

Recombinant mouse Thrombopoietin protein

Catalog Number: ATGP3930

PRODUCT INFORMATION

Expression system

HEK293

Domain

22-356aa

UniProt No.

P40226

NCBI Accession No.

NP_033405

Alternative Names

Thpo, C-mpl ligand, ML, Megakaryocyte colony-stimulating factor, Megakaryocyte growth and development factor, MGDF, Myeloproliferative leukemia virus oncogene ligand, Mgdg, MI, Mpllg, Tpo, thrombopoietin isoform 1

PRODUCT SPECIFICATION

Molecular Weight

36.4 kDa (341aa)

Concentration

0.5mg/ml (determined by absorbance at 280nm)

Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol

Purity

> 90% by SDS-PAGE

Endotoxin level

< 1 EU per 1ug of protein (determined by LAL method)

Biological Activity

Measured in a cell proliferation assay using MO7e human megakaryocytic leukemic cells. The ED50 range ≤ 4 ng/ml.

Tag

His-Tag

Application

SDS-PAGE, Bioactivity

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

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BACKGROUND

Description

Thrombopoietin (THPO), also known as megakaryocyte growth and development factor (MGDF), is a glycoprotein hormone produced by the liver and kidney which regulates the production of platelets. It stimulates the production and differentiation of megakaryocytes, the bone marrow cells that bud off large numbers of platelets. Megakaryocytopoiesis is the cellular development process that leads to platelet production. It is a humoral growth factor necessary for megakaryocyte proliferation and maturation, as well as for thrombopoiesis. This protein is the ligand for MLP/C_MPL, the product of myeloproliferative leukemia virus oncogene. Recombinant mouse Thrombopoietin, fused to His-tag at C-terminus, was expressed in HEK293 cell and purified by using conventional chromatography techniques.

Amino acid Sequence

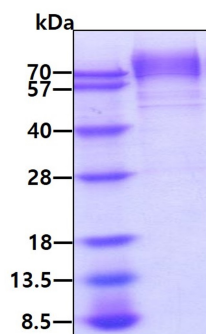
SPVAPACDPR LLNKLLRDSH LLHSRLSQCP DVDPLSIPVL LPAVDFSLGE WKTQTEQSKA QDILGAVSLL LEGVMAARGQ
LEPSCLSLL GQLSGQVRL LGALQGLLGT QLPLQGRRTA HKDPNALFLS LQQLLRGKVR FLLLVEGPTL CVRRTLPTTA
VPSSTSQLLT LNKFPNRTSG LLETNFSVTA RTAGPGLLSR LQGFRVKITP GQLNQTSRSP VQISGYLNRT HGPVNGTHGL
FAGTSLQTL ASDISPAFN KGSALFNLQG GLPPSPSLAP DGHTPFPPSP ALPTTHGSP QLHPLFPDPS TTMPNSTAPH
PVTMYPHPRN LSQET<HHHHH H>

General References

Jenkins JM., et al. (2007) Blood. 109:4739-4741.
Hitchcock IS., et al. (2014) Br J Haemato. 165:259-268.

DATA

SDS-PAGE

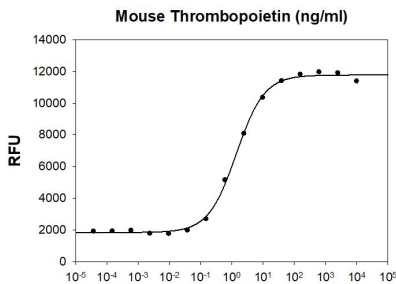


3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain

Biological Activity

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Mouse Thrombopoietin stimulates cell proliferation of the MO7e human megakaryocytic leukemic cells. The ED50 range ≤ 4 ng/ml.