Recombinant Protein Technical Manual

Recombinant Mouse Thrombopoietin/TPO Protein (His Tag)

RPES3187

Product Data:

Product SKU: RPES3187

Size: 10µg

Species: Mouse

Expression host: Human Cells

Uniprot: P40226

Protein Information:

Molecular Mass: 36.4 kDa

AP Molecular Mass: 8010 kDa

Tag: N-6His

Bio-activity:

Purity: > 95 % as determined by SDS-PAGE

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from a 0.2 µm filtered solution of PBS, pH7.4.

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: Thrombopoietin;C-mpl ligand;Megakaryocyte colony-stimulating factor;Megakaryocyte growth and development factor;Myeloproliferative leukemia virus oncogene ligand;THPO

Immunogen Information:

Sequence: Ser22-Thr356

Background:

Thrombopoietin (TPO) is a glycoprotein hormone which belongs to the EPO/TPO family. It produced by the liver and kidney which regulates the production of platelets. Mature mouse Tpo shares 71% and 81% aa sequence homology with human and rat Tpo, respectively. It is an 80-85 kDa protein that consists of an N-terminal domain with homology to Erythropoietin (Epo) and a C-terminal domain that contains multiple N-linked and O-linked glycosylation sites. TPO stimulates the production and differentiation of megakaryocytes, the bone marrow cells that bud off large numbers of platelets. Lineage-specific cytokine affects the proliferation and maturation of megakaryocytes from their committed progenitor cells. It acts at a late stage of megakaryocyte development. It may be the major physiological regulator of circulating platelets.