

Recombinant Mouse Thrombopoietin (rm TPO)

Synonyms: Megakaryocyte colony- stimulating factor, MKCSF, Myeloproliferative leukemia virus oncogene ligand, MPLLG, C- mpl ligand, ML, Megakaryocyte growth and development factor, MGDF

Introduction: 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, that bone marrow cells that fragment into large numbers of platelets.

Description: Recombinant mouse Thrombopoietin produced in *E.Coli* is a single, non-glycosylated soluble polypeptide chain containing 174 amino acids and having a molecular mass of 18.7 kDa. The rm TPO is purified by proprietary chromatographic techniques.

Source: *Escherichia Coli*.

Physical Appearance: Sterile filtered white lyophilized (freeze-dried) powder.

Formulation: Lyophilized from a 0.22 µm filtered solution in PBS pH 7.5, The aliquots of 1µg and 2µg contain Trehalose 5% (w/vol) for better recovery

Solubility: It is recommended to reconstitute the lyophilized rm TPO in sterile H₂O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

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

Purity: Greater than 95.0% as verified by SDS-PAGE / silver stain

Endotoxicity: The endotoxin level is less than 1 EU / µg determined by LAL method

Amino Acid Sequence: SPVAPACDPR LLNLLRDSH LLHSRLSQCP DVDPLSIPVL LPAVDFSLGE WKTQTEQSKA QDILGAVSLL LEGVMAARGQ LEPSCLSSLL GQLSGQVRLL LGALQGLLGT QLPLQGRRTA HKDPNALFLS LQQLLRGKVR FLLLVEGPTL CVRRTLPTTA VPSSTSQLLT LNKF

Biological Activity: The biological activity was determined by dose dependent stimulation of proliferation of human megakaryoblastic leukemia cell line M-07e. The ED50 was found to be less than 0.8 ng/ml.

This material is offered for **research only**. Not for use in human. For in vitro use only. ImmunoTools will not be held responsible for patent infringement or other violations that may occur with the use of our products.

<i>small</i>	2 µg	Cat.N°	12343612
<i>medium</i>	10 µg	Cat.N°	12343613
<i>large</i>	50 µg	Cat.N°	12343615
<i>x-large</i>	250 µg	Cat.N°	12343617

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