

Human c-MPL/Thrombopoietin R Protein

Cat. No. MPL-HM101

Description

Source	Recombinant Human c-MPL/Thrombopoietin R Protein is expressed from HEK293 with His tag at the C-Terminus. It contains Gln26-Trp491.
Accession	P40238-1
Molecular Weight	The protein has a predicted MW of 53.6 kDa. Due to glycosylation, the protein migrates to 67-77 kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 0.1EU per µg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

Formulation and Storage

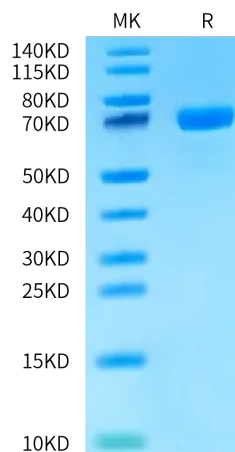
Formulation	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
Storage	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Background

The c-mpl gene encodes a member of the hematopoietic cytokine receptor superfamily. This gene was discovered through the study of a murine retrovirus which induces an acute myeloproliferative syndrome in mice. MPLV (for myeloproliferative leukemia virus) has transduced a truncated and constitutively activated form of the c-mpl receptor chain. High levels of c-mpl expression were detected in 45% of acute myeloid leukemia (AML). No correlation was found between c-mpl expression and the French-American-British classification subtype of AML.

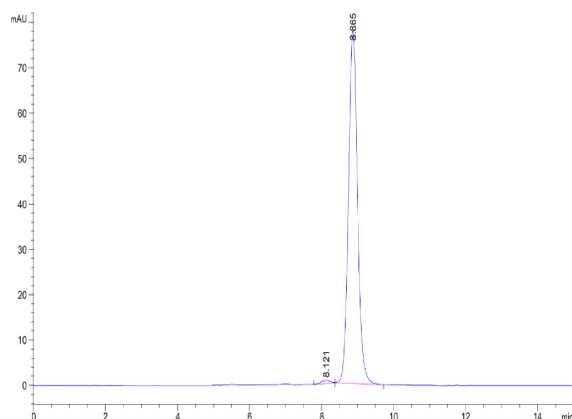
Assay Data

Bis-Tris PAGE



Human c-MPL on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC



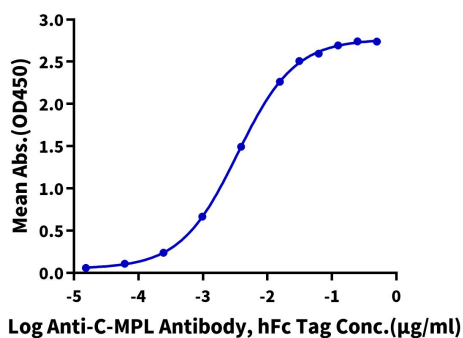
The purity of Human c-MPL is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

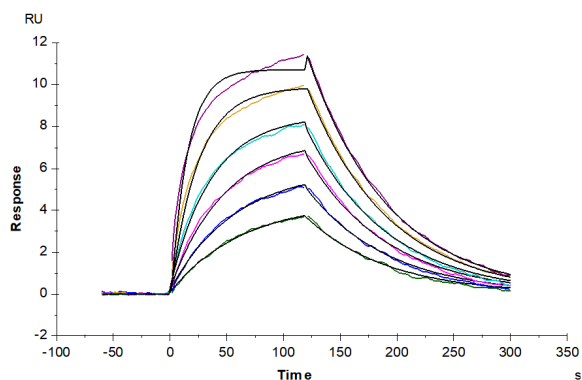
Human c-MPL, His Tag ELISA

0.05µg Human c-MPL, His Tag Per Well



Immobilized Human c-MPL, His Tag at 0.5µg/ml (100µl/Well) on the plate. Dose response curve for Anti-c-MPL Antibody, hFc Tag with the EC50 of 3.4ng/ml determined by ELISA (QC Test).

SPR Data



Human c-MPL, His Tag immobilized on CM5 Chip can bind Human Thrombopoietin, His Tag with an affinity constant of 25.54 nM as determined in SPR assay (Biacore T200).