

Product Name: 2-Iodomelatonin

Catalog No.: 0737

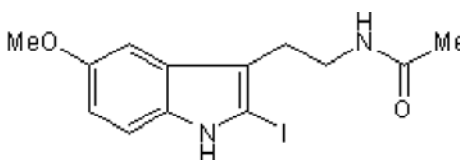
Batch No.: 7

CAS Number: 93515-00-5

IUPAC Name: N-[2-(2-Iodo-5-methoxyindol-3-yl)ethyl]acetamide

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₃H₁₅IN₂O₂
Batch Molecular Weight: 358.18
Physical Appearance: Cream solid
Solubility: DMSO to 100 mM
 ethanol to 100 mM
Storage: Store at -20°C
Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.38 (Ethyl acetate:Petroleum ether [2:1])
HPLC: Shows 98.6% purity
¹H NMR: Consistent with structure
 Mass Spectrum: Consistent with structure

	Carbon Hydrogen Nitrogen		
	Carbon	Hydrogen	Nitrogen
Theoretical	43.59	4.22	7.82
Found	43.57	4.14	7.66

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

Product Name: 2-Iodomelatonin

Catalog No.: 0737

Batch No.: 7

CAS Number: 93515-00-5

IUPAC Name: N-[2-(2-Iodo-5-methoxyindol-3-yl)ethyl]acetamide

Description:

Potent melatonin agonist (pK_i values are 10.55 and 9.87 at human recombinant MT₁ and MT₂ receptors respectively). 2-[¹²⁵I]-iodomelatonin has been used to identify, characterize and localize melatonin binding sites in the brain and peripheral tissues.

Physical and Chemical Properties:

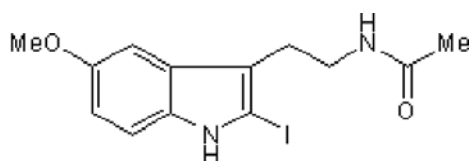
Batch Molecular Formula: C₁₃H₁₅IN₂O₂

Batch Molecular Weight: 358.18

Physical Appearance: Cream solid

Minimum Purity: ≥98%

Batch Molecular Structure:



Storage: Store at -20°C

CAUTION - This product is light sensitive and we recommend that the solid material and any solutions obtained are protected from exposure to light.

Solubility & Usage Info:

DMSO to 100 mM

ethanol to 100 mM

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. Our standard recommendations are:

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:

Browning *et al* (2000) Pharmacological characterization of human recombinant melatonin mt₁ and MT₂ receptors. *Br.J.Pharmacol.* **129** 877. PMID: 10696085.

Suiciak *et al* (1991) Quantitative pharmacological analysis of 2-[¹²⁵I]-iodomelatonin binding sites in discrete areas of the chicken brain. *J.Neurosci.* **11** 2855. PMID: 1652626.

Dubocovich and Takahashi (1987) Use of 2-[¹²⁵I]-iodomelatonin to characterize melatonin sites in chicken retina. *Proc.Natl.Acad.Sci.U.S.A.* **84** 3916. PMID: 3035559.

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