

# Human IL-12 (p70), His Tag, HEK293

LDG006PHM **Catalog Number Package**  $5~\mu g$  /  $20~\mu g$  /  $100~\mu g$  / Customized package

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# **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 induce IFN gamma secretion in PHA-activated human peripheral blood lymphocytes (PBMC). The ED<sub>50</sub> for this effect is 0.05-0.2 ng/mL.

**Form** 

Lyophilized

**Expression system** 

**HEK293** 

Buffer

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

Molecular weight

The protein has a calculated MW of 59.55 kDa. The protein migrates as 63-75 kDa under reducing condition (SDS-PAGE analysis).

**Endotoxin level** 

<0.1 EU per 1  $\mu$ g of the protein by the LAL method.

# **Background**



## **Background**

Interleukin 12 p70 (IL-12 p70) is an interleukin which is major secreted from immune cells like dendritic cells, macrophages and neutrophils. IL-12 p70 is a 58.5 kDa protein containing 527 amino acid residues which is composed by two subunits (IL-12 p35 and IL-12 p40). IL-12 p70 induces the cytotoxic activity of immune cells like NK cells and T cells. IL-12 p70 binds its receptor (IL-12Rβ1 and IL-12Rβ2) that activates the Jak/STAT signaling pathway. IL-12 p70 also plays an important role in cancer model which inhibits the formation of new blood vessels through the production of IFN y.

### **Uniprot ID**

P29459

P29460

#### **Synonyms**

Cytotoxic lymphocyte maturation factor 40 kDa subunit, CLMF p40, IL-12 subunit p40, NK cell stimulatory factor chain 2. NKSF2

#### **Sequence Note**

p35 : Arg 23 - Ser 219 (IL-12A) p40 : Ile 23 - Ser 328 (IL-12B)

# Instruction

### Reconstitution

It is recommended to reconstitute the lyophilized protein in sterile H<sub>2</sub>O to a concentration of 200 µg/mL and incubate the stock solution for at least 20 min to ensure sufficient re-dissolved.

## 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.

## Shipping

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

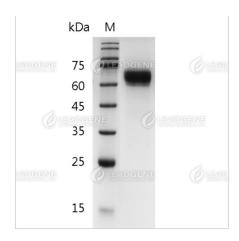
# **Image**

Tainan Headquarter

**Innovation & Research Center** 

**CLD Center** 





SDS-PAGE analysis of recombinant human IL-12 (p70).

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