

DATASHEET

Version 20181206

TPO, His, Mouse

Cat. No.: Z03374-1

Size: 1.0 mg

Synonyms: C-mpl ligand, MGDF, Thpo; MGDF

Description:

Thrombopoietin(TPO), also known as C-mpl ligand, MGDF and Thpo, is a glycoprotein hormone belonging to the EPO/TPO family. It is expressed mainly in the liver, kidney and skeletal muscle. TPO binds and signals through MLP/C_MPL receptor. It stimulates the proliferation and maturation of megakaryocytes from their committed progenitor cells, and it regulates the production and circulation of platelets. TPO has also been reported to promote the apoptosis of hypoxia-sensitized neurons and to inhibit neuronal differentiation.

Recombinant mouse TPO produced in *HEK293* cells with C-terminal Histidine tag, is a polypeptide chain containing 341 amino acids. rmTPO has a molecular mass of 62 70 kDa analyzed by reducing SDS-PAGE and is obtained by chromatographic techniques at GenScript.

Amino Acid Sequence:

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00001 SPVAPACDPR LLNKLLRDSH LLHSRLSQCP DVDPLSIPVL
00041 LPAVDFSLGE WKTQTEQSKA QDILGAVSLL LEGVMAARGQ
00081 LEPSCLSSLL GQLSGQVRLL LGALQGLLT QLPLQGRITTA
00121 HKDPNALFLS LQQLLRGKVR FLLLVEGPTL CVRRTLPTTA
00161 VPSSTSQLLT LNKFPNRTSG LLETNFSVTA RTAGPGLLSR
00201 LQGFVRKITP GQLNQTSRSP VQISGYLNRT HGPVNGTHGL
00241 FAGTSLQTL ASDISPGAFN KGSLAFNLQG GLPPSPSLAP
00281 DGHTPFPPSP ALPTTHGSPP QLHPLFPDPS TTMNSTAPH
00321 PVTMYPHPRN LSQETHHHHH H
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Source: *HEK 293*

Species: Mouse

Biological Activity: ED₅₀ < 2ng/ml, measured in a proliferation assay using MO7e cells.

Molecular Weight: 62-70kDa, observed by reducing SDS-PAGE.

Formulation: Lyophilized from a 0.2 µm filtered solution in PBS.

Reconstitution: Reconstituted in sterile ddH₂O or PBS at 100 µg/ml.

Purity: > 97% as analyzed by reducing SDS-PAGE.

Endotoxin Level: <0.2 EU/µg, determined by LAL method.

Storage: Lyophilized recombinant Mouse TPO remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, Mouse TPO should be stable up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.