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**IGF1 Protein (AA 49-118)** 



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Quantity:	50 μg	
Target:	IGF1	
Protein Characteristics:	AA 49-118	
Origin:	Mouse	
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 FDC-P1 cells, corresponding to a	
	specific activity of >1×10^5 units/mg.	
	AA 49-118, expressed with an N-terminal Met.	
Purity:	> 95 % by SDS-PAGE analysis.	
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	

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 carcinogenesis, and related to prostate cancer as well.Recombinant mouse Insulin-like Growth Factor I (rmIGF-I) produced in E. coli is a single non-glycosylated polypeptide chain containing 71 amino acids. A fully biologically active molecule, rmIGF-I has a molecular mass of 7.8 kDa analyzed by reducing SDS-PAGE.

Synonyms: Insulin-like Growth Factor-I, Somatamedin C, IGF-IA

Molecular Weight:

7.8 kDa, observed by reducing SDS-PAGE.

UniProt:

P05017

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 mouse Insulin-like Growth Factor I (rmIGF-I) remains stable up to 6 months at -80 °C from date of receipt. Upon reconstitution, rmIGF-I remains stable up to 2 weeks at 4 °C or up to 3 months at -20 °C.	
Expiry Date:	6 months	