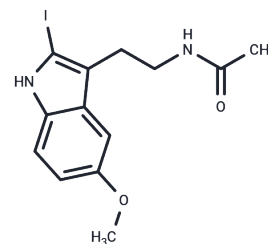


2-Iodomelatonin

Chemical Properties

CAS No. :	93515-00-5
Formula:	C ₁₃ H ₁₅ IN ₂ O ₂
Molecular Weight:	358.17
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	2-Iodomelatonin is a potent agonist of melatonin receptor 1 (MT1) with a K_i value of 28 μ M, exhibiting over 5-fold selectivity for MT1 compared to MT2. It can be used to identify, characterize, and localize melatonin binding sites in the brain and peripheral tissues.
Targets(IC50)	Melatonin Receptor
In vitro	2-iodomelatonin (0-7.5 μ M; 18 hours) shares the protective properties of melatonin, inhibiting cell death and the increase in Rip2 expression in stressed mutant htt ST14A cells[1].

Solubility Information

Solubility	DMSO: 55 mg/mL (153.56 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: 2 mg/mL (5.58 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

	1mg	5mg	10mg
1 mM	2.792 mL	13.9599 mL	27.9197 mL
5 mM	0.5584 mL	2.792 mL	5.5839 mL
10 mM	0.2792 mL	1.396 mL	2.792 mL
50 mM	0.0558 mL	0.2792 mL	0.5584 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

Tomkinson A, et al. A murine IL-4 receptor antagonist that inhibits IL-4- and IL-13-induced responses prevents antigen-induced airway eosinophilia and airway hyperresponsiveness. *J Immunol.* 2001 May 1;166(9):5792-800.
Wang X, et al. The melatonin MT1 receptor axis modulates mutant Huntingtin-mediated toxicity. *J Neurosci.* 2011 Oct 12;31(41):14496-507.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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