# ARG70130
# Human IGF1 recombinant protein (Active) (His-tagged, C-ter)

Package: 100 µg, 20 µg
Store at: -20°C

## Summary

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| Product Description | E. coli expressed, His-tagged (C-ter) Active Human IGF1 recombinant protein |
| Tested Application | SDS-PAGE |
| Target Name | IGF1 |
| Species | Human |
| A.A. Sequence | Gly49 - Ala118 |
| Expression System | E. coli |
| Activity | Active |
| Activity Note | Determined by its ability to induce MCF-7 cells proliferation. The ED50 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. |
| Alternate Names | MGF; Insulin-like growth factor I; Mechano growth factor; Somatomedin-C; IGFI; IGF-I |

## Properties

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| Form | Powder |
| Purification Note | Endotoxin level is < 0.01 EU/µg of the protein, as determined by the LAL test. |
| Purity | > 95% (by SDS-PAGE) |
| Buffer | PBS (pH 7.4) |
| Reconstitution | It is recommended to reconstitute the lyophilized protein in sterile water to a concentration not less than 200 µg/mL and incubate the stock solution for at least 20 min at room temperature to make sure the protein is dissolved completely. |
| Storage instruction | For long term, lyophilized protein should be stored at -20°C or -80°C. After reconstitution, aliquot and store at -20°C or -80°C for up to one month. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. |
| Note | For laboratory research only, not for drug, diagnostic or other use. |

## Bioinformation

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| Gene Symbol | IGF1 |
| Gene Full Name | insulin-like growth factor 1 (somatomedin C) |
| Background | The protein encoded by this gene is similar to insulin in function and structure and is a member of a family of proteins involved in mediating growth and development. The encoded protein is processed from a precursor, bound by a specific receptor, and secreted. Defects in this gene are a cause of insulin-like growth factor I deficiency. Alternative splicing results in multiple transcript variants encoding different isoforms that may undergo similar processing to generate mature protein. [provided by RefSeq, Sep 2015] |
| Function | The insulin-like growth factors, isolated from plasma, are structurally and functionally related to insulin but have a much higher growth-promoting activity. May be a physiological regulator of [1-14C]-2-deoxy-D-glucose (2DG) transport and glycogen synthesis in osteoblasts. Stimulates glucose transport in rat |

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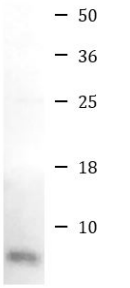
| | bone-derived osteoblastic (PyMS) cells and is effective at much lower concentrations than insulin, not only regarding glycogen and DNA synthesis but also with regard to enhancing glucose uptake. May play a role in synapse maturation. [UniProt] |
| Cellular Localization | Secreted. [UniProt] |

## Images




Human IGF1
recombinant protein

ARG70130 Human IGF1 recombinant protein (Active) (His-tagged, C-ter) SDS-PAGE image

SDS-PAGE analysis of ARG70130 Human IGF1 recombinant protein (Active) (His-tagged, C-ter).