

# Active Recombinant Human Thrombopoietin

**Cat. No.** THPO-269H    **Lot. No.** (See product label)

## SPECIFICATION

<b>Product Overview</b>	Thrombopoietin Human Recombinant produced in E.Coli is a single, non-glycosylated soluble polypeptide chain containing 174 amino acids and having a molecular mass of 18608 Dalton which comprises the receptor binding domain of the Mpl-ligand protein. The TPO is purified by proprietary chromatographic techniques.
<b>Species</b>	Human
<b>Source</b>	E.coli
<b>Description</b>	THPO is a glycoprotein hormone produced mainly by the liver and the kidney that regulates the production of platelets by the bone marrow. It stimulates the production and differentiation of megakaryocytes, the bone marrow cells that fragment into large numbers of platelets.
<b>Form</b>	Lyophilized from a concentrated (1mg/ml) solution containing 10mM sodium phosphate pH-8.
<b>Purity</b>	Greater than 85.0% as determined by SDS-PAGE.
<b>Bio-activity</b>	The ED50 as determined by the dose-dependant stimulation of MO7e cells is < 0.8 ng/ml.
<b>Physical Appearance</b>	Sterile Filtered White lyophilized (freeze-dried) powder.
<b>Solubility</b>	It is recommended to reconstitute the lyophilized THPO in sterile 18Mμ-cm H2O not

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less than 100g/ml, which can then be further diluted to other aqueous solutions.

**Amino acid sequence**

SPAPPACDLR VLSKLLRDSH VLHSRLSQCP EVHPLPTPVL LPAVDFSLGE  
 WKTQMEETKA QDILGAVTLL LEGVMAARGQ LGPTCLSSLL GQLSGQVRLL  
 LGALQSLLGT QLPPQGRRTA HKDPNAIFLS FQHLLRGKVR FLMLVGGSTL  
 CVRRAPPTTA VPSRTSLVLT LNEL.

**Storage**

Lyophilized THPO although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution TPO Human should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

## GENE INFORMATION

**Gene Name**

THPO thrombopoietin [ Homo sapiens ]

**Official Symbol**

THPO

**Synonyms**

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

**Gene ID**

7066

**mRNA Refseq**

NM\_000460

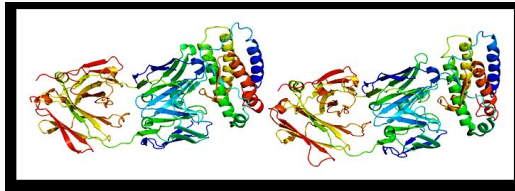
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<b>Protein Refseq</b>	NP_000451
<b>MIM</b>	600044
<b>UniProt ID</b>	P40225
<b>Chromosome Location</b>	3q27
<b>Pathway</b>	Hematopoietic cell lineage
<b>Function</b>	cytokine activity; growth factor activity; hormone activity

PDB rendering based on 1v7m.



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