

Insulin Like Growth Factor-1 Active Protein | rIGF1 active protein

Recombinant Rat Insulin Like Growth Factor-1

CATALOG #
AAA38145

HOST
E Coli

PRODUCT SYNONYMS

Insulin Like Growth Factor-1; Recombinant Rat Insulin Like Growth Factor-1; IGF1 Rat; Insulin-Like Growth Factor 1 Rat Recombinant; Somatomedin C; IGF-I; IGFIA; IGF1; rIGF1 active protein

PRODUCT SPECIFICATIONS

Host	E Coli
Purity/Purification	Greater than 98.0% as determined by SDS-PAGE.
Form/Format	The protein was lyophilized with no additives. Sterile Filtered White lyophilized (freeze-dried) powder.
Sequence	GPETLCGAEL VDALQFVCGP RGFYFNKPTG YGSSIRRAPQ TGIVDECCFR SCDLRRLEMY CAPLKPTKSA
Sequence Length	143
Solubility	It is recommended to reconstitute the lyophilized IGF1 in sterile 18M Omega -cm H2O not less than 100 ug/ml, which can then be further diluted to other aqueous solutions.
Biological Activity	The ED50, was calculated 2 methods: 1. Stimulation of protein synthesis in rat L6 myoblasts ED50 was found to be < 30ng/ml corresponding to a Specific Activity of 33,334IU/mg. 2. Type 1 IGF receptor binding assay ED50 was found to be <10ng/ml corresponding to a Specific Activity of 100,000IU/mg.
Preparation and Storage	Lyophilized IGF-1 although stable at room temperature for 3 weeks, should be stored desiccated below -18 degree C. Upon reconstitution IGF1 should be stored at 4 degree C between 2-7 days and for future use below -18 degree C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

ADDITIONAL INFORMATION

Related Product Information for rIGF1 active protein	Description: Insulin-Like Growth Factor I Rat Recombinant produced in E Coli is a single, non-glycosylated, polypeptide chain containing 70 amino acids and having a molecular mass of 7.7kDa. IGF-I is purified by proprietary chromatographic techniques. Introduction: The somatomedins, or insulin-like growth factors (IGFs), comprise a family of peptides that play important roles in mammalian growth and development. IGF1 mediates many of the growth-promoting effects of growth hormone (GH; MIM 139250). Early studies showed that growth hormone did not directly stimulate the incorporation of sulfate into cartilage, but rather acted through a serum factor, termed 'sulfation factor,' which later became known as 'somatomedin' (Daughaday et al., 1972). Three main somatomedins have been characterized: somatomedin C (IGF1), somatomedin A (IGF2; MIM 147470), and somatomedin B (MIM 193190) (Rotwein, 1986; Rosenfeld, 2003).
Product Categories/Family for rIGF1 active protein	Cytokines and Growth Factors; Growth Factors; Insulin-Like Growth Factor

NCBI AND UNIPROT INFORMATION

NCBI GI #	163659885
NCBI GeneID	24482

NCBI Accession #	NP_001075946.2
NCBI GenBank Nucleotide #	NM_001082477.2
UniProt Accession #	P08025 ; P08024
Molecular Weight	17,831 Da
NCBI Official Full Name	insulin-like growth factor I isoform a preproprotein
NCBI Official Synonym Full Names	insulin-like growth factor 1
NCBI Official Symbol	Igf1
NCBI Protein Information	insulin-like growth factor I; IGF-I; somatomedin
UniProt Protein Name	Insulin-like growth factor I
UniProt Gene Name	Igf1
UniProt Synonym Gene Names	Igf-1; IGF-I
UniProt Entry Name	IGF1_RAT

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-rigf1-active-protein/insulin-like-growth-factor-1/38145>