

PRODUCT INFORMATION

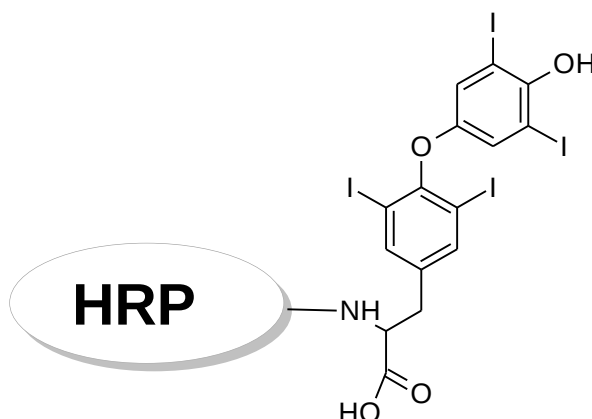
T4-HRP

Cat. No. T4HRP.1 (1 mg)

Cat. No. T4HRP.2 (5 mg)

Cat. No. T4HRP.3 (10 mg)

T4 – Horseradish Peroxidase Conjugate



- L-Thyroxine – enzyme conjugate with horseradish peroxidase
- Reagent for T4 ELISA with commonly used anti T4-antibodies
- High activity
- Improved stability

Product Data

product name:	T4-HRP.1
raw material:	horseradish peroxidase type VI-A
activity:	1500 U/mg solid
label:	T4 (L-Thyroxine)
quantity:	1 mg
conjugation ratio:	POD/T4: 1:1
purity:	> 99% (HPLC)
form:	lyophilized, essentially salt free
reconstitution:	1 ml PBS without azide
working dilution (ELISA)	1:5000 – 1:10000
storage:	-20°C, dry
usage:	For research use only. Not intended for diagnostic use. Suitable for use in immunoassay development or other applications.
keywords:	thyroxine; T4; T3; thx; thyroxinal; Thyrax; Henning; tetraiodothyronine, triiodothyronine, diiodophenyl-L-alanine; DL-thyroxine, T4-HRP, T4-POD

Information

The thyroid hormones, triiodothyronine (T₃) and thyroxine (T₄), are tyrosine-based hormones produced by the thyroid gland that are primarily responsible for regulation of metabolism. Iodine is necessary for the production of T₃ and T₄. A deficiency of iodine leads to decreased production of T₃ and T₄, enlarges the thyroid tissue and will cause the disease known as goitre. The major form of thyroid hormone in the blood is thyroxine (T₄), which has a longer half-life than T₃. The ratio of T₄ to T₃ released into the blood is roughly 20 to 1. T₄ is converted to the active T₃ (three to four times more potent than T₄) within cells by deiodinases (5'-iodinase). These are further processed by decarboxylation and deiodination to produce iodothyronamine (T_{1a}) and thyronamine (T_{0a}). All three isoforms of the deiodinases are selenium-containing enzymes, thus dietary selenium is essential for T₃ production.

References

1. Kirkegaard C, Faber J (1998). "The role of thyroid hormones in depression". Eur J Endocrinol 138 (1): 1–9.
2. Dratman M, Gordon J (1996). "Thyroid hormones as neurotransmitters". Thyroid 6 (6): 639–47.

Ordering Information

Product	Quantity	Product Name	Cat.-No.	Price* [EUR]
T4-HRP	1 mg	T4 horseradish peroxidase conjugate	T4HRP.1	355,- €
T4-HRP	5 mg	T4 horseradish peroxidase conjugate	T4HRP.2	1495,- €
T4-HRP	10 mg	T4 horseradish peroxidase conjugate	T4HRP.3	2195,- €

* For bulk package size please inquire. Prices do not contain shipping costs, please inquire. Last updated: 2023-01-08