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Human CellExp IGF-1, human recombinant protein

IGF-I, IGF1A, somatomedin C, MGF
Catalog # PBV11126r

Specification

Human CellExp IGF-1, human recombinant protein - Product info

Primary Accession	P05019
Calculated MW	**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	**3479**
Gene Symbol	**IGF1**

Other Names
IGF-I, IGF1A, somatomedin C, MGF

Gene Source	**Human**
Source	**HEK293 cells**
Assay&Purity	**SDS-PAGE; ≥98%**
Assay2&Purity2	**N/A;**
Recombinant	**Yes**
Results	**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 Cytomety
- 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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