

## Recombinant Mouse TPO

### Information

<b>Gene ID</b>	21832
<b>Accession #</b>	P40226
<b>Alternate Names</b>	
<b>Source</b>	<i>Escherichia coli</i> .
<b>M.Wt</b>	Approximately 18.7 kDa, a single non-glycosylated polypeptide chain containing 174 amino acids.
<b>AA Sequence</b>	SPVAPACDPR LLNKLLRDSH LLHSRLSQCP DVDPLSIPVL LPAVDFSLGE WKTQTEQSKA QDILGAVSLL LEGVMAARGQ LEPSCLSSLL GQLSGQVRL LGALQGLLGT QLPLQGRTTA HKDPNALFLS LQQLLRGKVR FLLLVEGPTL CVRRTLPTTA VPSSTSQLLT LNKF
<b>Appearance</b>	Sterile Filtered White lyophilized (freeze-dried) powder.
<b>Stability &amp; Storage</b>	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. - 12 months from date of receipt, -20 to -70 °C as supplied. - 1 month, 2 to 8 °C under sterile conditions after reconstitution. - 3 months, -20 to -70 °C under sterile conditions after reconstitution.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4, with 5% Trehalose.
<b>Reconstitution</b>	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/ml. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions.
<b>Biological Activity</b>	Fully biologically active when compared to standard. The biological activity determined by a chemotaxis bioassay using human peripheral T lymphocytes is in a concentration range of 1.0-100 ng/ml.
<b>Shipping Condition</b>	Gel pack.
<b>Handling</b>	Centrifuge the vial prior to opening.
<b>Usage</b>	For Research Use Only! Not to be used in humans.

### Components and Storage

Components	10 µg	100 µg	500 µg
Recombinant Mouse TPO	10 µg	100 µg	500 µg

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## Quality Control

Purity	> 95 % by SDS-PAGE and HPLC analyses.
Endotoxin	Less than 0.1 EU/μg of rMuTPO as determined by LAL method.

## Description

Thrombopoietin (TPO), the ligand for the receptor encoded by the c-Mpl proto-oncogene, is a key regulator of megakaryocytopoiesis and thrombopoiesis in vitro and in vivo. The cDNAs for TPO have recently been cloned from canine, murine and human sources. The proteins from these three species are highly conserved, exhibiting from 69 - 75 % sequence identity at the amino acid level. Two distinct domains, separated by a pair of arginine residues that may be a proteolytic cleavage site, have been identified in TPO: the amino terminal region exhibiting sequence homology to erythropoietin and the carboxy terminal region containing multiple potential N-linked glycosylation sites. Recombinant TPO has now been shown to stimulate the maturation, as well as the proliferation, of megakaryocytes and may have important therapeutic applications for the treatment of various clinical conditions associated with thrombocytopenia.

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