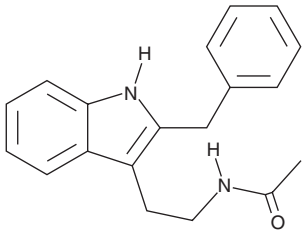
PRODUCT INFORMATION

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:	$C_{19}H_{20}N_2O$
FW:	292.3
Purity:	≥98%
UV/Vis.:	λ_{max}: 226, 283 nm
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	≥2 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. Luzindole is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of luzindole in these solvents is approximately 30, 20, and 30 mg/ml, respectively.

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_{1A} (MT_1) and MT_{1B} (MT_2).[1] Luzindole is a melatonin receptor antagonist that preferentially targets MT_{1B} over MT_{1A} (K_i values are = 10-27 and 158-513 nM, respectively).[2-4] 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.[2,5,6]

References

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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).
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