

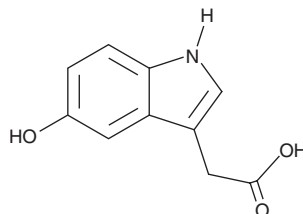
PRODUCT INFORMATION



5-hydroxy Indole-3-acetic Acid

Item No. 22889

CAS Registry No.: 54-16-0
Formal Name: 5-hydroxy-1H-indole-3-acetic acid
Synonyms: 5-HIAA,
5-Hydroxyindoleacetic Acid,
5-hydroxy IAA, NSC 90432
MF: C₁₀H₉NO₃
FW: 191.2
Purity: ≥98%
Supplied as: A crystalline 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-hydroxy Indole-3-acetic acid (5-HIAA) is supplied as a crystalline solid. A stock solution may be made by dissolving the 5-HIAA in the solvent of choice, which should be purged with an inert gas. 5-HIAA is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of 5-HIAA in these solvents is approximately 25 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of 5-HIAA can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of 5-HIAA in PBS (pH 7.2) is approximately 0.1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

5-hydroxy Indole-3-acetic acid (5-HIAA) is a metabolite of the monoamine neurotransmitter serotonin (5-HT; Item No. 14332).¹ It is formed from serotonin *via* a 5-hydroxy indole-3-acetaldehyde intermediate by aldehyde dehydrogenase. 5-HIAA has been used as a biomarker for the detection of neuroendocrine tumors. Brain levels of 5-HIAA are decreased in patients with severe Alzheimer's disease.²

References

1. Corcuff, J.-B., Chardon, L., El Hajji Ridah, I., *et al.* Urinary sampling for 5HIAA and metanephrines determination: revisiting the recommendations. *Endocr. Connect.* **6(6)**, R87-R98 (2017).
2. Vermeiren, Y., Van Dam, D., Aerts, T., *et al.* Monoaminergic neurotransmitter alterations in postmortem brain regions of depressed and aggressive patients with Alzheimer's disease. *Neurobiol. Aging* **35(12)**, 2691-2700 (2014).

WARNING

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

SAFETY DATA

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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