

# Recombinant Human TPO Protein, Myc/DDK-tagged, C13 and N15-labeled

**Cat. No.** TPO-561H    **Lot. No.** (See product label)

## SPECIFICATION

### Product Overview

TPO MS Standard C13 and N15-labeled recombinant protein (NP\_000538) with a C-terminal MYC/DDK tag, was expressed in HEK293 cells.

### Species

Human

### Source

HEK293

### Description

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.

### Molecular Mass

102.9 kDa

### AA Sequence

MRALAVLSVTLVMACTEAFPPFISRGKELLWGKPEESRVSSVLEESKRLVDTAMYAT  
 MQRNLKKGILSAAQLLSFSKLEPTSGVIARAAEIMETSIQAMKRKVNLTQQSQHP  
 TDALSEDLLSIANMSGCLPYMLPPKCPNTCLANKYRPITGACNNRDHPRWVGASNTA  
 LARWLPPVYEDGFSQPRGWNPGFLYNGFPLPPVREVTRHVIQVSNEVVTDDDRYS

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DLLMAWGQYIDHDIAFTPQSTSKAAFGGGADCQMTCCENQNPCFPIQLPEEARPAAG  
 TACLPFYRSSAACGTGDQGGALFGNLSTANPRQQMNGLTSTFLDASTVYGSSPALER  
 QLRNWTSAEGLLRVHARLRDSDGRAYLPFVPPRAPAACAPEPGIPGETRGPCFLAGD  
 GRASEVPSLTALHTLWLREHNRLAAALKALNAHWSADAVYQEARKVVGALHQIITLR  
 DYIPRILGPEAFQQYVGPYEGYDSTANPTVSNVFSTAAFRFGHATHPLVRRLDASF  
 QEHPDLPLGLWLHQAFFSPWTLLRGGGLDPLIRGLLARPAPKLQVQDQLMNEELTERL  
 FVLSNSSTLDLASINLQRGRDHGLPGYNEWREFCGLPRLETPADLSTAIASRSVADKI  
 LDLYKHPDNIDVWLGGLAENFLPRARTGPLFACLIGKQMKALRDGDWFWWENSHV  
 FTDAQRRELEKHSLSRVICDNTGLTRVPMDAFQVGKFPEDFESCDSITGMNLEAWR  
 ETFPQDDKCGFPESVENGDVHCEESGRRVLVYSCRHGYELQGREQLTCTQEGW  
 DFQPPLCKDVNECADGAHPPCHASARCRNTKGGFQCLCADPYELGDDGRTCVDSD  
 GRLPRVTWISMSLAALLIGGFAGLTSTVICRWTRTGKSTLPISETGGGTPELRCGKH  
 QAVGTSPQRAAAQDSEQESAGMEGRDTHRLPRALTRPLEQKLISEEDLAANDILDY  
 KDDDDKV

**Purity** > 80% as determined by SDS-PAGE and Coomassie blue staining

**Stability** Stable for 3 months from receipt of products under proper storage and handling conditions.

**Storage** Store at -80 centigrade. Avoid repeated freeze-thaw cycles.

**Concentration** 50 µg/mL as determined by BCA

**Storage Buffer** 100 mM glycine, 25 mM Tris-HCl, pH 7.3.

## GENE INFORMATION

**Gene Name** TPO thyroid peroxidase [ Homo sapiens (human) ]

**Official Symbol** TPO

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**Synonyms** TPO; thyroid peroxidase; TPX; thyroperoxidase; thyroid microsomal antigen; MSA; TDH2A;

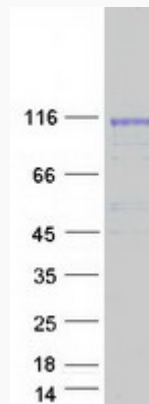
**Gene ID** 7173

**mRNA Refseq** NM\_000547

**Protein Refseq** NP\_000538

**MIM** 606765

**UniProt ID** P07202

**SDS-PAGE**

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