

Melatonin-D4

Chemical Properties

CAS No. : 66521-38-8

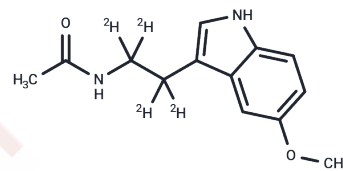
Formula: C₁₃H₁₆N₂O₂

Molecular Weight: 236.3

Storage: Store at low temperature, Keep away from direct sunlight

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	Melatonin-D4 is a hormone produced by the pineal gland, known for its role as a selective ATF-6 inhibitor that promotes apoptosis in human hepatoma cells via COX-2 downregulation. Additionally, it activates melatonin receptors and exhibits antioxidative and anti-inflammatory properties.
Targets(IC50)	Apoptosis, Mitophagy, Melatonin Receptor, Autophagy

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	4.2319 mL	21.1595 mL	42.3191 mL
5 mM	0.8464 mL	4.2319 mL	8.4638 mL
10 mM	0.4232 mL	2.116 mL	4.2319 mL
50 mM	0.0846 mL	0.4232 mL	0.8464 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

- 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
- Hu C, et al. Neuroprotective effect of melatonin on soluble A β 1-42-induced cortical neurodegeneration via Reelin-Dab1 signaling pathway. *Neurol Res.* 2017 Apr 7:1-1
- 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
- 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.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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