

PRODUCT INFORMATION



5,6-dihydroxy Indole

Item No. 20630

CAS Registry No.: 3131-52-0

Formal Name: 1H-indole-5,6-diol

Synonym: Dopamine lutine

MF: C₈H₇NO₂

FW: 149.1

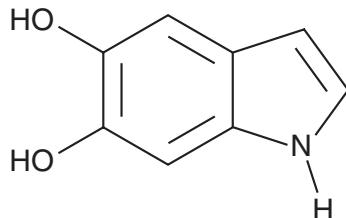
Purity: ≥98%

UV/Vis.: λ_{max} : 274, 302 nm

Supplied as: A crystalline solid

Storage: -20°C

Stability: As supplied, 2 years from the QC date provided on the Certificate of Analysis, when stored properly



Laboratory Procedures

5,6-dihydroxy Indole is supplied as a crystalline solid. A stock solution may be made by dissolving the 5,6-dihydroxy indole in the solvent of choice. 5,6-dihydroxy Indole is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of 5,6-dihydroxy indole in ethanol and DMF is approximately 10 mg/ml and approximately 3 mg/ml in DMSO.

5,6-dihydroxy Indole is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, 5,6-dihydroxy indole should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. 5,6-dihydroxy Indole 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

5,6-dihydroxy Indole is an intermediate in melanogenesis.^{1,2} Its precursor is dopachrome. 5,6-dihydroxy Indole can be metabolized to either eumelanin or pheomelanin, depending, in part, on the availability of cysteine.

References

1. Ito, S., and Wakamatsu, K., Chemistry of mixed melanogenesis--pivotal roles of dopaquinone. *Photochem. Photobiol.* **84**(3), 582-592 (2008).
2. Micillo, R., Panzella, L., Koike, K., et al. "Fifty Shades" of black and red or how carboxyl groups fine tune eumelanin and pheomelanin properties. *Int. J. Mol. Sci.* **17**(5), E746 (2016).

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.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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