

## Active Recombinant Human IGF1 protein, His&hFc-tagged

Cat. No. IGF1-126H Lot. No. (See product label)

### SPECIFICATION

|                         |  |
|-------------------------|--|
| <b>Product Overview</b> | Active Recombinant Human IGF1 protein(P05019)(49~118 aa), fused with N-terminal His tag and C-terminal hFc tag, was expressed in HEK293.   |
| <b>Species</b>          | Human  |
| <b>Source</b>           | HEK293   |
| <b>ProteinLength</b>    | 49-118 aa  |
| <b>Form</b>             | Lyophilized from sterile PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.   |
| <b>Bio-activity</b>     | <p>Insulin-like growth factor 1 (IGF1), also called somatomedin C is a hormone similar in molecular structure to insulin. It plays an important role in childhood growth and continues to have anabolic effects in adults. A synthetic analog of IGF1, mecasermin, is used for the treatment of growth failure. IGF1 consists of 70 amino acids in a single chain with three intramolecular disulfide bridges. Besides, Insulin Like Growth Factor Binding Protein 2 (IGFBP2) has been identified as an interactor of IGF1, thus a binding ELISA assay was conducted to detect the interaction of recombinant human IGF1 and recombinant mouse IGFBP2. Briefly, IGF1 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100 μwere then transferred to IGFBP4-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-IGF1 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3</p> |

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times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37°C. Finally, add 50 µ stop solution to the wells and read at 450 nm immediately. The binding activity of recombinant human IGF1 and recombinant mouse IGFBP2 was shown, the EC50 for this effect is 0.087 ug/mL.

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|-----------------------|--|
| <b>Molecular Mass</b> | 38.7kDa  |
| <b>Endotoxin</b>      | <1.0EU per 1µg (determined by the LAL method).   |
| <b>Purity</b>         | > 80% as determined by SDS-PAGE.   |
| <b>Storage</b>        | Avoid repeated freeze/thaw cycles. Store at -20°C for 12 months. Aliquot and store at -80°C for 12 months. |
| <b>Reconstitution</b> | Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.                       |

## GENE INFORMATION

|                        |  |
|------------------------|--|
| <b>Gene Name</b>       | IGF1 insulin-like growth factor 1 (somatomedin C) [ Homo sapiens ]   |
| <b>Official Symbol</b> | IGF1   |
| <b>Synonyms</b>        | IGF1; insulin-like growth factor 1 (somatomedin C); insulin-like growth factor 1; IGF1A; MGF; IGF-IA; IGF-IB; somatomedin-C; mechano growth factor; insulin-like growth factor I; insulin-like growth factor IA; insulin-like growth factor IB; IGFI; IGF-I; |
| <b>Gene ID</b>         | 3479   |
| <b>mRNA Refseq</b>     | NM_000618  |

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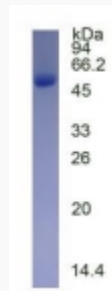
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**Protein Refseq** NP\_000609

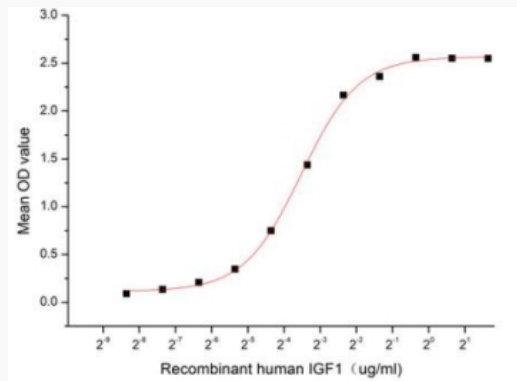
**MIM** 147440

**UniProt ID** P05019

**SDS-PAGE**



**Activity**



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