

**IGF-I, human recombinant protein****Insulin-Like Growth Factor 1, Somatomedin C, IGF-I, IGFI, IGF1, IGF-IA, Mechano growth factor, MGF****Catalog # PBV10104r****Specification**

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**IGF-I, human recombinant protein - Product info**

Primary Accession [P01343](#)  
Calculated MW **7.6 kDa** KDa

**IGF-I, human recombinant protein - Additional Info**

Gene ID **3479**  
Gene Symbol **IGF1A**  
**Other Names**  
Insulin-Like Growth Factor 1, Somatomedin C, IGF-I, IGFI, IGF1, IGF-IA, Mechano growth factor, MGF

Gene Source **Human**  
Source **E. coli**  
Assay&Purity **SDS-PAGE; ≥98%**  
Assay2&Purity2 **HPLC; ≥98%**  
Recombinant **Yes**  
Results **21.6-54.7 ng/ml**  
**Target/Specificity**  
IGF-I

**Application Notes**

Reconstitute in H<sub>2</sub>O to a concentration of 0.1-1.0 mg/ml. This solution can be diluted into other buffered solutions or stored at 4°C for 1 week or -20°C for future use.

**Format**

Recombinant IGF-1 is available as a lyophilized powder

**Storage**

-20°C; IGF-1 protein is lyophilized with no additives

**IGF-I, human recombinant protein - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**IGF-I, human recombinant protein - Images****IGF-I, human recombinant protein - Background**

Human IGF-1 (insulin-like Growth Factor-1, IGF1, MGF, Somatomedin) is a hormone similar in molecular structure to insulin. It is a polypeptide growth factor that stimulates the proliferation of a wide range of cell types including muscle, bone, and cartilage tissue. Insulin-like growth factor 1 has been shown to bind and interact with all the IGF-1 Binding Proteins (IGFBPs), of which there are six (IGFBP1-6). IGFBP-3, the most abundant protein, accounts for 80% of all IGF binding. IGF-1 binds to IGFBP-3 in a 1:1 molar ratio. IGF-1 binds to at least two cell surface receptors: the IGF-1 receptor (IGF1R), and the insulin receptor. The IGF-1 receptor seems to be the "physiologic" receptor - it binds IGF-1 at significantly higher affinity than the IGF-1 that is bound to the insulin receptor. Mature human IGF I shares 94% and 96% aa sequence identity with mouse IGF1 and rat IGF1, respectively, and exhibits cross species activity. It shares 64% aa sequence identity with mature human IGFII. Human IGF-1 is a 7.6 kDa protein containing 70 amino acid residues. The recombinant human IGF-1 was produced using animal origin free technology.