

# LeadGMP® Human TPO Protein, His Tag, E. coli

LDG017PHE-GMP **Catalog Number Package**  $100 \ \mu g \ / \ 1 \ mg \ / \ Customized package$ 

For full product information, images and publications, please visit our website.



## **Specifications**

**Species of Origin** 

Human

**Affinity Tag** 

His Tag (C-term)

**Purity** 

>95% as determined by SDS-PAGE analysis.

**Activity** 

Measure by its ability to induce proliferation in MO7e cells. The ED50 for this effect is <2 ng/mL.

Mycoplasma

Not detected

**Expression system** 

Escherichia coli

Buffer

Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4.

Molecular weight

The protein has a calculated MW of 19.6 kDa. The protein migrates as 20 kDa under reducing condition (SDS-PAGE analysis).

**Endotoxin level** 

<0.05 EU per 1  $\mu g$  of the protein by the LAL method.

**Form** 

Lyophilized

## **Background**



### Background

Thrombopoietin (TPO) is a glycoprotein that produced by the liver, kidney, marrow stroma and several other tissues. The TPO level in the blood is mostly negatively correlated with the abundance of platelets and bone marrow megakaryocytes, although multiple states of inflammation or infection, liver failure, and hematological disturbances are associated with unexpectedly high or low circulating levels of the hormone.

**Uniprot ID** 

P40225

### **Synonyms**

Thrombopoietin, C-mpl ligand, ML, Megakaryocyte colony-stimulating factor, Megakaryocyte growth and development factor, MGDF, Myeloproliferative leukemia virus oncogene ligand

**Sequence Note** 

Ser22-Leu195

## Instruction

#### Reconstitution

It is recommended to reconstitute the lyophilized protein in sterile H<sub>2</sub>O to a concentration not less than 0.5 mg/mL and incubate the stock solution for at least 20 min to ensure sufficient re-dissolved.

## **Shipping**

The product is shipped with polar packs. Upon receipt, store it immediately at -20°C or lower for long term storage.



## Stability & Storage

This product is stable after storage at:

- -20°C for 12 months in lyophilized state from date of receipt.
- -20°C or -80°C for 2 weeks under sterile conditions after reconstitution.

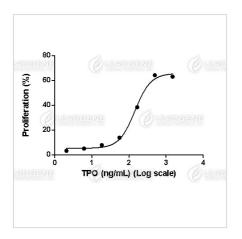
Avoid repeated freeze/thaw cycles.

### Manufacturing specifications

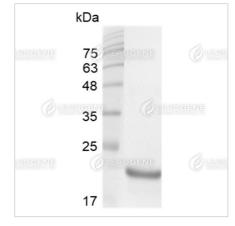
LeadGMP® recombinant proteins are manufactured in ISO 13485:2016 and GMP certified facility. The processes include:

- Animal-free reagent and laboratory
- Manufactured and tested under GMP guideline
- Testing and traceability of raw material
- Records of the maintenance and equipment calibration
- Personnel training records
- Batch-to-batch consistency
- Documentation of QA control and process changes
- Manufactured and tested under an ISO
  13485:2016 certified quality management system
- Stability monitor of product shelf-life

## **Image**



LeadGMP® Human TPO Protein, His Tag, E. coli (LDG017PHE-GMP) induced MO7e cell proliferation.



SDS-PAGE analysis of LeadGMP® TPO, Human

**Disclaimer:** For Research Use or Further Manufacturing Only.

Tainan Headquarter

**Innovation & Research Center** 

**CLD Center**