

## Product datasheet for DA3549

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OriGene Technologies, Inc.

## **Thrombopoietin Human Protein**

**Product data:** 

**Product Type:** Recombinant Proteins

**Description:** Thrombopoietin human recombinant protein, 10 μg

Species: Human
Expression Host: E. coli

**Expression cDNA Clone** 

or AA Sequence:

SPAPPACDLR VLSKLLRDSH VLHSRLSQCP EVHPLPTPVL LPAVDFSLGE WKTQMEETKA QDILGAVTLL LEGVMAARGQ LGPTCLSSLL GQLSGQVRLL LGALQSLLGT QLPPQGRTTA

HKDPNAIFLS FQHLLRGKVR FLMLVGGSTL CVRRAPPTTA VPSRTSLVLT LNEL

**Predicted MW:** 18.6 kDa

Purity: >90% pure by SDS-PAGE

Buffer: Presentation State: Purified

State: Lyophilized (freeze-dried) without buffer and stabilizer

**Biological:** 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  $5 \times 10^5$  U/mg.

Specific: 5 x 10<sup>5</sup> units/mg

**Endotoxin:** < 0.1 ng per μg (IEU/μg) of rh TPO

**Reconstitution Method:** Restore in sterile water not less than 0.1 mg/ml which can then be further diluted into other

aqueous buffers.

**Preparation:** Lyophilized (freeze-dried) without buffer and stabilizer

**Protein Description:** 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.

**Note:** Centrifuge vials before opening!

Storage: 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. Avoid repeated freeze-thaw cycles!





## **Thrombopoietin Human Protein - DA3549**

**Stability:** Shelf life: One year from despatch.

**RefSeq:** NP 000451

 Locus ID:
 7066

 UniProt ID:
 P40225

 Cytogenetics:
 3q27.1

Synonyms: MGDF; MKCSF; ML; MPLLG; THCYT1; TPO

**Summary:** Megakaryocytopoiesis is the cellular development process that leads to platelet production.

The main functional protein encoded by this gene is a humoral growth factor that is necessary for megakaryocyte proliferation and maturation, as well as for thrombopoiesis. This protein is the ligand for MLP/C\_MPL, the product of myeloproliferative leukemia virus oncogene. Mutations in this gene are the cause of thrombocythemia 1. Alternative promoter usage and differential splicing result in multiple transcript variants differing in the 5' UTR and/or coding region. Multiple AUG codons upstream of the main open reading frame (ORF) have been identified, and these upstream AUGs inhibit translation of the main ORF at

different extent. [provided by RefSeq, Feb 2014]

**Protein Families:** Druggable Genome, Secreted Protein

Protein Pathways: Hematopoietic cell lineage