Mouse Thrombopoietin / THPO / TPO Protein (His Tag)

Catalog Number: **50146-M08H**

Sino Biological Inc.
Biological Solution Specialist

General Information

Gene Name Synonym:

Thpo, RP23-148P12.1, Mpllg, TPO, TPO-1, TPO-2, TPO-3, TPO-4

Protein Construction:

A DNA sequence encoding the mouse THPO (NP_033405.1) precursor (Met 1-Thr 356) with a N-terminal polyhistidine tag was expressed.

Source: Mouse

Expression Host: Human Cells

QC Testing

Purity: > 90 % as determined by SDS-PAGE

Bio-Activity

Measured in a cell proliferation assay using MO7e human megakaryocytic leukemic cells.
The ED50 for this effect is typically 0.5-2.5 ng/mL.

Endotoxin:

< 1.0 EU per μg of the 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: Ser 22

Molecular Mass:

The recombinant mouse THPO consists of 346 amino acids with the predicted molecular mass of 37 kDa. As a result of glycosylation, rmTHPO migrates as an approximately 80-90 kDa band in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile PBS, pH 7.4

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

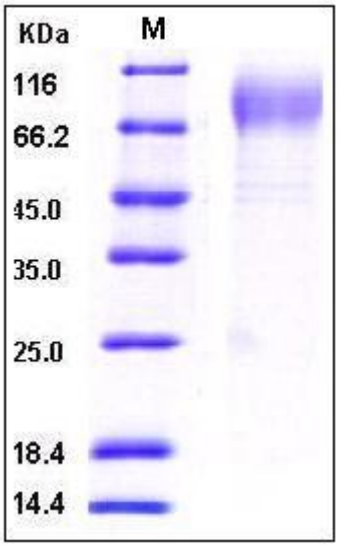
Usage Guide

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.

SDS-PAGE:



Reconstitution:

Detailed reconstitutio ducts.

Protein Descri

Thrombopoietin (THPO) is a hematopoietic growth factor that is involved in the regulation of platelet production. This cytokine is composed of an amino-terminal erythropoietin-like domain which is the functional domain and a highly glycosylated carboxyl domain that appears to stabilize circulating thrombopoietin. THPO stimulates both proliferation of progenitor megakaryocytes and their maturation to platelet-producing megakaryocytes, and also accelerates the recovery of platelets. It has been identified that surface c-MPL, the receptor for THPO, binds to the ligand and mediates the action. THPO has multilineage effects in hematopoiesis, not only stimulating megakaryocytopoiesis but also acting in synergy with other cytokines to enhance proliferation and survival of committed erythroid progenitors and primitive hematopoietic stem cells. Mouse THPO is found mainly in the liver, kidney and skeletal muscle.

References

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2. de Sauvage FJ, et al., 1994, Nature, 369 (6481): 533-8.
3. Eaton DL,et al., 1995, Curr Opin Hematol, 2 (3): 167-71.
4. Lok S,et al., 1994, Stem Cells, 12 (6): 586-98.
5. Drexler HG,et al., 1996, Leukemia, 10 (9): 1405-21.
6. Miyazaki H,et al., 1999, Int J Hematol, 70 (4): 216-25.