

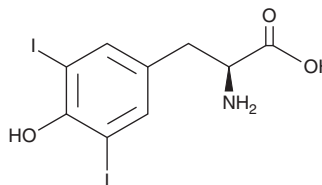
PRODUCT INFORMATION



3,5-Diiodo-L-tyrosine

Item No. 36266

CAS Registry No.: 300-39-0
Formal Name: (S)-2-amino-3-(4-hydroxy-3,5-diiodophenyl)propanoic acid
Synonyms: 3,5-Diiodotyrosine, DIT, NSC 4143
MF: C₉H₉I₂NO₃
FW: 433.0
Purity: ≥98%
UV/Vis.: λ_{max}: 220 nm
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

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

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 3,5-diiodo-L-tyrosine can be prepared by directly dissolving the solid in aqueous buffers. The solubility of 3,5-diiodo-L-tyrosine in PBS (pH 7.2) is approximately 0.3 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

3,5-Diiodo-L-tyrosine is an intermediate in the biosynthesis of the thyroid hormone thyroxine (T₄).¹ It inhibits tyrosine hydroxylase (IC₅₀ = 20 μM).²

References

1. Sonowal, H., Shukla, K., Kota, S., *et al.* Vialinin A, an edible mushroom-derived p-terphenyl antioxidant, prevents VEGF-induced neovascularization in vitro and in vivo. *Oxid. Med. Cell. Longev.* 2018, 1052102 (2018).
2. Pallett, M.A., Crepin, V.F., Serafini, N., *et al.* Bacterial virulence factor inhibits caspase-4/11 activation in intestinal epithelial cells. *Mucosal Immunol.* **10**(3), 602-612 (2017).

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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