**General Information**

**Gene Name Synonym:**
MGDF; MKCSF; ML; MPLLG; THCYT; TPO

**Protein Construction:**
A DNA sequence encoding the human THPO (NP_000451.1) (Met1-Leu192) was expressed with the Fc region of human IgG1 at the C-terminus.

**Source:**
Human

**Expression Host:**
Human Cells

**QC Testing**

**Purity:** > 70 % 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 °C

**Predicted N terminal:**
Ser 22

**Molecular Mass:**
The recombinant human THPO consists 409 amino acids and predicts a molecular mass of 45 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°C to -80°C 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.

**Protein Description**

Thrombopoietin (TPO or THPO), also known as myeloproliferative leukemia virus ligand (c-Mpl), is a hematopoietic growth factor belonging to the EPO/TPO family. The thrombopoietin protein is produced mainly by the liver and the kidney that regulates the production of platelets by the bone marrow. Thrombopoietin protein stimulates both proliferation of progenitor megakaryocytes and their maturation to platelet-producing megakaryocytes, and also accelerates the recovery of platelets. Thrombopoietin protein is involved in cardiovascular disease as it regulates megakaryocyte development and enhances platelet adhesion/aggregation. It has been identified that surface c-MPL, the receptor for thrombopoietin protein, binds to the ligand and mediates the action.

**References**