



### 3,3'-Diiodo-L-thyronine

## **Chemical Properties**

CAS No.: 4604-41-5

Formula: C15H13I2NO4

Molecular Weight: 525.08
Appearance: N/A

Storage: 0-4°C for short term (days to weeks), or -20°C for long term (months).

# **Biological Description**

Description	3,3'-Diiodo-L-thyronine (3,3'-T2) is an endogenous metabolite of thyroid hormone. It significantly enhances COX activity.
Targets(IC <sub>50</sub> )	Human Endogenous Metabolite: None COX: None
In vitro	3,3'-Diiodo-L-thyronine (3,3'-T2; 1 $\mu$ M; 30 min) significantly enhances COX activity [2]. 3,3'-T2 is produced by further degradation of T3 and rT3 [3].

## Solubility Information

Solubility	DMSO: 125 mg/mL (238.06 mM) (< 1 mg/ml refers to the product slightly soluble or insoluble)
	( · · · · · · · · · · · · · · · · · · ·

#### **Preparing Stock Solutions**

	1mg	5mg	10mg
1 mM	1.904 mL	9.522 mL	19.045 mL
5 mM	0.381 mL	1.904 mL	3.809 mL
10 mM	0.19 mL	0.952 mL	1.904 mL
50 mM	0.038 mL	0.19 mL	0.381 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 °C for 6 months; - 20 °C for 1 month. Please use it as soon as possible.

### Reference

- 1. Lorenzini L, et al. Assay of Endogenous 3,5-diiodo-L-thyronine (3,5-T2) and 3,3'-diiodo-L-thyronine (3,3'-T2) in Human Serum: A Feasibility Study. Front Endocrinol (Lausanne). 2019 Feb 19;10:88.
- 2. Lanni A, et al. Rapid stimulation in vitro of rat liver cytochrome oxidase activity by 3,5-diiodo-L-thyronine and by 3,3'-diiodo-L-thyronine. Mol Cell Endocrinol. 1994 Feb;99(1):89-94.
- 3. Chen X, et al. Simultaneous quantification of T4, T3, rT3, 3,5-T2 and 3,3'-T2 in larval zebrafish (Danio rerio) as a model to study exposure to polychlorinated biphenyls. Biomed Chromatogr. 2018 Jun;32(6):e4185.

Page 1 of 2 www.targetmol.com

### Inhibitors · Natural Compounds · Compound Libraries

This product is for Research Use Only  $\cdot$  Not for Human or Veterinary or Therapeutic Use.

Tel:781-999-4286

E-mail:info@targetmol.com

Address:36 Washington Street, Wellesley Hills, MA 02481

Page 2 of 2 www.targetmol.com