

Datasheet for ABIN7275771

Thyroperoxidase Protein (AA 19-846) (His tag)**2** Images[Go to Product page](#)

Overview

Quantity:	100 µg
Target:	Thyroperoxidase (TPO)
Protein Characteristics:	AA 19-846
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This Thyroperoxidase protein is labelled with His tag.

Product Details

Purpose:	Human Thyroid Peroxidase Protein
Sequence:	Phe19-Arg846
Characteristics:	Recombinant Human Thyroid Peroxidase Protein is expressed from HEK293 with His tag at the C-Terminus.It contains Phe19-Arg846.
Purity:	> 95 % as determined by Tris-Bis PAGE,> 95 % as determined by HPLC
Sterility:	0.22 µm filtered
Endotoxin Level:	Less than 1EU per µg by the LAL method.

Target Details

Target:	Thyroperoxidase (TPO)
Alternative Name:	Thyroid Peroxidase (TPO Products)

Target Details

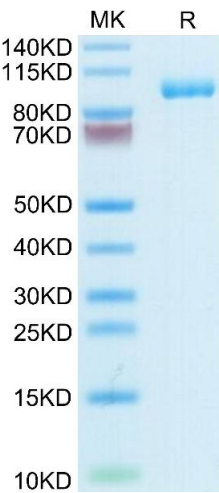
Background:	Thyroid peroxidase, also called thyroperoxidase (TPO) or iodide peroxidase that encodes a 933 amino-acid residue (aa) molecule with a single membrane-spanning region. Thyroid peroxidase plays a key role in thyroid hormone synthesis by catalyzing both the iodination of tyrosine residues to form monoiodotyrosine (MIT) and diiodotyrosine (DIT) residues and the coupling of iodotyrosine residues in Tg, resulting in the formation of T3 and T4. It is a frequent epitope of autoantibodies in autoimmune thyroid disease, for example, the expression of thyroid peroxidase is lost in papillary thyroid carcinoma.
Molecular Weight:	90.6 kDa. Due to glycosylation, the protein migrates to 95-105 kDa based on Tris-Bis PAGE result.
Pathways:	Thyroid Hormone Synthesis

Application Details

Restrictions:	For Research Use only
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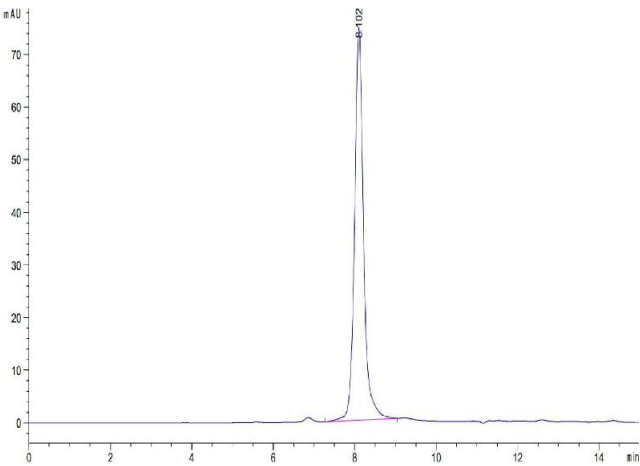
Handling

Format:	Liquid
Buffer:	Supplied as 0.22µm filtered solution in 20 mM Tris, 500 mM NaCl, 10 % Glycerol (pH 7.4).
Storage:	-80 °C
Storage Comment:	Valid for 12 months from date of receipt when stored at -80°C., Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.
Expiry Date:	12 months



SDS-PAGE

Image 1. Human TPO/Thyroid Peroxidase on Tris-Bis PAGE under reduced condition. The purity is greater than 95 % .



Size-exclusion chromatography-High Pressure Liquid Chromatography

Image 2. The purity of Human TPO/Thyroid Peroxidase is greater than 95 % as determined by SEC-HPLC.