

Product Information

L-Thyroxine, Purity ≥98%

Cat. No.: X24-09-YM1112

Size: 500 mg; 1 g; 2 g; 5 g

MDL: MFCD00002595

CAS Number: 51-48-9

Compound CID: 5819

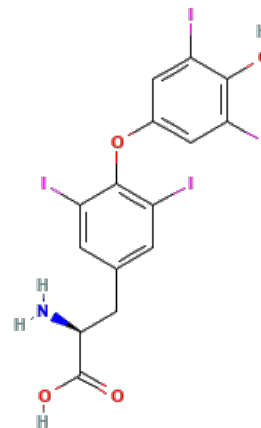
Synonym: 51-48-9; Levothyroxine; Thyroxine; Thyroxin; Levothyroxin;

Tetraiodothyronine; 3,3',5,5'-Tetraiodo-L-thyronine; Thyratabs; Thyreoideum;

Thyroxinal; Thyrax; Synthroid; Thyroxine iodine; L-Thyroxin; L-T4; 3,5,3',5'-Tetraiodo-

L-thyronine;

(2S)-2-Amino-3-[4-(4-hydroxy-3,5-diiodophenoxy)-3,5-diiodophenyl]propanoic acid



This product is for research use only and is not intended for diagnostic use.

Product Information

Description	L-Thyroxine, soluble in DMSO and insoluble in water and ethanol, is a synthetic form of the thyroid hormone thyroxine. The molecular weight of the compound is 776.87, and its molecular formula is $C_{15}H_{11}I_4NO_4$.
Molecular Weight	776.87
Molecular Formula	$C_{15}H_{11}I_4NO_4$
IUPAC Name	(2S)-2-Amino-3-[4-(4-hydroxy-3,5-diiodophenoxy)-3,5-diiodophenyl]propanoic acid
InChI	InChI=1S/C15H11I4NO4/c16-8-4-7(5-9(17)13(8)21)24-14-10(18)1-6(2-11(14)19)3-12(20)15(22)23/h1-2,4-5,12,21H,3,20H2,(H,22,23)/t12-/m0/s1
InChI Key	XUIIKFGFIJCVMT-LBPRGKRZSA-N
Canonical SMILES	<chem>C1=C(C=C(C(=C1)OC2=CC(=C(C(=C2)I)O)I)I)CC(C(=O)O)N</chem>
Form	Lyophilized powder
Purity	≥98%
Impurities	Free from inappropriate visible particulates, foreign matter, discoloration, or other defects.
Solubility	<i>In vitro</i> : DMSO: 96 mg/mL (123.57 mM); Water: insoluble; Ethanol: insoluble
Identity	Confirmed by NMR/HPLC/MS.
Stability	In its lyophilized form, the chemical remains stable for 36 months.
Quality Level	Research grade



Applications

L-Thyroxine plays a key role in inhibiting the overproduction of thyroid-stimulating hormone (TSH) through negative feedback on the hypothalamus and pituitary gland.

Storage

Store at -20°C, and keep desiccated.
