10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

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

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_2O 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 Cytomety
- Cell Culture

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

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.