83103 Avenue 48, Ste.1B #204 Coachella, CA 92236 USA Phone: +1.6268339877 Email: info@cali-bio.com

# **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<sup>6</sup> 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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