# Data Sheet (Cat.No.T1443)

TargetMol

## Memantine hydrochloride

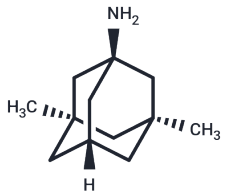
### Chemical Properties

CAS No. : 41100-52-1

Formula: C12H22ClN

Molecular Weight: 215.76

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 | Memantine hydrochloride (Memantine HCl) is an AMANTADINE derivative that has some dopaminergic effects. Memantine hydrochloride has been proposed as an antiparkinson agent. |
| Targets(IC50) | GluR,NMDAR,Autophagy,Cytochromes P450,iGluR |

### Solubility Information

| | |
|---|---|
| Solubility | DMSO: 125 mg/mL (579.35 mM),Sonication is recommended.<br>H2O: 28 mg/mL (129.77 mM),Sonication is recommended.<br>Ethanol: 40 mg/mL (185.39 mM),Sonication is recommended.<br>(< 1 mg/ml refers to the product slightly soluble or insoluble) |
| In vivo Formulation | 10% DMSO+90% Saline: 10 mg/mL (46.35 mM),Solution.<br>*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.* |

Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|---|---|---|---|
| 1 mM | 4.6348 mL | 23.1739 mL | 46.3478 mL |
| 5 mM | 0.927 mL | 4.6348 mL | 9.2696 mL |
| 10 mM | 0.4635 mL | 2.3174 mL | 4.6348 mL |
| 50 mM | 0.0927 mL | 0.4635 mL | 0.927 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

Bresink I, et al. British journal of pharmacology, 1996, 119(2): 195-204.
Dong L, Shen S, Chen W, et al. Discovery of Novel Inhibitors Targeting Human O-GlcNAcase: Docking-Based Virtual Screening, Biological Evaluation, Structural Modification, and Molecular Dynamics Simulation. Journal of chemical information and modeling. 2019, 59(10): 4374-4382.
Dong L, Shen S, Chen W, et al. Discovery of Novel Inhibitors Targeting Human O-GlcNAcase: Docking-Based Virtual Screening, Biological Evaluation, Structural Modification, and Molecular Dynamics Simulation[J]. Journal of chemical information and modeling. 2019, 59(10): 4374-4382.



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