

Certificate of Analysis

www.tocris.com

Product Name: 2-Phenylmelatonin

Catalog No.: 0680

Batch No.: 5

CAS Number: 151889-03-1

IUPAC Name: *N*-[2-(5-Methoxy-2-phenylindol-3-yl)ethyl]acetamide

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₉H₂₀N₂O₂·¼H₂O

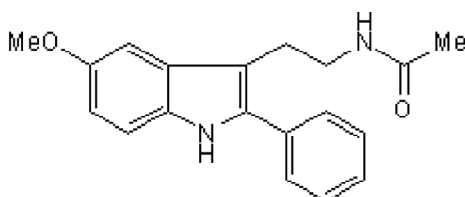
Batch Molecular Weight: 312.88

Physical Appearance: Off-white solid

Solubility: ethanol to 100 mM
DMSO to 100 mM

Storage: Store at +4°C

Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.35 (Petrol:EtOAc 3:7)

HPLC: Shows 99.4% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:	Carbon Hydrogen Nitrogen			
	Theoretical	72.94	6.6	8.95
	Found	73.31	6.58	9.06

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

bio-techne.com
info@bio-techne.com
techsupport@bio-techne.com

North America
Tel: (800) 343 7475

China
info.cn@bio-techne.com
Tel: +86 (21) 52380373

Europe Middle East Africa
Tel: +44 (0)1235 529449

Rest of World
www.tocris.com/distributors
Tel: +1 612 379 2956

Product Name: 2-Phenylmelatonin

Catalog No.: 0680

Batch No.: 5

CAS Number: 151889-03-1

IUPAC Name: *N*-[2-(5-Methoxy-2-phenylindol-3-yl)ethyl]acetamide

Description:

2-Phenylmelatonin is a highly potent melatonin agonist; displays higher affinity and greater potency than melatonin itself. The EC₅₀ values for G protein activation in MT₁ and MT₂-transfected cells are 65 and 58 pM respectively.

Physical and Chemical Properties:

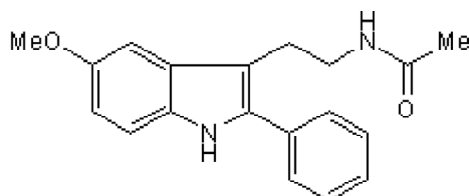
Batch Molecular Formula: C₁₉H₂₀N₂O₂·¼H₂O

Batch Molecular Weight: 312.88

Physical Appearance: Off-white solid

Minimum Purity: ≥98%

Batch Molecular Structure:



Storage: Store at +4°C

Solubility & Usage Info:

ethanol to 100 mM

DMSO to 100 mM

This compound is hygroscopic and may absorb atmospheric moisture during prolonged storage, causing the solid to become sticky and/or collapse into a gel or glass-like form. Although purity is unaffected, it may be difficult to extract the full quantity from the vial. In such a situation, we recommend that solutions are made by adding solvent directly to the vial. The vial should then be vortexed vigorously to ensure the product has completely dissolved.

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. *Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Nonno *et al* (1999) Ligand efficacy and potency at recombinant human MT₂ melatonin receptors: evidence for agonist activity of some mt₁-antagonists. *Br.J.Pharmacol.* **127** 1288. PMID: 10455277.

Nonno *et al* (1998) Pharmacological characterization of the human melatonin Mel_{1a} receptor following stable transfection into NIH3T3 cells. *Br.J.Pharmacol.* **124** 485. PMID: 9647472.

Spadoni *et al* (1993) 2-Substituted 5-methoxy-N-acetyltryptamines: synthesis, binding affinity for the melatonin receptor, and evaluation of the biological activity. *J.Med.Chem.* **36** 4069. PMID: 8258829.

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

bio-techne.com

info@bio-techne.com

techsupport@bio-techne.com

North America

Tel: (800) 343 7475

China

info.cn@bio-techne.com

Tel: +86 (21) 52380373

Europe Middle East Africa

Tel: +44 (0)1235 529449

Rest of World

www.tocris.com/distributors

Tel: +1 612 379 2956