

PRODUCT DATA SHEET



Bioworld Technology, Inc.

Recombinant TPO, His, Rat

Catalog Number: BK0288-10µg

Source: CHO

Quantity: 10µg

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.

Molecular Weight:

22 kDa, observed by reducing SDS-PAGE.

Purity:

> 98% as analyzed by SDS-PAGE.

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.

Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

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Formulation:

Lyophilized after extensive dialysis against PBS.

AA Sequence:

SPVPPAC-
DPRLLNKLLRDSYLLHSRLSQCPDVNPLSIPVLLP
AVDFSLGEWKTQTEQSKAQDIL-
GAVSLLLEGVMAARGQLEP-
SCLSSLLGQLSGQVRLLLGALQGLLGTQLPPQGR
TTA HKDPSALFLSLQQLLRGKVRLLLLVEGPALC
VRRTLPTTAVPSRTS QLLTLNKFHHHHHH

Endotoxin:

< 0.2 EU/µg, determined by LAL method.

Reconstitution:

Reconstituted in ddH₂O or PBS at 100 µg/ml.

Storage:

Lyophilized recombinant Rat Thrombopoietin remains stable up to 6 months at -80 °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.

Usage:

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