HB221026

Recombinant Human TPO Protein, His Tag

Product Information

Product Name	Cat#	Size
Recombinant Human TPO Protein, His Tag	92252ES60	100 μg
	92252ES80	1 mg

Product Description

Thrombopoietin (TPO), is a key regulator of megakaryocytopoiesis and thrombopoiesis. The 353 amino acid (aa) human TPO precursor is cleaved to yield the 332 aa mature protein. Mature human TPO shares approximately 70% aa sequence homology with mouse and rat TPO. TPO and its receptor (c-Mpl) are the major regulators of megakaryocyte and platelet production and serve a critical and non-redundant role in hematopoietic stem cell (HSC) biology. TPO signals through the Jak-STAT, Ras-Raf-MAPK, and PI3K pathways, and promotes survival, proliferation, and polyploidization in megakaryocytes. The proto-oncogene c- also plays an important role in many of these same processes.

Product Properties

Synonyms	MGDF, MGDFC-mpl ligand, MKCSF, MK-CSF, ML, MPL ligand, MPLLG, THCYT1, THPO
Accession	NP_000451.1
Source	HEK293 Cells-derived human TPO protein, Ser 22-Gly 353 with His tag at the N-terminus.
Molecular Weight	Approximately 37.6 kDa. As a result of glycosylation, TPO migrates as an approximately 78.2 kDa band in SDS-PAGE under reducing conditions.
AA Sequence	SPAPPACDL RVLSKLLRDS HVLHSRLSQC PEVHPLPTPV LLPAVDFSLG EWKTQMEETK AQDILGAVTL LLEGVMAARG QLGPTCLSSL LGQLSGQVRL LLGALQSLLG TQLPPQGRTT AHKDPNAIFL SFQHLLRGKV RFLMLVGGST LCVRRAPPTT AVPSRTSLVL TLNELPNRTS GLLETNFTAS ARTTGSGLLK WQQGFRAKIP GLLNQTSRSL DQIPGYLNRI HELLNGTRGL FPGPSRRTLG APDISSGTSD TGSLPPNLQP GYSPSPTHPP TGQYTLFPLP PTLPTPVVQL HPLLPDPSAP TPTPTSPLLN TSYTHSQNLS QEG
Tag	His
Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Purity	> 90% by SDS-PAGE.
Biological Activity	Measured in a cell proliferation assay using MO7e human megakaryocytic leukemic cells. The ED_{50} for this effect is typically 10-60 ng/mL.
Endotoxin	< 1.0 EU per 1μg of the protein by the LAL method.
Formulation	Lyophilized from a 0.2 μm filtered concentrated solution in PBS, pH 7.4.
Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water (400 μL) to a concentration of 0.25 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤ -20°C. Stock solutions should be apportioned into working aliquots and stored at ≤ -20°C. Further dilutions should be made in appropriate buffered solutions.

Shipping and Storage

The products are shipped with ice pack and can be stored at -20℃ for 1 year.
1 month, 2 to 8 °C under sterile conditions after reconstitution.

3 months, -20 ℃ under sterile conditions after reconstitution.

Recommend to aliquot the protein into smaller quantities when first used and avoid repeated freeze-thaw cycles.

Cautions

1. Avoid repeated freeze-thaw cycles.
2. For your safety and health, please wear lab coats and disposable gloves for operation.
3. For research use only.