

## 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<sub>50</sub> for this effect is 0.9-3.1 ng/mL. The specific activity of recombinant human IGF-I is approximately  $>1.2 \times 10^3$  IU/mg.

#### Form

Lyophilized

#### Expression system

Escherichia coli

#### Buffer

Lyophilized from a 0.2 µm 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 µg of the protein by the LAL method.

### Background

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#### CLD Center

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### 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.

### Uniprot ID

#P05019

### Synonyms

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

### Sequence Note

Gly49-Ala118

## Instruction

### Reconstitution

It is recommended to reconstitute the lyophilized protein in sterile H<sub>2</sub>O to a concentration not less than 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

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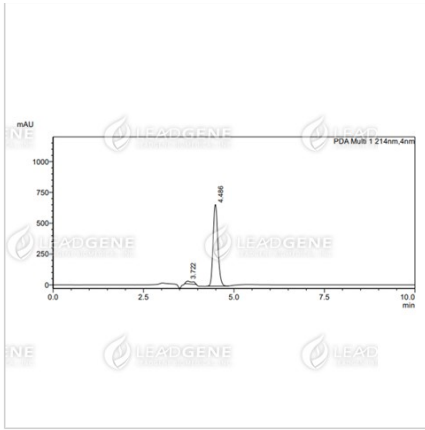
bd@leadgene.com.tw

### Innovation & Research Center

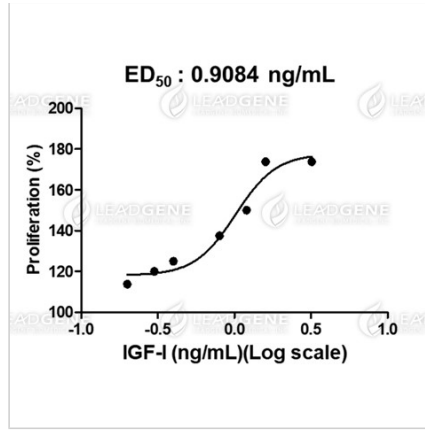
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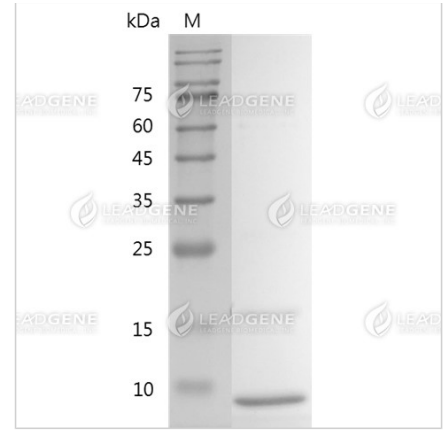
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The purity of recombinant human IGF-I is greater than 95% as determined by RP-HPLC.



Human IGF-I, His Tag, E. coli (LDG088PHE) induced MCF-7 cell proliferation, with the ED<sub>50</sub> at 0.9084 ng/mL.



SDS-PAGE analysis of recombinant human IGF-I.

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