

# Human IGF-I, His Tag, E. coli

 Catalog Number
 LDG088PHE

 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** 

>95% as determined by SDS-PAGE analysis.

**Activity** 

Measure by its ability to induce MCF-7 cells proliferation. The ED $_{50}$  for this effect is 0.9-3.1 ng/mL. The specific activity of recombinant human IGF-I is approximately >1.2 x  $10^3$  IU/mg.

Form

Lyophilized

**Expression System** 

Escherichia coli

**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 8.59 kDa. The protein migrates as 8-10 kDa under reducing condition (SDS-PAGE analysis).

**Endotoxin Level** 

<0.01 EU per 1  $\mu g$  of the protein by the LAL method.

**Background** 



#### **Background**

Insulin like Growth Factors 1 (IGF-I) is a 7.79 kDa member of the Insulin-like Growth Factors with 71 amino acid residues. IGF-I is mainly expressed from liver, adipose tissue, Endometrial stromal cells, Leydig cells, and can be isolated from plasma. IGF-I mediating the protein anabolic and promoting effect of pituitary growth hormone. IGF-I also affects metabolism of glycogen, DNA synthesis and glucose uptake via binding to IGF-I receptor.

## **Synonyms**

Mechano Growth Factors, MGF, Somatomedin-C, Insulin-like Growth Factors

## **Uniprot ID**

#P05019

#### **Sequence Note**

Gly49-Ala118

## 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.

# Shipping

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

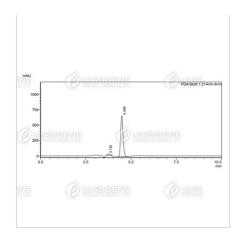
#### **Stability & Storage**

This product is stable after storage at:

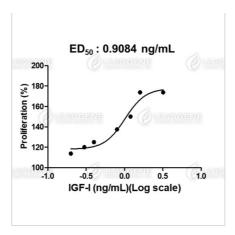
- -20°C for 12 months in lyophilized state from date of receipt.
- -20°C or -80°C for 1 month under sterile conditions after reconstitution.

Avoid repeated freeze/thaw cycles.

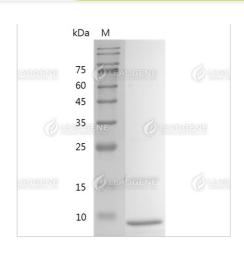
## **Image**



The purity of recombinant human IGF-I is greater than 95% as determined by RP-HPLC.



Human IGF-I, His Tag, E. coli (LDG088PHE) induced MCF-7 cell proliferation, with the ED50 at 0.9084 ng/mL.



SDS-PAGE analysis of recombinant human IGF-I.

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