

Product datasheet for PH310659

Thyroid Peroxidase (TPO) (NM_000547) Human Mass Spec Standard

Product data:

Product Type:	Mass Spec Standards
Description:	TPO MS Standard C13 and N15-labeled recombinant protein (NP_000538)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC210659
Predicted MW:	102.9 kDa
Protein Sequence:	>RC210659 protein sequence Red=Cloning site Green=Tags(s)
	<p>MRALAVLSVTLVMACTEAFPPFISRGKELLWGKPEESRVSSVLEESKRLVDTAMYATMQRNKKRGILSA AQLLSFSKLEPTSGVIARAAEIMETSIQAMKRKVNLKTQQSQHPTDALSEDLLSIIANMSGCLPYMLPP KCPNNTCLANKYRPITGACNDRDHPRWGASNTALARWLPVYEDGFSQPRGWNPGLYNGFPLPPVREPTR HVIQVSNVETDDDRYSDLLMAWGQYIDHDI AFTPQSTSKAAFGGGADCQMTCEQNPCFPIQLPEEARP AAGTACLPFYRSSAACGTGDQGFNLSTANPRQMNGLTSFLDASTVYGSSPALERQLRNWTSAEGLL RVHARLRDSDGRAYLPFVPPRAPAACAPEPGIPGETRGPCFLAGDGRASEVPSLTALHTLWLREHNRLAAA LKALNAHWSADAVYQEARKVVGALHQIITLTDYIPRILGPEAFQQYVGPYEGYDSTANPTVSNVSTAAF RFGHATIHPLVRRLDASFQEHDPDLPLWLHQAFFSPWTLRGGGLDPLIRGLLARPAKLQVQDQLMNEEL TERL FVLSNSSTLDLASINLQRGRDHGLPGYNEWREFCGLPRLETPADLSTAIASRSVADKILDLYKHPD NIDVWLGGLAENFLPRARTGPLFAELIGKQMKALRDGDWFWWENSHVFTDAQRRELEKHSLSRVICDNTG LTRVPMDAFQVGKFPEDFESCDSTIGMNEAWRETFPQDDKCGFPESVENGDVHCEESGRRVLYVSCRH GYELQGREQLTCTQEGWDFQPPLCKDVNECADGAHPCHASARCNTKGGFQCLCADPYELGDDGRTCV SGRLPRVTWISMSLAALLIGGFAGLTSTVICRWTRTGKSTLPISETGGGPELRCGKHQAVGTSPQRAA AQDSEQESAGMEGRDTHRLPRAL</p> <p>TRPLEQKLI SEEDLAANDILDYKDDDDKV</p>
Tag:	C-Myc/DDK
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- ¹³ C ₆ , ¹⁵ N ₄]-L-Arginine and [U- ¹³ C ₆ , ¹⁵ N ₂]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.



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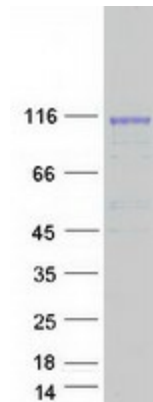
RefSeq: [NP_000538](#)
RefSeq Size: 3152
RefSeq ORF: 2799
Synonyms: MSA; TDH2A; TPX
Locus ID: 7173
UniProt ID: [P07202](#), [Q502Y3](#), [Q6P534](#)
Cytogenetics: 2p25.3

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 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]

Protein Families: Druggable Genome, ES Cell Differentiation/IPS, Transmembrane

Protein Pathways: 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]).