4202 mL	17.101 mL	34.2021 mL
5 mM	0.684 mL	3.4202 mL	6.8404 mL
10 mM	0.342 mL	1.7101 mL	3.4202 mL
50 mM	0.0684 mL	0.342 mL	0.684 mL

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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

Phillips ST, et al. Binding of 5H-dibenzo[b,e][1,4]diazepine and chiral 5H-dibenzo[a,d]cycloheptene analogues of clozapine to dopamine and serotonin receptors. *J Med Chem.* 1994 Aug 19;37(17):2686-96.

Yuji Nagai, et al. Deschloroclozapine: a potent and selective chemogenetic actuator enables rapid neuronal and behavioral modulations in mice and monkeys. *bioRxiv.*

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