

## Rotundine

## Chemical Properties

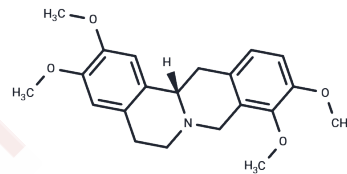
CAS No. : 483-14-7

Formula: C<sub>21</sub>H<sub>25</sub>NO<sub>4</sub>

Molecular Weight: 355.43

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	Rotundine (Gindarine) (L-tetrahydropalmatine, L-THP) is a selective dopamine D1 receptor antagonist with IC <sub>50</sub> of 166 nM.
Targets(IC <sub>50</sub> )	5-HT Receptor, Dopamine Receptor
In vitro	Cidofovir inhibits human cytomegalovirus (HCMV) infection in cultured cells. Cidofovir is inhibitory to CMV plaque formation even when added to the cells at 48 hr post infection with IC <sub>50</sub> of 0.9 µg/mL for Davis and 1.6 µg/mL for AD-169 strains, respectively. [1] Cidofovir also inhibits herpes simplex virus infection. In addition, Cidofovir blocks cell fusion induced by HSV-1 in monkey kidney cells and blocks the expression of HSV-l-specific proteins and the synthesis of viral DNA. [3]

## Solubility Information

Solubility	DMSO: 55 mg/mL (154.74 mM), Sonication is recommended. H <sub>2</sub> O: < 1 mg/mL (insoluble or slightly soluble), Ethanol: < 1 mg/mL (insoluble or slightly soluble), (< 1 mg/ml refers to the product slightly soluble or insoluble)
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## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.8135 mL	14.0675 mL	28.1349 mL
5 mM	0.5627 mL	2.8135 mL	5.627 mL
10 mM	0.2813 mL	1.4067 mL	2.8135 mL
50 mM	0.0563 mL	0.2813 mL	0.5627 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

Wang JB, et al. Future Med Chem, 2012, 4(2), 177-186.

Wu D, Wang P, Zhao C, et al. Levo-tetrahydropalmatine Ameliorates Neuropathic Pain by Inhibiting the Activation of the Clec7a-MAPK/NF- $\kappa$ B-NLRP3 Inflammasome Axis. Phytomedicine. 2023: 155075.

Liu YL, et al. Acta Pharmacol Sin, 2005, 26(5), 533-538.

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