Human CellExp™ IGF1R/CD221, human recombinant

CATALOG #: 7490-10 10 µg
7490-50 50 µg

ALTERNATE NAMES: IGF-1R, IGF1R, CD221, IGFIR, IGF I R, IGFR, JTK13, MGC142170, MGC142172, MGC18216, Insulin-like Growth Factor 1 (IGF-1) Receptor

SOURCE: HEK 293 cells (Glu 31 – Asn 932)

PURITY: ≥ 95% by SDS-PAGE gel

MOL. WEIGHT: 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.

ENDOTOXIN LEVEL: <1 EU/µg by LAL method

FORM: Lyophilized

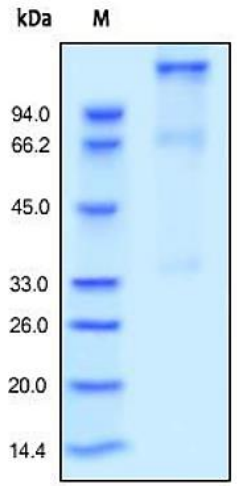
FORMULATION: Lyophilized from 0.22 µm filtered solution in PBS, pH 7.4. Normally Mannitol or Trehalose is added as protectants before lyophilization.

STORAGE CONDITIONS: Store at -20°C. After reconstitution, aliquot and store at -20°C and use within 3 months. Avoid repeated freezing and thawing cycles.

RECONSTITUTION: 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.

DESCRIPTION: 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.

BIOLOGICAL ACTIVITY: Measured by its ability to bind human IGF-I in a functional ELISA.



Human recombinant IGF1R/CD221

RELATED PRODUCTS:

- Human CellExp™ CD223, human recombinant **(Cat. No. 7278-10, -50)**
- Human CellExp™ CD71, human recombinant **(Cat. No. 7279-10, -50)**
- Human CellExp™ CD273, human recombinant **(Cat. No. 7369-10, -50)**
- Human CellExp™ CD33, human recombinant **(Cat. No. 7370-10, -50)**
- Human CellExp™ CD36, human recombinant **(Cat. No. 7371-10, -50)**
- Human CellExp™ CD87, human recombinant **(Cat. No. 7372-20, -100)**
- Human CellExp™ CD360, human recombinant **(Cat. No. 7373-20, -100)**
- Human CellExp™ CD244, human recombinant **(Cat. No. 7374-10, -50)**
- Human CellExp™ CD304, human recombinant **(Cat. No. 7375-10)**
- Human CellExp™ CD319, human recombinant **(Cat. No. 7376-10, -50)**
- Human CellExp™ CD306, human recombinant **(Cat. No. 7377-10, -50)**
- Human CellExp™ CD84, human recombinant **(Cat. No. 7378-10, -50)**

FOR RESEARCH USE ONLY! Not to be used in humans.