

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

 Catalog Number
 LDG006PHM

 Package
 5 μg / 20 μg / 100 μg / 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 induce IFN gamma secretion in PHA-activated human peripheral blood lymphocytes (PBMC). The ED $_{50}$  for this effect is 0.05-0.2 ng/mL.

Form

Lyophilized

**Expression System** 

**HEK293** 

**Storage Buffer** 

Lyophilized from a 0.2  $\mu m$  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-12R $\beta$ 1 and IL-12R $\beta$ 2) 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  $\gamma$ .

#### **Synonyms**

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

## **Uniprot ID**

P29459 P29460

### **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  $H_2O$  to a concentration not less than 200  $\mu$ g/mL and incubate the stock solution for at least 20 min to ensure sufficient redissolved.

#### 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.

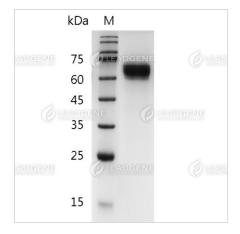
Avoid repeated freeze/thaw cycles.

### **Shipping**

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



# Image



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

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