PRODUCT INFORMATION



5-Methoxycarbonylamino-N-acetyltryptamine

Item No. 39553

CAS Registry No.: 190277-13-5

N-[3-[2-(acetylamino)ethyl]-1H-indol-Formal Name:

5-yl]-carbamic acid, methyl ester

Synonyms: GR135531, 5-MCA-NAT, MCA-NAT

MF: $C_{14}H_{17}N_3O_3$

275.3 FW: **Purity:** ≥95% Supplied as: A 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

5-Methoxycarbonylamino-N-acetyltryptamine (5-MCA-NAT) is supplied as a solid. A stock solution may be made by dissolving the 5-MCA-NAT in the solvent of choice, which should be purged with an inert gas. 5-MCA-NAT is slightly soluble in methanol.

Description

5-MCA-NAT is a melatonin (Item No. 14427) derivative and a partial agonist of melatonin receptor 1 (MT_1) and MT_2 . It inhibits forskolin-induced production of cAMP in CHO cells expressing human MT_1 or MT_2 (EC₅₀s = 440 and 98 nM, respectively). In vivo, ocular administration of 5-MCA-NAT reduces intraocular pressure in control and DBA/2J glaucomatous mice.²

References

- 1. Vincent, L., Cohen, W., Delagrange, P., et al. Molecular and cellular pharmacological properties of 5-methoxycarbonylamino-N-acetyltryptamine (MCA-NAT): A nonspecific MT3 ligand. J. Pineal Res. 48(3), 222-229 (2010).
- 2. Martínez-Águila, A., Fonseca, B., Pérez de Lara, M.J., et al. Effect of melatonin and 5-methoxycarbonylamino-N-acetyltryptamine on the intraocular pressure of normal and glaucomatous mice. J. Pharmacol. Exp. Ther. 357(2), 293-299 (2016).

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

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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