

Active Recombinant Human Thrombopoietin

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

SPECIFICATION

Product Overview	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.
Species	Human
Source	E.coli
Description	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.
Form	Lyophilized from a concentrated (1mg/ml) solution containing 10mM sodium phosphate pH-8.
Purity	Greater than 85.0% as determined by SDS-PAGE.
Bio-activity	The ED50 as determined by the dose-dependant stimulation of MO7e cells is < 0.8 ng/ml.
Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Solubility	It is recommended to reconstitute the lyophilized THPO in sterile 18M μ -cm H ₂ O not

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

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

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

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

Amino acid sequence

SPAPPACDLR VLSKLLRDSH VLHSRLSQCP EVHPLPTPV 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

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

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

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

Protein Refseq	NP_000451
MIM	600044
UniProt ID	P40225
Chromosome Location	3q27
Pathway	Hematopoietic cell lineage
Function	cytokine activity; growth factor activity; hormone activity
PDB rendering based on 1v7m.	