



[Go to Product page](#)

Datasheet for ABIN2017987
IGF1 Protein (AA 49-118)

Overview

Quantity:	50 µg
Target:	IGF1
Protein Characteristics:	AA 49-118
Origin:	Rat
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Biological Activity:	Active

Product Details

Characteristics:	ED50 < 10 ng/mL, measured by a cell proliferation assay using FDCP-1 cells, corresponding to a specific activity of > 1x10 ⁵ units/mg. AA 49-118, expressed with an N-terminal Met.
Purity:	> 95 % as analyzed by SDS-PAGE and HPLC.
Endotoxin Level:	< 0.2 EU/µg, determined by LAL method.

Target Details

Target:	IGF1
Alternative Name:	Insulin-Like Growth Factor I (IGF-I) (IGF1 Products)
Background:	Insulin-like Growth Factor I (IGF-I) is a single chain 7 kDa growth-promoting polypeptide originally identified as somatomedin-c. It belongs to the IGF family of peptides, which also includes IGF-II and insulin. The gene expression of IGF-I is mainly regulated by Growth

Target Details

Hormone, and IGF-I executes its functions via signaling through transmembrane tyrosine receptors(IGF Receptors). Most circulating IFG-I is associated with the IGF Binding Protein 3 (IGFBP-3), and the IGFBPs may inhibit the actions of IGFs by competing against the IGF Receptors. IGF-I is active in post-natal and adult animals, and is crucial for somatic growth, as IGF-I null mice show marked retardation in utero. IGF-I is involved in the carcinogenesis, and related to the prostate cancer as well. Recombinant rat Insulin-like Growth Factor I (rrIGF-I) produced in E. coli is a single non-glycosylated polypeptide chain containing 71 amino acids. A fully biologically active molecule, rrIGF-I has a molecular mass of 7.8 kDa analyzed by reducing SDS-PAGE.

Synonyms: Somatomedin C, IGF-I, IGFA, IGF1

Molecular Weight: 7.8 kDa, observed by reducing SDS-PAGE.

UniProt: [P08025](#)

Pathways: [RTK Signaling](#), [Intracellular Steroid Hormone Receptor Signaling Pathway](#), [Peptide Hormone Metabolism](#), [Hormone Activity](#), [Regulation of Intracellular Steroid Hormone Receptor Signaling](#), [Regulation of Hormone Metabolic Process](#), [Regulation of Hormone Biosynthetic Process](#), [Stem Cell Maintenance](#), [Glycosaminoglycan Metabolic Process](#), [Regulation of Carbohydrate Metabolic Process](#), [Autophagy](#), [Smooth Muscle Cell Migration](#), [Activated T Cell Proliferation](#), [Positive Regulation of fat Cell Differentiation](#)

Application Details

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: Reconstituted in ddH2O at 100 µg/mL.

Buffer: Lyophilized after extensive dialysis against PBS.

Storage: -80 °C

Storage Comment: Lyophilized recombinant rat Insulin-like Growth Factor I (rrIGF-I) remains stable up to 6 months at -80 °C from date of receipt. Upon reconstitution, rrIGF-I remains stable up to 2 weeks at 4 °C or up to 3 months at -20 °C.

Expiry Date: 6 months