

**Human CellExp IGF-1, human recombinant protein**  
**IGF-I, IGF1A, somatomedin C, MGF**  
**Catalog # PBV11126r****Specification**

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**Human CellExp IGF-1, human recombinant protein - Product info**Primary Accession  
Calculated MW[P05019](#)

This protein rhIGFI-Fc, fused with Fc fragment of human IgG1 at the N-terminus, has a calculated MW of 35 kDa. DTT-reduced Protein migrates as 35 kDa. KDa

**Human CellExp IGF-1, human recombinant protein - Additional Info**Gene ID  
Gene Symbol  
**Other Names**  
IGF-I, IGF1A, somatomedin C, MGF**3479**  
**IGF1**Gene Source  
Source  
Assay&Purity  
Assay2&Purity2  
Recombinant  
Results

**Human**  
**HEK293 cells**  
**SDS-PAGE; ≥98%**  
**N/A;**  
**Yes**  
**The ED50 for this effect is typically 0.5-2.5 ng/mL.**

**Target/Specificity**  
IGF-1**Application Notes**

Centrifuge the vial prior to opening. Reconstitute in PBS, pH 7.4. Do not vortex.

**Format**

Lyophilized

**Storage**

-20°C; Lyophilized from 0.22 µm filtered solution in 50 mM Tris, 100 mM glycine, pH 7.5. Normally Mannitol or Trehalose are added as protectants before lyophilization.

**Human CellExp IGF-1, 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](#)

#### **Human CellExp IGF-1, human recombinant protein - Images**

#### **Human CellExp IGF-1, human recombinant protein - Background**

Insulin-like growth factor 1 (IGF-1) also known as somatomedin C, IGF1A, IGFI, sulfation factor, and is a hormone similar in molecular structure to insulin. It plays an important role in childhood growth and continues to have anabolic effects in adults. A synthetic analog of IGF-1, mecasermin is used for the treatment of growth failure. IGF-1 consists of 70 amino acids in a single chain with three intramolecular disulfide bridges. IGF-1 has a molecular weight of 7649 daltons. IGF-1 is produced primarily by the liver as an endocrine hormone as well as in target tissues in a paracrine/autocrine fashion. IGF-1 binds to at least two cell surface receptors: the Insulin-like growth factor 1 receptor, abbreviated as "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. Like the insulin receptor, the IGF-1 receptor is a receptor tyrosine kinase - meaning it signals by causing the addition of a phosphate molecule on particular tyrosines. Its primary action is mediated by binding to its specific receptor IGF1R, present on many cell types in many tissues. Binding to the IGF1R, a receptor tyrosine kinase, initiates intracellular signaling; IGF-1 is one of the most potent natural activators of the AKT signaling pathway, a stimulator of cell growth and proliferation, and a potent inhibitor of programmed cell death. 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).

#### **Human CellExp IGF-1, human recombinant protein - References**

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