

## **Product Datasheet**

Product Name	Thrombopoietin Human Recombinant, CHO
Cata No	CB500364
Source	Chinese Hamster Ovarian Cells (CHO)
Synonyms	Megakaryocyte colony-stimulating factor, Myeloproliferative leukemia virus oncogene ligand, C-mpl ligand, ML, Megakaryocyte growth and development factor, MGDF,
	TPO, MKCSF, MPLLG, MGC163194, THPO.

#### Description

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 is approximately 80 kDa, consisting of a 332 amino acid residue with a predicted molecular mass of approximately 35 kDa. As a result of glycosylation, the recombinant protein migrates with an apparent molecular mass of 80±10 kDa in SDS-PAGE.

#### **Physical Appearance**

Sterile Filtered White lyophilized (freeze-dried) powder.

### **Biological Activity**

The ED50 as determined by the dose-dependant stimulation of MO7e cells is 1-3 ng/ml, corresponding to a Specific Activity of 1 x  $10^{6}$  IU/mg.

### Purity

Greater than 97.0% as determined by:(a) Analysis by RP-HPLC.(b) Analysis by SDS-PAGE.

#### Formulation

Lyophilized from a concentrated (1mg/ml) solution in water containing 20mM sodium citrate buffer, pH 6.9.

#### Stability

Lyophilized Thrombopoietin 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.

#### Sequence

SPAPPACDLR VLSKLLRDSH VLHSRLSQCP EVHPLPTPVL LPAVDFSLGE WKTQMEETKA QDILGAVTLL LEGVMAARGQ LGPTCLSSLL GQLSGQVRLL LGALQSLLGT QLPPQGRTTA HKDPNAIFLS FQHLLRGKVR FLMLVGGSTL CVRRAPPTTA VPSRTSLVLT LNELPNRTSG LLETNFTASA RTTGSGLLKW QQGFRAKIPG LLNQTSRSLD QIPGYLNRIH ELLNGTRGLF PGPSRRTLGA PDISSGTSDT GSLPPNLQPG YSPSPTHPPT GQYTLFPLPP TLPTPVVQLH PLLPDPSAPT PTPTSPLLNT SYTHSQNLSQ EG

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