Recombinant Cynomolgus IGF1R protein, His-tagged

Cat. No. IGF1R-391H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Cynomolgus IGF1R protein (Glu31-Asn932), fused to His tag at C-terminus, was expressed in human 293 cells (HEK293).
Species	Cynomolgus
Source	HEK293
ProteinLength	902
Description	The Insulin-like Growth Factor 1 Receptor (IGF1) 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 make up of two alpha subunits and two beta subunits ,the 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.

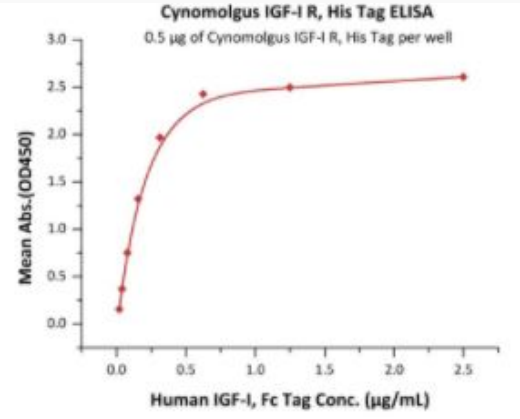
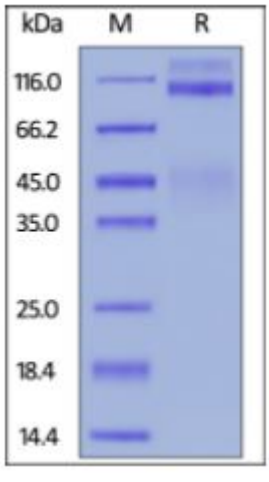
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Form	Lyophilized from 0.22 um filtered solution in PBS, pH7.4, 10% trehalose.
Molecular Mass	The protein has a calculated MW of 104.9 kDa, 81.1 kDa, 23.8 kDa. The protein migrates as 45-50 kDa, 96-115 kDa and 120 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.
Endotoxin	Less than 1.0 EU per ug by the LAL method.
Purity	>90% as determined by SDS-PAGE.
Storage	For long term storage, the product should be stored at lyophilized state at -20 centigrade or lower. Please avoid repeated freeze-thaw cycles. This product is stable after storage at: -20 centigrade to -70 centigrade for 12 months in lyophilized state; -70 centigrade for 3 months under sterile conditions after reconstitution.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.2 ug/ul. Centrifuge the vial at 4℃ before opening to recover the entire contents.

GENE INFORMATION

Gene Name	IGF1R
Official Symbol	IGF1R
Synonyms	IGF1R; insulin-like growth factor 1 receptor; IGF-I receptor; insulin-like growth factor I receptor; JTK13; IGFIRC
Gene ID	708227

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mRNA Refseq	NM_001261352.1
Protein Refseq	NP_001248281.1
UniProt ID	I2CWY3
Bioactivity-ELISA of IGF1R-391H	 Immobilized Cynomolgus IGF-I R, His Tag at 5 μg/mL (100 μL/well) can bind Human IGF-I, Fc Tag with a linear range of 0.02-0.3 μg/mL (QC tested).
SDS-PAGE of IGF1R-391H	

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Cynomolgus IGF-I R on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 90%.

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