

TPO, His, Rat

Cat. No.: Z03240-50

Size: 50.0 ug

Synonyms: Thrombopoietin (TPO), His, Rat

Description:

Thrombopoietin (TPO), also known as c-Mpl ligand, MGDF and THOP, 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 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 apoptosis of hypoxia-sensitized neurons and to inhibit neuronal differentiation.

Recombinant Rat Thrombopoietin(TPO), His, produced in CHO cells is a polypeptide chain containing 174 amino acids. A fully biologically active molecule, rrTPO has a molecular mass of 22 kDa analyzed by reducing SDS-PAGE and is obtained by chromatographic techniques at GenScript.

Amino Acid Sequence:

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00001 SPVPPACDPR LLNKLLRDSY LLHSRLSQCP DVNPLSIPVL
00041 LPAVDFSLGE WKTQTEQSKA QDILGAVSLL LEGVMAARGQ
00081 LEPSCLSSLL GQLSGQVRLI LGALQGLLGT QLPPQGRITTA
00121 HKDPSALFLS LQQLLRGKVR FLLLVEGPAL CVRRTLPTTA
00161 VPSRTSQQLL LNKFHSHHHH
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Source: CHO

Species: Rat

Biological Activity: The ED₅₀ as determined by the dose-dependent stimulation of the proliferation of human MO7e cells was found to be ≤ 0.2 ng/ml, corresponding to a specific activity of $\geq 5 \times 10^6$ units/mg.

Molecular Weight: 22 kDa, observed by reducing SDS-PAGE.

Formulation: Lyophilized after extensive dialysis against PBS.

Reconstitution: Reconstituted in ddH₂O or PBS at 100 μ g/ml.

Purity: > 98% as analyzed by SDS-PAGE.

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

Storage: Lyophilized recombinant Rat Thrombopoietin remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, Rat Thrombopoietin should be stable up to 1 week at 4°C or up to 2 months at -20°C.