TPO Human E. coli

Product Data Sheet

Type: Recombinant
Source: E. coli
Species: Human
Other names: Thrombopoietin, Megakaryocyte colony-stimulating factor, c-MPL Ligand, MGDF

Cat. No.:

RBG10329010	(10 µg)
RBG10329050	(50 µg)
RBG10329100	(100 µg)

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 exhibit cross-species reactivity. The human TPO gene encodes for a 353 amino acid glycoprotein, which contains a 21 amino acid signal sequence, a 15 amino acid erythropoietin-like domain, and a highly glycosylated 179 amino acid C-terminal domain. Recombinant Human TPO is a fully biologically active 174 amino acid polypeptide (18.6 kDa), which contains the erythropoietin-like domain of the full length TPO protein.

Research topic

Others

Amino Acid Sequence

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SPAPPACDLR VLSKLLRDSH VLHSRLSQCP EVHPLPTPVL LPAVDFSLGE WKTQMEETKA QDILGAVTLL LEGVMAARGQ
LGPTCLSSLL GQLSGQVRLL LGALQSLLGT QLPPQGRTTA HKDPNAIFLS FQHLLRGKVR FLMLVGGSTL CVRRAPPTTA
VPSRTSLVLT LNEL
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Source

E. coli

Purity

98%

Biological Activity

The ED_{50} as determined by the dose-dependent stimulation of the proliferation of human MO7e cells was found to be 1.0 ng/ml, corresponding to a specific activity of 1×10^6 units/mg.

Endotoxin

Endotoxin level is <0.1 ng/µg of protein (<1EU/µg).

Reconstitution

Centrifuge the vial prior to opening. Reconstitute in water to a concentration of < 0.5 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.

Storage, Stability/Shelf Life

-20°C

HEADQUARTERS: BioVendor Laboratorní medicína, a.s.	Karasek 1767/1	621 00 Brno CZECH REPUBLIC	Phone: +420-549-124-185 Fax: +420-549-211-460	E-mail: Web:	info@biovendor.com sales@biovendor.com www.biovendor.com
AUSTRIA: BioVendor GesmbH	Nußdorfer Straße 20/10	1090 Vienna AUSTRIA	Phone: +43-1-89090-25 Fax: +43-1-89090-2515	E-mail:	infoAustria@biovendor.com
GERMANY, SWITZERLAND: BioVendor GmbH	Otto-Hahn-Straße 16	34123 Kassel GERMANY	Phone: +49-6221-433-9100 Fax: +49-6221-433-9111	E-mail:	infoEU@biovendor.com
USA, CANADA AND MEXICO: BioVendor LLC	128 Bingham Rd. Suite 1300	Asheville, NC 28806 USA	Phone: +1-828-575-9250 +1-800-404-7807 Fax: +1-828-575-9251	E-mail:	infoUSA@biovendor.com