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Human CellExp IGF1R/CD221, human recombinant protein

IGF-1R, IGF1R, CD221, IGFIR, IGFIR, IGFR, JTK13, MGC142170, MGC142172, MGC18216, Insulin-like Growth

Catalog # PBV11111r

Specification

Human CellExp IGF1R/CD221, human recombinant protein - Product info

Primary Accession	P08069
Calculated MW	**This protein contains C-terminal polyhistidine tag and has a calculated MW of 104 kDa (single chain), 80 kDa (α subunit) and 23 kDa (β subunit). DTT-reduced protein migrates as 120 kDa, 80 kDa and 35 kDa polypeptide in SDS-PAGE. KDa**

Human CellExp IGF1R/CD221, human recombinant protein - Additional Info

Gene ID	**3480**
Gene Symbol	**IGF1R**

Other Names
IGF-1R, IGF1R, CD221, IGFIR, IGFIR, IGFR, JTK13, MGC142170, MGC142172, MGC18216, Insulin-like Growth Factor 1 (IGF-1) Receptor

Gene Source	**Human**
Source	**HEK293 cells**
Assay&Purity	**SDS-PAGE; ≥95%**
Assay2&Purity2	**N/A;**
Recombinant	**Yes**
Results	**Measured by its ability to bind human IGF-I in a functional ELISA.**

Target/Specificity
IGF1R/CD221

Application Notes
Centrifuge the vial prior to opening. Reconstitute in sterile PBS, pH 7.4 to a concentration of 50 µg/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 month. For extended storage, it is recommended to store at -20°C.

Format
Lyophilized

Storage
-20°C; Lyophilized from 0.22 µm filtered solution in PBS, pH 7.4. Normally Mannitol or Trehalose is added as protectants before lyophilization.

Human CellExp IGF1R/CD221, 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 IGF1R/CD221, human recombinant protein - Images

Human CellExp IGF1R/CD221, human recombinant protein - Background

The Insulin-like Growth Factor 1 Receptor (IGF1R) is also known as CD221, JTK13, and is a transmembrane receptor that is activated by IGF-1 and by the related growth factor IGF-2. It belongs to the large class of tyrosine kinase receptors. This receptor mediates the effects of IGF-1, which is a polypeptide protein hormone similar in molecular structure to insulin. IGF1R is made up of two alpha subunits and two beta subunits. Both the α and β subunits are synthesized from a single mRNA precursor. The precursor is then glycosylated, proteolytically cleaved, and crosslinked by cysteine bonds to form a functional transmembrane αβ chain. The α chains are located extracellularly while the β subunit spans the membrane and are responsible for intracellular signal transduction upon ligand stimulation. IGF1R have a binding site for ATP, which is used to provide the phosphates for autophosphorylation. There is a 60% homology between IGF1R and the insulin receptor. In response to ligand binding, the α chains induce the tyrosine autophosphorylation of the β chains. This event triggers a cascade of intracellular signaling that, while somewhat cell type specific, often promotes cell survival and cell proliferation.

Human CellExp IGF1R/CD221, human recombinant protein - References

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