

TPO, rat recombinant

CATALOG #: 7221-10 10 µg
7221-50 50 µg

ALTERNATE NAMES: Thrombopoietin, Megakaryocyte colony-stimulating factor, c-MPL Ligand, MGDF

SOURCE: E. Coli

PURITY: ≥ 98% by SDS-PAGE gel and HPLC analyses

MOL. WEIGHT: 18.7 kDa

ENDOTOXIN LEVEL: < 0.1 ng/µg of protein (<1 EU/µg).

FORM: Lyophilized

FORMULATION: Sterile filtered through a 0.2 micron filter. Lyophilized from Sodium Citrate, pH 4.5

STORAGE CONDITIONS: Store at -20°C. After reconstitution, aliquot and store at -20°C to -80°C. Avoid repeated freezing and thawing cycles.

RECONSTITUTION:
Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 week. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.

DESCRIPTION:
TPO is a lineage specific growth factor, produced in the liver, kidney and skeletal muscle. It stimulates the proliferation and maturation of megakaryocytes, and promotes increased circulating levels of platelets in vivo. TPO signals through the c-mpl receptor and acts as an important regulator of circulating platelets. Human and murine TPO exhibits cross-species reactivity. Recombinant rat TPO is a fully biologically active 174 amino acid polypeptide (18.7 kDa), which contains the erythropoietin-like domain of the full length TPO protein.

AMINO ACID SEQUENCE:
SPVPPACDPR LLNKLRRDSY LLHSRLSQCP DVNPLSIPVL LPAVDFSLGE
WKTQTEQSKA QDILGAVSLL LEGVMAARGQ LEPSCLSSLL GQLSGQVRLRLL
LGALQGLLGT QLPPQGRRTA HKDPSALFLS LQQLLRGKVR FLLLVEGPAL
CVRRTLPTTA VPSRTSQQLLT LNKF

BIOLOGICAL ACTIVITY:
Determined by its ability to stimulate the proliferation of human MO7e cells. The expected ED₅₀ is ≤ 0.2 ng/ml, corresponding to a specific activity of ≥ 5 x 10⁶ units/mg.

- RELATED PRODUCTS:**
- TPO, human recombinant (Cat. No. 4351-10, -50, -1000)
 - TPO, murine recombinant (Cat. No. 4352-10, -50, -1000)
 - Human Cell^{exp} Human Recombinant TPO (Cat. No. 6483-10, -50)
 - TPO (Mouse) ELISA Kit (Cat. No. K4753-10, -50)
 - TPO Antibody (Cat. No. 5352-100)
 - TPO Antibody (Cat. No. 5351R-100)

FOR RESEARCH USE ONLY! Not to be used in humans.