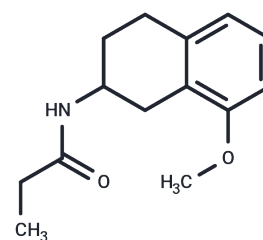


## 8-M-PDOT

## Chemical Properties

CAS No. :	134865-70-6
Formula:	C <sub>14</sub> H <sub>19</sub> NO <sub>2</sub>
Molecular Weight:	233.31
Storage:	Store at low temperature Powder: -20°C for 3 years   In solvent: -80°C for 1 year <small>Actual storage temperature shall be subject to the COA.</small>



## Biological Description

Description	8-M-PDOT (AH-002) is a selective and potent melatonin MT2 receptor agonist that also inhibits MT1 receptors. 8-M-PDOT exhibits anxiolytic activity and can be used to study MT2-induced neuropathic pain.
Targets(IC50)	Melatonin Receptor, MT Receptor
In vivo	Treatment with 8-M-PDOT (10 µg/µL; administered into the dorsal striatum by bilateral cannulas; for 30 minutes; male Wistar rats) demonstrates an anxiolytic-like effect[2].
Animal Research	Animal Model: Male Wistar rats (280-320 g) with Rotenone [2]. Dosage: 10 µg/µL. Administration: Administered into the dorsal striatum by bilateral cannulas; for 30 minutes

## Solubility Information

Solubility	DMSO: 50 mg/mL (214.31 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Corn Oil: 5 mg/mL (21.43 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	4.2861 mL	21.4307 mL	42.8614 mL
5 mM	0.8572 mL	4.2861 mL	8.5723 mL
10 mM	0.4286 mL	2.1431 mL	4.2861 mL
50 mM	0.0857 mL	0.4286 mL	0.8572 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

Nosedá AC, et al. REM sleep deprivation promotes a dopaminergic influence in the striatal MT2 anxiolytic-like effects. *Sleep Sci.* 2016 Jan-Mar;9(1):47-54.

Browning C, et al. Pharmacological characterization of human recombinant melatonin mt(1) and MT(2) receptors. *Br J Pharmacol.* 2000 Mar;129(5):877-86.

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