



Recombinant Human TPO

20220511BB



FOR RESEARCH ONLY! NOT FOR HUMAN USE!

Cat.-no.:	100-109
Size:	10 µg
Lot. No.:	According to product label

Scientific Background

Gene-ID (NCBI):	7124
Synonyms:	Thrombopoietin, Megakaryocyte colony-stimulating factor, c-MPL Ligand, MGDF

Thrombopoietin 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. 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.

Sequence

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SPAPPACDLR VLSKLLRDSH VLHSRLSQCP EVHPLPTPVL  
LPAVDFSLGE WKTQMEETKA QDILGAVTLL LEGVMAARGQ  
LGPTCLSSLL GQLSGQVRL LGALQSLLGT QLPPQGRRTA  
HKDPNAIFLS FQHLLRGKVR FLMLVGGSTL CVRRAPPTTA  
VPSRTSLVLT LNEL
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Database References

Protein RefSeq:	NP_000451.1
Uniprot ID:	P40225
mRNA RefSeq:	NM_000460.2

Product Specifications

Expressed in	E. coli
Purity	> 98% by SDS-PAGE and HPLC analysis
Endotoxin level	< 0.1 ng /µg of protein (<1EU/µg).
Formulation	Lyophilized from 10 mM Sodium Citrate, pH 3.0
Length (aa):	174
MW:	18.6 kDa

Stability: The lyophilized protein is stable at room temperature for 1 month and at 4°C for 6 months. Reconstituted working aliquots are stable for 1 week at 2°C to 8°C and for 12 months at -20°C to -80°C.

Reconstitution: Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/mL. *Do not vortex.* This solution can be stored at 2-8°C for up to 1 week. For extended storage, it is recommended to further dilute in a buffer (e.g. PBS) containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.



AVOID REPEATED FREEZE AND THAW CYCLES!

Biological Activity: The ED₅₀ as determined by its ability to stimulate the proliferation of human MO7e cells is ≤ 1,0 ng/ml, corresponding to a specific activity of ≥ 1 x 10⁶ U/mg.