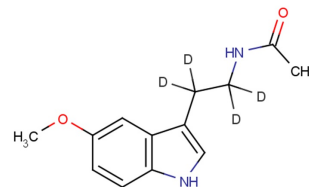


Melatonin D5

Chemical Properties

CAS No.:	66521-38-8
Formula:	C ₁₃ H ₁₂ D ₄ N ₂ O ₂
Molecular Weight:	236.3
Appearance:	N/A
Storage:	0-4°C for short term (days to weeks), or -20°C for long term (months).



Biological Description

Description	Melatonin D5 is deuterium labeled Melatonin. Melatonin is a selective ATF-6 inhibitor and induces human hepatoma cell apoptosis through COX-2 downregulation. Melatonin is a hormone made by the pineal gland that can activate melatonin receptor. Antioxidative and anti-inflammatory properties.
Targets(IC ₅₀)	Others: None

Solubility Information

Solubility	< 1 mg/ml refers to the product slightly soluble or insoluble
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	4.232 mL	21.16 mL	42.319 mL
5 mM	0.846 mL	4.232 mL	8.464 mL
10 mM	0.423 mL	2.116 mL	4.232 mL
50 mM	0.085 mL	0.423 mL	0.846 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 °C for 6 months; - 20 °C for 1 month. Please use it as soon as possible.

Reference

1. Kilic U, et al. Particular phosphorylation of PI3K/Akt on Thr308 via PDK-1 and PTEN mediates melatonin's neuroprotective activity after focal cerebral ischemia in mice. Redox Biol. 2017 Apr 5;12:657-665
2. Hu C, et al. Neuroprotective effect of melatonin on soluble Aβ1-42-induced cortical neurodegeneration via Reelin-Dab1 signaling pathway. Neurol Res. 2017 Apr 7:1-1
3. Rahim I, et al. Melatonin administration to wild-type mice and non-treated NLRP3 mutant mice share similar inhibition of the inflammatory response during sepsis. J Pineal Res. 2017 Mar 31
4. Bu LJ, et al. Melatonin, a novel selective ATF-6 inhibitor, induces human hepatoma cell apoptosis through COX-2 downregulation. World J Gastroenterol. 2017 Feb 14;23(6):986-998.

Inhibitors · Natural Compounds · Compound Libraries

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