



LKT Laboratories, Inc.

## Melatonin

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### Product Information

**Product ID** M1745

**CAS No.** 73-31-4

**Chemical Name** N-[2-(5-Methoxy-1H-indol-3-yl)ethyl]acetamide

**Synonym** Regulin, N-Acetyl-5-methoxytryptamine

**Formula** C<sub>13</sub>H<sub>16</sub>N<sub>2</sub>O<sub>2</sub>

**Formula Wt.** 232.27

**Melting Point** 116-118 °C

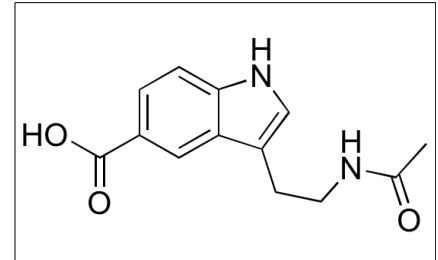
**Purity** ≥98%

**Solubility** Soluble in DMSO. Insoluble in water.

**Store Temp** 4 °C

**Ship Temp** Ambient

**Description** Melatonin is an endogenous hormone involved in circadian rhythms. Melatonin activates melatonin (MT) receptors and decreases expression of follicle-stimulating hormone (FSH), luteinizing hormone (LH), and leptin; it exhibits sedative, antioxidative, immunostimulatory, anti-ulcerative, neuroprotective, neuromodulatory, anti-obesity, anticancer, and chemopreventive activities. Melatonin production is increased at night, inducing sleepiness. This compound increases levels of superoxide dismutase, glutathione, and glutathione peroxidase and decreases levels of iNOS and lipoxygenase; it also scavenges ROS. In various models, melatonin increases release of IL-1, IL-2, IL-6, and IL-12. In animal models of obesity, melatonin also decreases body weight, adiposity, leptin levels, and insulin levels. In animal models of Alzheimer's disease, this compound prevents hyperphosphorylation of tau protein and fibrillogenesis of amyloid-B (AB). Melatonin also shows some benefit in the treatment of migraines and cancer as well as the prevention of carcinogenesis. Additionally melatonin may treat gastro-esophageal reflux disease (GERD).



**Bulk quantities available upon request**

Product ID	Size
M1745	1 g
M1745	5 g
M1745	10 g

**References** Kandil TS, Mousa AA, El-Gendy AA, et al. The potential therapeutic effect of melatonin in Gastro-Esophageal Reflux Disease. *BMC Gastroenterol.* 2010 Jan 18;10:7. PMID: 20082715.

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Mills E, Wu P, Seely D, et al. Melatonin in the treatment of cancer: a systematic review of randomized controlled trials and meta-analysis. *J Pineal Res.* 2005 Nov;39(4):360-6. PMID: 16207291.

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**Caution:** This product is intended for laboratory and research use only. It is not for human or drug use.