

Mouse anti-Human IGF1R Monoclonal Antibody | anti-IGF1R antibody

Anti-IGF1R Antibody, Mouse Monoclonal

CATALOG # AAA254608	HOST Mouse	REACTIVITY Human	APPLICATIONS ELISA
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PRODUCT SYNONYMS

IGF1R; Monoclonal Antibody; Anti-IGF1R Antibody; Mouse Monoclonal; IGF1R/CD221 Antibody; Mouse MAb; insulin-like growth factor 1 receptor; Anti-CD221 Antibody; Anti-IGF-I R Antibody; Anti-IGF1 Receptor Antibody; Anti-IGFIR Antibody; Anti-IGFR Antibody; Anti-JTK13 Antibody; anti-IGF1R antibody

PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Human
Clonality	Monoclonal
Isotype	Mouse IgG2a
Clone Number	4E2D12F6
Specificity	Human IGF1R/CD221
Purity/Purification	Protein A
Form/Format	Liquid; 0.2um filtered solution in PBS
Concentration	1 mg/ml (varies by lot)
Applicable Applications for anti-IGF1R antibody	ELISA
Immunogen	Recombinant Human IGF1R protein
Preparation	This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a mouse immunized with purified, recombinant Human IGF1R/CD221 extracellular domain (rhIGF1R). The IgG fraction of the cell culture supernatant was purified by Protein A affinity chromatography.
Preparation and Storage	This antibody can be stored at 2-8 degree C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20 degree C to -80 degree C. Preservative-Free. Avoid repeated freeze-thaw cycles.

ADDITIONAL INFORMATION

Related Product Information for anti-IGF1R antibody	The insulin-like growth factor-1 receptor (IGF1R) is a transmembrane tyrosine kinase involved in several biological processes including cell proliferation, differentiation, DNA repair, and cell survival. This a disulfide-linked heterotetrameric transmembrane protein consisting of two alpha and two beta subunits, and among which, the alpha subunit is extracellular while the beta subunit has an extracellular domain, a transmembrane domain, and a cytoplasmic tyrosine kinase domain. The IGF1R signaling pathway is activated in the mammalian nervous system from the early developmental stages. Its major effect on developing neural cells is to promote their growth and survival. This pathway can integrate its action with signaling pathways of growth and morphogenetic factors that induce cell fate specification and selective expansion of specified neural cell subsets. Modulation of cell migration is another possible role that IGF1R activation may play in neurogenesis. In the mature brain, IGF-I binding sites have been found in different regions of the brain, and multiple reports confirmed a strong neuroprotective action of the IGF-IR against different pro-apoptotic insults. IGF1R is an important signaling molecule in cancer cells and plays an essential role in the establishment and maintenance of the transformed phenotype. Inhibition of IGF1R signaling thus appears to be a promising strategy to interfere with the growth and survival of cancer cells. IGF1R is frequently overexpressed by tumors and mediates proliferation and apoptosis protection. IGF signaling also influences hypoxia signaling, protease secretion, tumor cell motility, and adhesion, and thus can affect the propensity for invasion and metastasis. Therefore, IGF1R is now an attractive anti-cancer treatment target.
Product Categories/Family for anti-IGF1R antibody	Receptor Tyrosine Kinases (RTKs) Cancer Drug Targets; AKT Signaling Pathway
References	Bhr C, et al. (2004) The insulin like growth factor-1 receptor (IGF-1R) as a drug target: novel approaches to cancer therapy. Growth Horm IGF Res. 14 (4): 287-95. Riedemann J, et al. (2006) IGF1R signalling and its inhibition. Endocr Relat Cancer. 13 Suppl 1: 33-43. Gualco E, et al. (2009) IGF-IR in neuroprotection and brain tumors. Front Biosci. 14: 352-75. Annenkov A. (2009) The insulin-like growth factor (IGF) receptor type 1 (IGF1R) as an essential component of the signalling network regulating neurogenesis. Mol Neurobiol. 40 (3): 195-215.

NCBI AND UNIPROT INFORMATION

NCBI GI #	4557665
NCBI GeneID	3480
NCBI Accession #	NP_000866.1
NCBI GenBank Nucleotide #	NM_000875.3
UniProt Accession #	P08069; Q14CV2; Q9UCC0; B1B5Y2
NCBI Official Full Name	insulin-like growth factor 1 receptor
NCBI Official Synonym Full Names	insulin-like growth factor 1 receptor
NCBI Official Symbol	IGF1R
NCBI Official Synonym Symbols	IGFR; CD221; IGFR; JTK13
NCBI Protein Information	insulin-like growth factor 1 receptor; IGF-I receptor; soluble IGF1R variant 1; soluble IGF1R variant 2; insulin-like growth factor I receptor
UniProt Protein Name	Insulin-like growth factor 1 receptor
UniProt Gene Name	IGF1R
UniProt Synonym Gene Names	IGF-I receptor
UniProt Entry Name	IGF1R_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.