

## Recombinant Mouse TPO/Thpo Protein(His Tag)

Catalog Number: GPEM0272

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

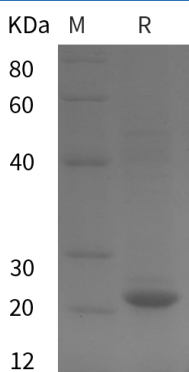
### Description

|               |                                                                       |
|---------------|-----------------------------------------------------------------------|
| Species       | Mouse                                                                 |
| Source        | E.coli-derived Mouse TPO protein Ser22–Phe195, with an N-terminal His |
| Calculated MW | 19.0 kDa                                                              |
| Observed MW   | 22 kDa                                                                |
| Accession     | P40226                                                                |
| Bio-activity  | Not validated for activity                                            |

### Properties

|                |                                                                                                                                                                                                                                        |
|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Purity         | > 95% as determined by reducing SDS-PAGE.                                                                                                                                                                                              |
| Endotoxin      | < 10 EU/mg of the protein as determined by the LAL method                                                                                                                                                                              |
| Storage        | Generally, 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°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C 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 in PBS with 5% Trehalose and 5% Mannitol.                                                                                                                                                  |
| Reconstitution | It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis.                                                                                               |

### Data



> 95 % as determined by reducing SDS-PAGE.

### 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.