



Recombinant Human TPO

20160908BB



FOR RESEARCH ONLY! NOT FOR HUMAN USE!

Cat.-no.:	100-109S
Size:	2 µg
Lot. No.:	According to product label

Scientific Background

Gene-ID (NCBI):	7124
Synonyms:	TNF, DIF, TNFA, TNFSF2, TNF-alpha

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 GQLSGQVRLI LGALQSLGTT 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	> 90% by SDS-PAGE
Endotoxin level	< 0.1 ng /µg of protein (<1EU/µg).
Formulation	lyophilized
Length (aa):	174
MW:	18.6 kDa

Stability: Lyophilized TPO although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution human TPO 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.

Reconstitution: It is recommended to reconstitute the lyophilized TPO in sterile water not less than 100µg/ml, which can then be further diluted to other aqueous solutions.



AVOID REPEATED FREEZE AND THAW CYCLES!

Biological Activity: The ED₅₀ as determined by the dose-dependent stimulation of MO7e cells (with SCF) is 1,95 ng/ml, corresponding to a specific activity of 5 x 10⁵ U/mg.