

IGF-1 active protein

Human IGF-1

CATALOG #
AAA79164

HOST
E. coli

PRODUCT SYNONYMS

IGF-1; Human IGF-1; IGF1; IGF1; IGF-I; IGF1A; IGF-1 active protein

PRODUCT SPECIFICATIONS

Host	E. coli
Purity/Purification	> 98% by SDS-PAGE & HPLC analyses
Form/Format	Lyophilized
Sequence	GPETLCGAEL VDALQFVCGD RGFYFNKPTG YGSSSRRAPQ TGIVDECCFR SCDLRRLEMY CAPLKPAKSA
Sequence Length	153
Length (aa)	70
Endotoxin Level	< 0.1 ng/ug of protein (<1 EU/ug)
Reconstitution	Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1 mg/mL. Do not vortex. This solution can be stored at 2-8°C for up to 1 week. For extended storage, it is recommended to further dilute in a buffer (e.g. PBS) containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.
Biological Activity	The ED ₅₀ as determined by a cell proliferation assay using murine FDC-P1 cells is ≤ 2.0 ng/ml, corresponding to a specific activity of $\geq 1 \times 10^5$ units/mg.
Preparation and Storage	The lyophilized protein is stable at room temperature for 1 month and at 4°C for 6 months. Reconstituted working aliquots are stable for 1 week at 2°C to 8°C and for 12 months at -20°C to -80°C. Avoid repeated freeze and thaw cycles.

ADDITIONAL INFORMATION

Related Product Information for IGF-1 active protein	The IGFs are mitogenic polypeptide growth factors that stimulate the proliferation and survival of various cell types including muscle, bone, and cartilage tissue in vitro. IGFs are predominantly produced by the liver, although a variety of tissues produce the IGFs at distinctive times. The IGFs belong to the Insulin gene family, which also contains insulin and relaxin. The IGFs are similar by structure and function to insulin, but have a much higher growth-promoting activity than insulin. IGF-II expression is influenced by placenta lactogen, while IGF-I expression is regulated by growth hormone. Both IGF-I and IGF-II signal through the tyrosine kinase type I receptor (IGF-IR), but, IGF-II can also signal through the IGF-II/Mannose-6-phosphate receptor. Mature IGFs are generated by proteolytic processing of inactive precursor proteins, which contain N-terminal and C-terminal propeptide regions. Recombinant human IGF-I and IGF-II are globular proteins containing 70 and 67 amino acids, respectively, and 3 intra-molecular disulfide bonds.
Product Categories/Family for IGF-1 active protein	Cytokines & Growth Factors

NCBI AND UNIPROT INFORMATION

NCBI GI #	11024682
NCBI GeneID	3479

NCBI Accession #	NP_000609.1
NCBI GenBank Nucleotide #	NM_000618.3
UniProt Accession #	P05019 ; P01343 ; Q14620 ; B2RWM7 ; E9PD02
Molecular Weight	7.6 kDa
NCBI Official Full Name	insulin-like growth factor I isoform 4 preproprotein
NCBI Official Synonym Full Names	insulin-like growth factor 1 (somatomedin C)
NCBI Official Symbol	IGF1
NCBI Official Synonym Symbols	IGFI; IGF-I; IGF1A
NCBI Protein Information	insulin-like growth factor I; MGF; IGF-IA; IGF-IB; somatomedin-C; mechano growth factor; insulin-like growth factor IA; insulin-like growth factor IB
UniProt Protein Name	Insulin-like growth factor I
UniProt Gene Name	IGF1
UniProt Synonym Gene Names	IBP1; IGF-I; MGF
UniProt Entry Name	IGF1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/e-coli-active-protein/igf-1/79164>