

Datasheet for ABIN7198245

Thyroperoxidase Protein (His tag)



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Overview

Quantity:	100 µg
Target:	Thyroperoxidase (TPO)
Origin:	Human
Source:	Baculovirus infected Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This Thyroperoxidase protein is labelled with His tag.

Product Details

Purpose:	Recombinant Human Thyroid peroxidase/TPO Protein (257 Ser/Ala, 725 Pro/Thr, His Tag)
Sequence:	Met 1-Arg846, 257 Ser/Ala, 725 Pro/Thr
Characteristics:	A DNA sequence encoding the human TPO (P07202-1) extracellular domain (Met 1-Arg846, 257 Ser/Ala, 725 Pro/Thr) was fused with a polyhistidine tag at the C-terminus.
Purity:	> 95 % as determined by reducing SDS-PAGE.
Endotoxin Level:	< 1.0 EU per µg as determined by the LAL method.

Target Details

Target:	Thyroperoxidase (TPO)
Alternative Name:	Thyroid peroxidase/TPO (TPO Products)
Background:	Background: Thyroid peroxidase is a membrane-bound glycoprotein which belongs to the peroxidase family, XPO subfamily. It contains 1 EGF-like domain and 1 Sushi (CCP/SCR) domain. Thyroid Peroxidase represents one of the main autoantigenic targets in autoimmune

Target Details

thyroid disease of humans. It used to be taken as the formerly so-called 'microsomal antigen' several years ago. As an integral membrane glycoprotein it is restricted to the apical plasma membrane of the follicular epithelial cells and comprises two identical subunits of approx 100 kDa molecular weight. Thyroid peroxidase is an enzyme expressed abundantly in the thyroid that liberates iodine for addition onto tyrosine residues on thyroglobulin for the production of thyroxine or triiodothyronine, thyroid hormones. Thyroid peroxidase plays a key role in the thyroid hormone biosynthesis by catalysing both the iodination of tyrosyl residues and the coupling of iodotyrosyl residues in thyroglobulin to form precursors of the thyroid hormones T4 and T3.

Synonym: MSA,TDH2A,TPX

Molecular Weight: 93.8 kDa

Pathways: [Thyroid Hormone Synthesis](#)

Application Details

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: Please refer to the printed manual for detailed information.

Buffer: Lyophilized from sterile 20 mM Tris, 500 mM NaCl, pH 7.4, 10 % glycerol

Storage: 4 °C,-20 °C,-80 °C

Storage Comment: Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.