

## IGF1R Antibody

**CATALOG NO.: XBP-4013**

**BACKGROUND:**

Insulin-like growth factor-1 receptor (IGF-1R, also known as CD221), a member of the tyrosine kinase superfamily, is a broadly expressed transmembrane receptor that plays a key role in supporting cell growth and differentiation, and imparts resistance to apoptosis. IGF-1R is synthesized as a single polypeptide that is glycosylated and proteolytically cleaved to yield a disulfide-linked tetrameric receptor composed of two alpha-subunits and two beta-subunits, arranged in the configuration alpha-beta-beta-alpha. IGF-1R's alpha-subunits (135 kDa) mediate ligand binding, and are entirely extracellular. IGF-1R's beta-subunits (90 kDa) each possess an extracellular domain, a single transmembrane domain, and a cytoplasmic portion. Three polypeptide ligands for IGF-1R have been identified: IGF-1, IGF-2, and insulin. IGF-1's binding to the alpha-subunits of the receptor induces a conformational change, resulting in the trans-autophosphorylation of three tyrosine residues (1131, 1135, and 1136) and activation. Activated IGF-1R phosphorylates substrate proteins, including Shc and insulin receptor substrates (IRS) 1, 2, 3, and 4, and recruits 14-3-3 proteins. This antibody recognizes the beta-subunit of IGF-1R, and does not bind to insulin receptor.

**SPECIFICITY:**

Human, mouse and rat.

**SOURCE:**

IGF1R antibody was produced against recombinant fragment of the cytoplasmic domain of human IGF-1R beta-subunit expressed in E. coli.

**APPLICATION:**

IGF1R antibody is suitable for use in Western blotting. **This product is for research use only.**

**STORAGE:**

Store at 2-8°C. For long term storage, aliquot into small volumes and store at -20°C. Avoid repeated freeze-thaw cycles to prevent denaturing the antibody.

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