

## Harmine

## Chemical Properties

CAS No. : 442-51-3

Formula: C<sub>13</sub>H<sub>12</sub>N<sub>2</sub>O

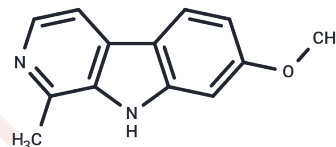
Molecular Weight: 212.25

Storage:

Keep away from direct sunlight, Keep away from moisture, 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	Harmine (Telepathine) is an alkaloid isolated from seeds of Peganum harmala.
Targets(IC50)	MAO,5-HT Receptor,DYRK

## Solubility Information

Solubility	DMSO: 16.9 mg/mL (79.62 mM), Sonication is recommended. ( < 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	2% DMSO+40% PEG300+5% Tween-80+53% Saline:: 2.5 mg/mL (11.78 mM), Solution. <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	4.7114 mL	23.5571 mL	47.1143 mL
5 mM	0.9423 mL	4.7114 mL	9.4229 mL
10 mM	0.4711 mL	2.3557 mL	4.7114 mL
50 mM	0.0942 mL	0.4711 mL	0.9423 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

Zhang H, et al. Phytomedicine. 2014 Feb 15;21(3):348-55.

Wang C, Hu R, Wang T, et al. A bivalent  $\beta$ -carboline derivative inhibits macropinocytosis-dependent entry of pseudorabies virus by targeting the kinase DYRK1A. Journal of Biological Chemistry. 2023; 104605.

Tekşen Y, Gündüz M K, Berikten D, et al. Peganum harmala L. seed extract attenuates anxiety and depression in rats by reducing neuroinflammation and restoring the BDNF/TrkB signaling pathway and monoamines after exposure to chronic unpredictable mild stress. Metabolic Brain Disease. 2024; 1-19.

Chen Q, Wang W Y, Xu Q Y, et al. The enhancing effects of selenomethionine on harmine in attenuating pathological cardiac hypertrophy via glycolysis metabolism. Journal of Cellular and Molecular Medicine. 2024, 28 (19): e70124.

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