

For Research Use Only

# Recombinant Human IGF-I/IGF-1 protein (hFc Tag)



Catalog Number: Eg0206

## Basic Information

**ED50:**  
20-80 ng/mL

**GeneID:**  
3479

**Species:**  
Human

**Accession:**  
P05019-1

**Purity:**  
>90 %, SDS-PAGE

## Technical Specifications

**Purity:**  
>90 %, SDS-PAGE

**Endotoxin Level:**  
<1.0 EU/  $\mu$ g protein, LAL method

**Source:**  
HEK293-derived Human IGF-I protein Gly49-Ala118 (Accession# P05019-1) with a human IgG1 Fc tag at the N-terminus.

**Predicted Molecular Mass:**  
33.7 kDa

**SDS-PAGE:**  
34-36 kDa

**Formulation:**  
Lyophilized from sterile PBS, pH 7.4. Normally 5% trehalose and 5% mannitol are added as protectants before lyophilization.

## Biological Activity

Immobilized Human IGF-I R (GST tag) at 1  $\mu$ g/mL (100  $\mu$ L/well) can bind Human IGF-I (hFc tag) with a linear range of 20-80 ng/mL.

## Storage and Shipping

**Storage:**  
It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

- 12 months from the date of receipt, -20°C to -80°C as lyophilized proteins.
- 3 months, -20°C to -80°C under sterile conditions after reconstitution.

**Shipping:**  
The product is shipped at ambient temperature. Upon receipt, store it immediately at the recommended temperature.

## Reconstitution

Briefly centrifuge the tube before opening. Reconstitute at 0.1-0.5 mg/mL in sterile water.

## Background

Insulin-like-growth factor 1 (IGF1), a 70 amino-acid peptide hormone is the principal mediator of biochemical effects of growth hormone (GH). IGF1 is an important growth factor in the regulation of cell proliferation and differentiation. IGF1 is largely synthesized in the liver (75%) and, to a lesser extent, in peripheral tissues. IGF1 have been shown to play an essential role in preventing the formation of fatty liver. IGF1 is a potent mitogen and is inhibited by IGF-binding protein-3 (IGFBP3). High serum IGF1 and low IGFBP3 are associated with increased risk of several carcinomas.

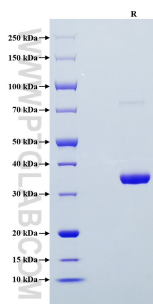
## References

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2. Adachi Y. et al. (2019) J Gastroenterol Hepatol. 2019 Jun 3.
3. Anisimov VN. et al. (2019) Crit Rev Oncol Hematol. 87(3):201-23.
4. Sonntag WE. et al. (2012) J Gerontol A Biol Sci Med Sci. 67(6):587-98.

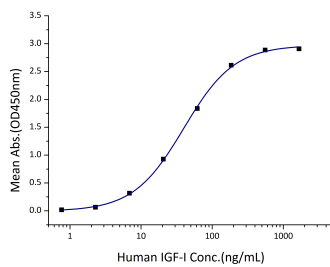
## Synonyms

IBP1, IGF1, IGF1A, IGF1B, IGFI, IGF-I, MGF

## Selected Validation Data



Purity of Recombinant Human IGF-I was determined by SDS-PAGE. The protein was resolved in an SDS-PAGE in reducing (R) conditions and stained using Coomassie blue.



Immobilized Human IGF-I R (GST tag) at 1  $\mu$ g/mL (100  $\mu$ L/well) can bind Human IGF-I (hFc tag) with a linear range of 20-80 ng/mL.

For technical support and original validation data for this product please contact

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