

Product Name: T3

Catalog No.: 6666

Batch No.: 2

CAS Number: 6893-02-3

IUPAC Name: O-(4-Hydroxy-3-iodophenyl)-3,5-diiodo-L-tyrosine

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₅H₁₂I₃NO₄.H₂O

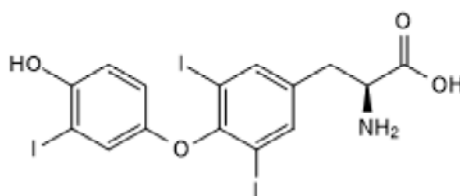
Batch Molecular Weight: 668.99

Physical Appearance: Off White solid

Solubility: DMSO to 50 mM

Storage: Store at -20°C

Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 99.1% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Optical Rotation: [α]_D = +22.6 (Concentration = 1, Solvent = 1M HCl : EtOH 1:2)

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	26.93	2.11	2.09
Found	26.49	1.96	2.25

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

bio-techne.com

info@bio-techne.com

techsupport@bio-techne.com

North America

Tel: (800) 343 7475

China

info.cn@bio-techne.com

Tel: +86 (21) 52380373

Europe Middle East Africa

Tel: +44 (0)1235 529449

Rest of World

www.tocris.com/distributors

Tel: +1 612 379 2956

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Description:

Thyroid hormone. Promotes differentiation of oligodendroglial precursor cells in neonatal rats and promotes maturation of hiPSC-derived cardiomyocytes. Also specifies cone cell subtype in retinal cell differentiation protocols. Used in protocols to generate cortical spheroids from hPSCs. Sodium salt (Cat. No. 5552) also available.

Physical and Chemical Properties:

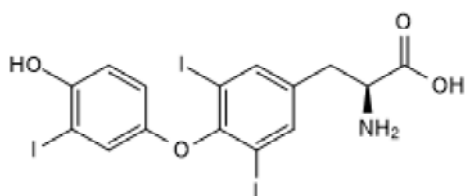
Batch Molecular Formula: C₁₅H₁₂I₃NO₄.H₂O

Batch Molecular Weight: 668.99

Physical Appearance: Off White solid

Minimum Purity: ≥98%

Batch Molecular Structure:



Storage: Store at -20°C

CAUTION - This product is light sensitive and we recommend that the solid material and any solutions obtained are protected from exposure to light.

Solubility & Usage Info:

DMSO to 50 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Eldred *et al* (2018) Thyroid hormone signaling specifies cone subtypes in human retinal organoids. *Science* **362** eaau6348. PMID: 30309916.

Madhavan *et al* (2018) Induction of myelinating oligodendrocytes in human cortical spheroids. *Nat Methods*. **15** 700. PMID: 30046099.

Yang *et al* (2014) Tri-iodo-L-thyronine promotes the maturation of human cardiomyocytes-derived from induced pluripotent stem cells. *J.Mol.CellCardiol*. **72** 296. PMID: 24735830.

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