**N-acetyl Tryptamine**

**Item No. 18605**

**CAS Registry No.:** 1016-47-3  
**Formal Name:** N-[2-(1H-indol-3-yl)ethyl]-acetamide  
**Synonym:** N-Acetyltryptamine  
**MF:** C_{12}H_{14}N_{2}O  
**FW:** 202.3  
**Purity:** ≥98%  
**Stability:** ≥2 years at -20°C  
**Supplied as:** A crystalline solid  
**UV/Vis.:** λ_{max} 222, 282, 290 nm

**Laboratory Procedures**

For long term storage, we suggest that N-acetyl tryptamine be stored as supplied at -20°C. It should be stable for at least two years.

N-acetyl Tryptamine is supplied as a crystalline solid. A stock solution may be made by dissolving the N-acetyl tryptamine in the solvent of choice. N-acetyl Tryptamine is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of N-acetyl tryptamine in these solvents is approximately 20, 5, and 10 mg/ml, respectively.

N-acetyl Tryptamine is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, N-acetyl tryptamine should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. N-acetyl Tryptamine 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**

N-acetyl Tryptamine is a structural analog of melatonin (5-methoxy-N-acetyltryptamine; Item No. 14427) that binds the melatonin MT\(_2\) receptor (K\(_i\) = 41 nM).\(^2\) It acts as a melatonin receptor antagonist in frog skin and chicken retina and as a partial agonist in rabbit retina.\(^2\)-\(^4\) N-acetyl Tryptamine is also a reaction product of assays for serotonin N-acetyltransferase, the penultimate enzyme in the melatonin biosynthetic pathway.\(^5\)

**References**

4. Dubocovich, M.L., Masana, M.I., Iacob, S., et al. Melatonin receptor antagonists that differentiate between the human Mel\(_{1a}\) and Mel\(_{1b}\) recombinant subtypes are used to assess the pharmacological profile of the rabbit retina ML\(_{1}\) presynaptic heteroreceptor. *Naunyn Schmiedebergs Arch. Pharmacol.* **355**(3), 365-375 (1997).