

# Native Human Thyroid Peroxidase

**Cat. No.** TPO-702H    **Lot. No.** (See product label)

## SPECIFICATION

<b>Product Overview</b>	Native human TPO is purified Human Thyroid Glands.
<b>Species</b>	Human
<b>Source</b>	Human Thyroids
<b>Description</b>	Thyroid Peroxidase (TPO) is a membrane-bound glycoprotein. TPO acts as an enzyme and plays a central role in thyroid gland function. It functions in the iodination of tyrosine residues in thyroglobulin and phenoxo-ester formation between pairs of iodinated tyrosines to generate the thyroid hormones, Thyroxine and Triiodothyronine. Mutations in TPO are associated with several disorders of thyroid hormoneogenesis, including congenital hypothyroidism, congenital goiter, and thyroid hormone organification defect IIA.
<b>Form</b>	Liquid in 20 mM Tris+ 50 mM KCl, pH 7.5 without preservative
<b>Concentration</b>	1.0 mg/mL
<b>Purity</b>	>98% by SDS-PAGE
<b>Storage</b>	Store in working aliquots at -20°C. Avoid repeated freeze-thaw cycles.
<b>Official Symbol</b>	TPO

## GENE INFORMATION

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<b>Gene Name</b>	TPO thyroid peroxidase [ Homosapiens ]
<b>Synonyms</b>	TPO; thyroidperoxidase; MSA; TPX; TDH2A; thyroperoxidase; OTTHUMP00000115303; OTTHUMP00000115304; OTTHUMP00000115535; OTTHUMP00000115536; thyroidmicrosome antigen; EC 1.11.1.8; EC 1.11.1
<b>Gene ID</b>	7173
<b>mRNA Refseq</b>	NM_000547
<b>Protein Refseq</b>	NP_000538
<b>MIM</b>	606765
<b>UniProt ID</b>	P07202
<b>Chromosome Location</b>	2p25
<b>Pathway</b>	Amine-derived hormones; Autoimmune thyroid disease; Cytokine-cytokine receptor interaction; Hematopoietic cell lineage; Jak-STAT signaling pathway; Metabolic pathways; Metabolism; Metabolism of amino acids and derivatives; Thyroid hormone biosynthesis; Thyroxine biosynthesis; Tyrosine metabolism
<b>Function</b>	calcium ion binding; heme binding; iodide peroxidase activity; oxidoreductase activity; peroxidase activity

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