Rat c-MPL / CD110 / TPOR Protein (Fc Tag)

Catalog Number: **80346-R02H**

General Information

Gene Name Synonym:

MPL

Protein Construction:

A DNA sequence encoding the rat MPL (XP_001072502.1) (Met1-Ala500) was expressed with the Fc region of human IgG1 at the C-terminus.

Source: Rat

Expression Host: HEK293 Cells

QC Testing

Purity: > 95 % as determined by SDS-PAGE.

Endotoxin:

< 1.0 EU per μg protein as determined by the LAL method.

Stability:

Samples are stable for up to twelve months from date of receipt at -70 ℃

Predicted N terminal: Gln 22

Molecular Mass:

The recombinant rat MPL consists of 720 amino acids and predicts a molecular mass of 80.7 kDa.

Formulation:

Lyophilized from sterile PBS, pH 7.4.

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

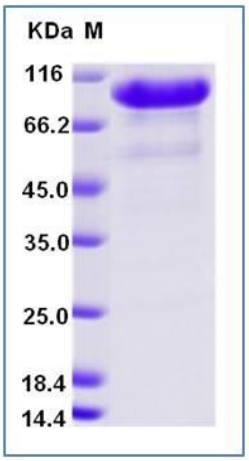
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

CD11, also known as c-MPL, is a 635 amino acid transmembrane domain, with two extracellular cytokine receptor domains and two intracellular cytokine receptor box motifs. It is expressed at a low level in a large number of cells of hematopoietic origin. C-MPL is homologous with members of the hematopoietic receptor superfamily. Presence of anti-sense oligodeoxynucleotides of c-mpl inhibited megakaryocyte colony formation. Thrombopoietin is the ligand for c-mpl. It was shown to be the major regulator of megakaryocytopoiesis and platelet formation. Defects in c-MPL are a cause of congenital amegakaryocytic thrombocytopeniawhich is a disease characterized by isolated thrombocytopenia and megakaryocytopenia with no physical anomalies. Defects in c-MPL also cause thrombocythemia type 2 and myelofibrosis with myeloid metaplasia.

References

1.Vigon I., *et al.*,(1992), Molecular cloning and characterization of MPL, the human homolog of the v-mpl oncogene: identification of a member of the hematopoietic growth factor receptor superfamily. Proc. Natl. Acad. Sci. U.S.A. 89:5640-5644. 2.Mignotte V., *et al.*, (1994), Structure and transcription of the human c-mpl gene (MPL).Genomics 20:5-12. 3.Gregory S.G., *et al.*,(2006), The DNA sequence and biological annotation of human chromosome 1.Nature 441:315-321.