

## Recombinant Human Thrombopoietin, His-tagged

Cat. No. THPO-98H Lot. No. (See product label)

### SPECIFICATION

**Product Overview** Recombinant Human Thrombopoietin encoding the human TPO (NP\_000451.1) precursor (Met 1- Gly 353) with a N-terminal his tag was expressed in HEK293.

**Species** Human

**Source** HEK293

**Protein Length** 1-353 a.a.

**Description** Thrombopoietin (TPO) is a hematopoietic growth factor that is involved in the regulation of platelet production. This cytokine is composed of an amino-terminal erythropoietin-like domain which is the functional domain and a highly glycosylated carboxyl domain that appears to stabilize circulating thrombopoietin. TPO stimulates both proliferation of progenitor megakaryocytes and their maturation to platelet-producing megakaryocytes, and also accelerates the recovery of platelets. It has been identified that surface c-MPL, the receptor for TPO, binds to the ligand and mediates the action. TPO has multilineage effects in hematopoiesis, not only stimulating megakaryocytopoiesis but also acting in synergy with other cytokines to enhance proliferation and survival of committed erythroid progenitors and primitive hematopoietic stem cells. Accordingly, TPO may contribute, at least in part, to leukemogenesis, and represent powerful tools for related analyses.

**Molecular Mass** The recombinant human TPO consists of 348 amino acids with the predicted molecular mass of 37.6 kDa. As a result of glycosylation, rhTPO migrates as an

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

approximately 80 kDa band in SDS-PAGE under reducing conditions.

**Predicted N Terminal** Ser 22.

**Endotoxin** < 1.0 EU per 1g cytokine as determined by the LAL method.

**Formulation** Supplied as a 0.2m filtered solution of PBS, pH7.4.

**Reconstitution** Follow the instructions on the vial. Centrifuge the vial at 4°C before opening to recover the entire contents.

**Purity** > 95%, as determined by SDS-PAGE.

**Stability** Samples are stable for up to twelve months from date of receipt -70°C.

**Storage** Store it under sterile conditions at -70°C immediately after receipt. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

## GENE INFORMATION

**Gene Name** [THPO thrombopoietin \[ Homo sapiens \]](#)

**Synonyms** THPO; thrombopoietin; ML; TPO; MGDF; MKCSF; MPLLG; MGC163194; MPL ligand; c-mpl ligand; thrombopoietin nirs variant 1; megakaryocyte stimulating factor; megakaryocyte colony-stimulating factor; megakaryocyte growth and development factor; myeloproliferative leukemia virus oncogene ligand

**Gene ID** [7066](#)

**mRNA Refseq** [NM\\_000460](#)

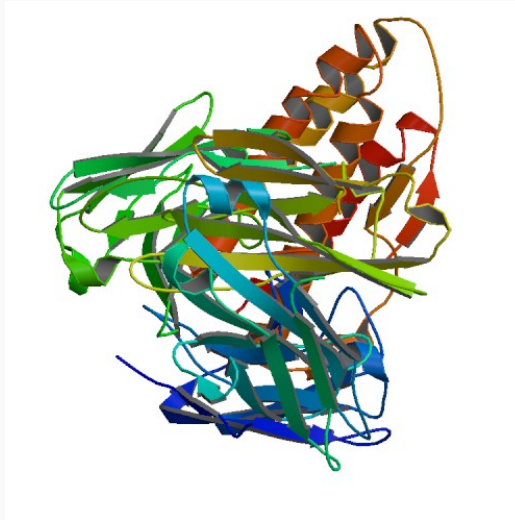
 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

<b>Protein Refseq</b>	NP_000451
<b>MIM</b>	600044
<b>UniProt ID</b>	P40225
<b>Chromosome Location</b>	q27
<b>Pathway</b>	Hematopoietic cell lineage
<b>Function</b>	cytokine activity; growth factor activity; hormone activity

PDB rendering based on 1v7m.



 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA