

## Product datasheet for TP310659

### Thyroid Peroxidase (TPO) (NM\_000547) Human Recombinant Protein

#### Product data:

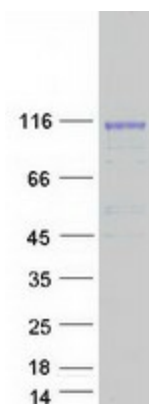
<b>Product Type:</b>	Recombinant Proteins
<b>Description:</b>	Recombinant protein of human thyroid peroxidase (TPO), transcript variant 1, 20 µg
<b>Species:</b>	Human
<b>Expression Host:</b>	HEK293T
<b>Expression cDNA Clone or AA Sequence:</b>	>RC210659 protein sequence <b>Red</b> =Cloning site <b>Green</b> =Tags(s)
	<p>MRALAVLSVTLVMACTEAFPPFISRGKELLWGKPEESRVSSVLEESKRLVDTAMYATMQRNLLKRGILSA  AQLLSFSKLPPTSGVIARAAEIMETSIAQMKRKNLKTQQSQHPTDALSEDLLSIANMSGCLPYMLPP  KCPNTCLANKYRPITGACNNRDHPRWGSNTALARWLPVYEDGFSQPRGWNPGLYNGFPLPPVREVTR  HVIQVSNEVVTDDDRYSDLLMAWGQYIDHDIAFTPQSTSKAAFGGGADCQMTENQNPCFPIQLPEEARP  AAGTAQLPFYRSSAACGTGDQGALFGNLSTANPRQQMNGLTSFLDASTVYGSSPALERQLRNWTSAEGLL  RVHARLRDSGRAYLPFVPPRAPAACAPEPGIPGETRGPCFLAGDGRASEVPSLTALHTLWLREHNRLAAA  LKALNAHWSADAVYQEARKVVGALHQIITLRDYIPRILGPEAFQYVGPYEGYDSTANPTVSNVFSTAAF  RFGHATHIPLVRRLDASFQEHDPDLPGLWLHQAFFSPWTLRGGGLDPLIRGLLARPALQVQDQLMNEEL  TERLFVLSNSSTLDLASINLQRGRDHGLPGYNEWREFCGLPRLETPADLSTAIASRSVADKILDLYKHPD  NIDVWLGGLAENFLPRARTGPLFACLIGKQMKALRDGDWFWWENSHVFTDAQRRELEKHLSRVICDNTG  LTRVPMDAFQVGKFPEDFESCDSITGMNLEAWRETFPQDDKCGFPESVENGFVHCEESGRRVLVYSCRH  GYELQGREQLTCTQEGWDFQPPLCKDVNECADGAHPPCHASARCRNTKGGFQCLCADPYELGDDGRTCV  SGRLPRVTWISMSLAALLIGGFAGLTSTVICRWTRTGKSTLPISETGGGTPELRCGKHQAVGTSPQRAA  AQDSEQESAGMEGRDTHRLPRAL</p> <p><b>TRPLEQKLISEEDLAANDILDYKDDDDKV</b></p>
<b>Tag:</b>	C-Myc/DDK
<b>Predicted MW:</b>	102.8 kDa
<b>Concentration:</b>	>0.05 µg/µL as determined by microplate BCA method
<b>Purity:</b>	> 80% as determined by SDS-PAGE and Coomassie blue staining
<b>Buffer:</b>	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
<b>Preparation:</b>	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.



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<b>Note:</b>	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
<b>Storage:</b>	Store at -80°C.
<b>Stability:</b>	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
<b>RefSeq:</b>	<a href="#">NP_000538</a>
<b>Locus ID:</b>	7173
<b>UniProt ID:</b>	<a href="#">P07202</a>
<b>RefSeq Size:</b>	3152
<b>Cytogenetics:</b>	2p25.3
<b>RefSeq ORF:</b>	2799
<b>Synonyms:</b>	MSA; TDH2A; TPX
<b>Summary:</b>	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 phenoxy-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, but the full-length nature of some variants has not been determined. [provided by RefSeq, May 2011]
<b>Protein Families:</b>	Druggable Genome, ES Cell Differentiation/IPS, Transmembrane
<b>Protein Pathways:</b>	Autoimmune thyroid disease, Cytokine-cytokine receptor interaction, Hematopoietic cell lineage, Jak-STAT signaling pathway, Metabolic pathways, Tyrosine metabolism

### Product images:



Coomassie blue staining of purified TPO protein (Cat# TP310659). The protein was produced from HEK293T cells transfected with TPO cDNA clone (Cat# [RC210659]) using MegaTran 2.0 (Cat# [TT210002]).