



Recombinant Protein Technical Manual  
Recombinant Rat c-MPL/CD110/TPOR Protein (His  
Tag)  
RPES4512

Product Data:

**Product SKU:** RPES4512

**Size:** 50µg

**Species:** Rat

**Expression host:** Baculovirus-Insect Cells

**Uniprot:**

Protein Information:

**Molecular Mass:** 55.1 kDa

**AP Molecular Mass:** 55 kDa

**Tag:** C-His

**Bio-activity:**

**Purity:** > 90 % as determined by SDS-PAGE

**Endotoxin:** < 1.0 EU per µg of the protein as determined by the LAL method

**Storage:** Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation:** Lyophilized from sterile 20mM Tris, 500mM NaCl, 3mM DTT, 10%glycerol, pH 7.5

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** MPL

## Immunogen Information:

**Sequence:** Met1-Ala500

## Background:

CD110, 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 thrombocytopenia which 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.