

# LeadGMP® Human Activin A Protein, Tag Free, E. coli

**Catalog Number** LDG026PHE-GMP **Package**  $1 \text{ mg} / 100 \mu\text{g} / \text{bulk}$ 

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



# **Specifications**

**Species of Origin** 

Human

**Affinity Tag** 

Tag Free

**Purity** 

>97% as determined by SDS-PAGE analysis.

**Activity** 

Measure by its ability to inhibit the proliferation of mouse MPC-11 cells. The ED<sub>50</sub> for this effect is <10 ng/mL. The specific activity of recombinant human Activin A is approximately >1.0 x 103 IU/mg.

Mycoplasma

Negative

Default

Negative

**Expression System** 

Escherichia coli

**Storage Buffer** 

Lyophilized from a 0.2 µm filtered solution of PBS, pH

Molecular weight

The protein has a calculated MW of 12.96 kDa. The protein migrates as 13-17 kDa under reducing condition (SDS-PAGE analysis).

**Endotoxin Level** 

<0.05 EU per 1 µg of the protein by the LAL method.

**Form** 

Lyophilized

## **Background**

**Tainan Headquarters** 

**Innovation & Research Center** 

**CLD Center** 



#### **Background**

Activin is the member of the TGF beta superfamily of cytokines. The current understanding of Activin A is classified as a hormone, a growth factor, and a cytokine. Depending on the different cell type, that overexpression of Activin A can either inhibit or promote cells division. There are important implications for tumor biology. Activin A also increase joint inflammation in rheumatoid arthritis (RA) and induces pathogenic mechanisms in the respiratory system.

**Sequence Note** 

Gly311-Ser426

#### **Synonyms**

Inhibin beta A chain, Activin beta-A chain, Erythroid differentiation protein, EDF

## Instruction

#### Reconstitution

It is recommended to reconstitute the lyophilized protein in sterile  $H_2O$  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 1 month under sterile conditions after reconstitution.

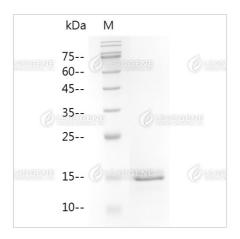
Avoid repeated freeze/thaw cycles.

### **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® Activin A, Human

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