

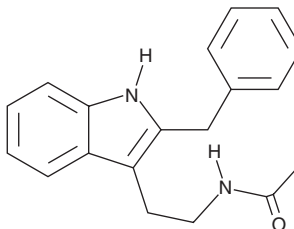
# PRODUCT INFORMATION



## Luzindole

Item No. 15998

**CAS Registry No.:** 117946-91-5  
**Formal Name:** N-[2-[2-(phenylmethyl)-1H-indol-3-yl]ethyl]-acetamide  
**Synonym:** N-0774  
**MF:** C<sub>19</sub>H<sub>20</sub>N<sub>2</sub>O  
**FW:** 292.3  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 226, 283 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

Luzindole is supplied as a crystalline solid. A stock solution may be made by dissolving the luzindole in the solvent of choice, which should be purged with an inert gas. Luzindole is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of luzindole in ethanol and DMF is approximately 30 mg/ml and approximately 20 mg/ml in DMSO.

Luzindole is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, luzindole should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. Luzindole has a solubility of approximately 0.5 mg/ml in a 1:1 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

In addition to intrinsic antioxidant activities, melatonin (Item No. 14427) evokes its effects through the G protein-coupled receptors MT<sub>1A</sub> (MT<sub>1</sub>) and MT<sub>1B</sub> (MT<sub>2</sub>).<sup>1</sup> Luzindole is a melatonin receptor antagonist that preferentially targets MT<sub>1B</sub> over MT<sub>1A</sub> (K<sub>i</sub> values are = 10-27 and 158-513 nM, respectively).<sup>2-4</sup> Luzindole is used both *in vitro* and *in vivo* to evaluate the roles of melatonin receptor signaling in diverse pathways, including circadian rhythms, animal behavior, and melanophore response.<sup>2,5,6</sup>

### References

1. Chan, K.H. and Wong, Y.H. *Int. J. Mol. Sci.* **14**(9), 18385-18406 (2013).
2. Teh, M.T. and Sugden, D. *Naunyn Schmiedebergs Arch. Pharmacol.* **358**(5), 522-528 (1998).
3. Dubocovich, M.L. *J. Pharmacol. Exp. Ther.* **246**(3), 902-910 (1988).
4. Dubocovich, M.L., Masana, M.I., Iacob, S., et al. *Naunyn Schmiedebergs Arch. Pharmacol.* **355**(3), 365-375 (1997).
5. Dubocovich, M.L., Yun, K., Al-Ghoul, W.M., et al. *FASEB J.* **12**(12), 1211-1220 (1998).
6. Laredo, S.A., Orr, V.N., McMackin, M.Z., et al. *Physiol. Behav.* **128**, 86-91 (2014).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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