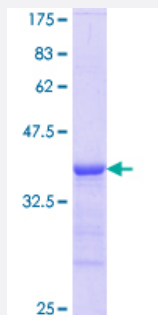


TPO (Human) Recombinant Protein (Q01)

Catalog # H00007173-Q01

Size 25 ug, 10 ug

Applications



Specification

Product Description	Human TPO partial ORF (NP_000538.3, 672 a.a. - 779 a.a.) recombinant protein with GST-tag at N-terminal.
Sequence	WENSHVFTDAQRRELEKHSLSRVICDNTGLTRVPMDAFQVGKFPEDFESCDSITGMNLEAWRET FPQDDKCGFPESVENGDVHCEEGRRLVYSCRHGYELQGREQ
Host	Wheat Germ (in vitro)
Theoretical MW (kDa)	37.62
Preparation Method	in vitro wheat germ expression system
Purification	Glutathione Sepharose 4 Fast Flow
Quality Control Testing	12.5% SDS-PAGE Stained with Coomassie Blue.
Storage Buffer	50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Best use within three months from the date of receipt of this protein.

Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — TPO

Entrez GeneID	7173
GeneBank Accession#	NM_000547
Protein Accession#	NP_000538.3
Gene Name	TPO
Gene Alias	MSA, TPX
Gene Description	thyroid peroxidase
Omim ID	274500 606765
Gene Ontology	Hyperlink
Gene Summary	This gene encodes a membrane-bound glycoprotein. The encoded protein acts as an enzyme and plays a central role in thyroid gland function. The protein 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 this gene are associated with several disorders of thyroid hormonogenesis, including congenital hypothyroidism, congenital goiter, and thyroid hormone organification defect IIA. Multiple transcript variants encoding distinct isoforms have been identified for this gene. Additional splice variants have been described but their biological natures have not been determined. [provided by RefSeq]
Other Designations	OTTHUMP00000115304 OTTHUMP00000115536 thyroid microsomal antigen thyroperoxidase

Pathway

- [Autoimmune thyroid disease](#)
- [Cytokine-cytokine receptor interaction](#)

- [Hematopoietic cell lineage](#)
- [Jak-STAT signaling pathway](#)
- [Metabolic pathways](#)
- [Tyrosine metabolism](#)

Disease

- [Atherosclerosis](#)
- [Calcinosis](#)
- [Coronary Artery Disease](#)
- [Disease Progression](#)
- [Genetic Predisposition to Disease](#)
- [Glomerulonephritis](#)
- [Hypothyroidism](#)
- [Myocardial Infarction](#)
- [Thyroid Dysgenesis](#)
- [Thyroid Neoplasms](#)
- [Tobacco Use Disorder](#)