



Synonym

THPO,MGC163194,MGDF,MKCSF,ML,MPLLG,TPO,THCYT1

Source

Human Thrombopoietin Protein, Tag Free(THN-H5214) is expressed from human 293 cells (HEK293). It contains AA Ser 22 - Gly 353 (Accession # [P40225-1](#)).

Molecular Characterization

TPO(Ser 22 - Gly 353)
P40225-1

This protein carries no "tag".

The protein has a calculated MW of 35.6 kDa. The protein migrates as 65-80 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 0.1 EU per µg by the LAL method.

Sterility

Negative

Mycoplasma

Negative.

Purity

>95% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

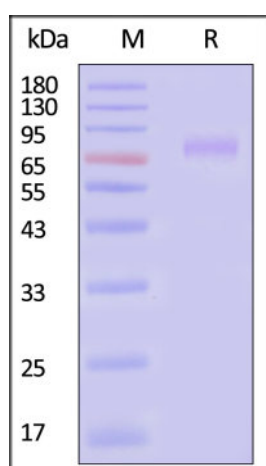
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE

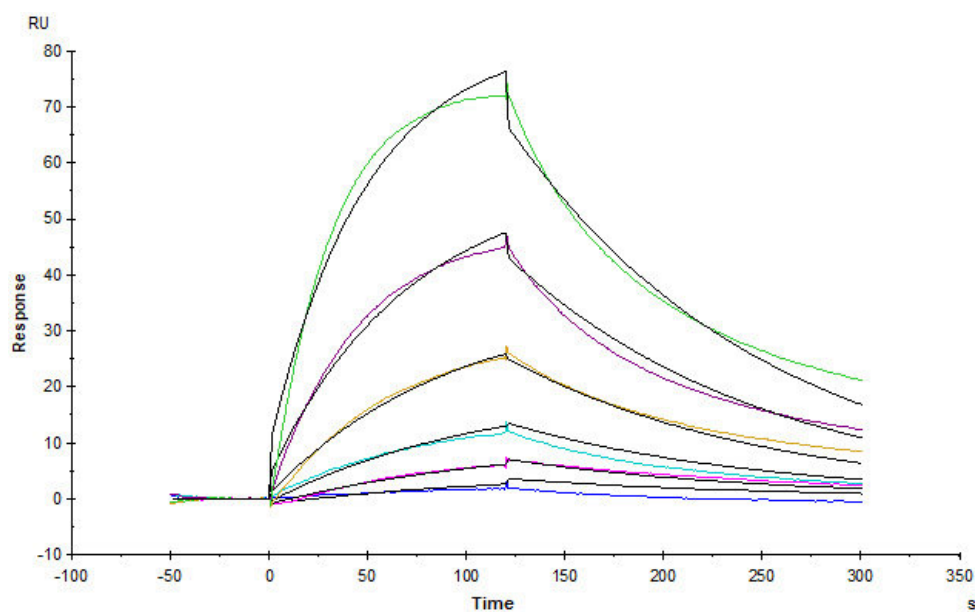


Human Thrombopoietin Protein, Tag Free on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With [Star Ribbon Pre-stained Protein Marker](#)).

Bioactivity-SPR

Discounts, Gifts,
and more!

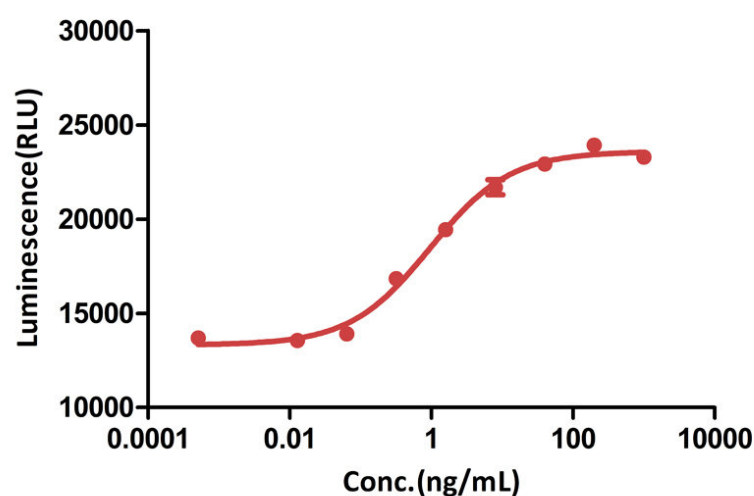




Human Thrombopoietin R, His Tag (Cat. No. THR-H52H7) captured on CM5 Chip via anti-His antibody can bind Human Thrombopoietin Protein, Tag Free (Cat. No. THN-H5214) with an affinity constant of 14.9 nM as determined in SPR assay (Biacore T200) (Routinely tested).

Bioactivity-Bioactivity CELL BASE

Human Thrombopoietin stimulates proliferation of Mo7e cells



Human Thrombopoietin Protein, Tag Free (Cat. No. THN-H5214) stimulates proliferation of Mo7e cells. The specific activity of Human Thrombopoietin Protein, Tag Free is $> 1.0 \times 10^7$ IU/mg (Routinely tested).

Background

Thrombopoietin (TPO) is a 332 amino acid glycoprotein made primarily in the liver and act as the major physiological regulator of platelet production. TPO binds the TPO receptor, activates JAK and STAT pathways, thus stimulating megakaryocyte growth and platelet production. Additionally, further investigation uncovered that thrombopoietin is a critical cytokine promoting hematopoietic rebound after myeloablation and its transcripts are expressed by multiple cellular sources.

Clinical and Translational Updates

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