

# LeadGMP® Human TGF Beta 1 Protein, His Tag, E. coli

Catalog Number LDG015PHE-GMP

**Package** 100 μg / 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** 

>98% as determined by SDS-PAGE analysis.

**Activity** 

Measure by its ability to inhibit the IL-4 dependent proliferation in TF-1 cells. The ED<sub>50</sub> for this effect is <0.1 ng/mL. The specific activity of recombinant human TGF beat 1 is approximately > 1 x  $10^7$  IU/mg, which is calibrated against the human TGF Beta 1 Non WHO Reference Material (NIBSC code: 89/514).

Mycoplasma

Not detected

**Expression system** 

Escherichia coli

**Buffer** 

Lyophilized from a 0.2  $\mu m$  filtered solution of PBS, pH 8.0.

Molecular weight

The protein has a calculated MW of 13.7 kDa. The protein migrates as 13 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** 

Tainan Headquarter

**Taipei Office** 



# **Background**

The transforming growth factor beta (TGF beta) family of cytokines are ubiquitous, multifunctional, and essential to survival. They play the central roles in growth, development, inflammation, repair, and host immunity. The mammalian TGF beta isoforms (TGF beta 1, beta 2 and beta 3) are secreted as potential precursors and possess a variety of cell surface receptors and produces at least two mediate signal transductions.

## **Uniprot ID**

P01137

## **Synonyms**

Transforming growth factor beta-1 proprotein

#### **Sequence Note**

Ala279-Ser390

# 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. In some experiments, it recommends to add 10 mM HCl when reconstitute lyophilized protein.

## **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 1 month 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**



SDS-PAGE analysis of LeadGMP® TGF beta 1, Human

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