

Anti-IGF1R/CD221 Antibody (1V195)

Product Details

Ig Type:	Rabbit IgG
Reactivity:	Human
Conjugation:	Unconjugated
Clone:	1V195
Purification:	Protein A

Applications

Verified Activity:	<ol style="list-style-type: none">1. Immunofluorescence staining of Human IGF1R in MCF7 cells. Cells were fixed with 4% PFA, blocked with 10% serum, and incubated with Rabbit anti-Human IGF1R monoclonal antibody (1:60) at 37°C 1 hour. Then cells were stained with the Alexa Fluor® 488-conjugated Goat Anti-rabbit IgG secondary antibody (green). Positive staining was localized to cell membrane.2. Flow cytometric analysis of human IGF1R expression on HeLa cells. Cells were stained with purified anti-Human IGF1R, then a FITC-conjugated second step antibody. The histogram were derived from events with the forward and side light-scatter characteristics of intact cells.
Application:	FCM,ICC/IF
Recommended	ICC-IF: 1:20-1:100; FCM: 1:25-1:100

Properties

Stability & Storage:	Store at 2°C-8°C for 1 month. Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles. Preservative-Free.
Shipping:	Shipping with blue ice.

Antigen Details

Immunogen:	Recombinant Protein: Human IGF1R / CD221 protein (TMPY-00834)
Antigen Species:	Human
Synonyms:	insulin-like growth factor 1 receptor;JTK13;IGF-I R;CD221;IGFIR;IGFR;IGF1 Receptor
Biology Area:	Receptor Tyrosine Kinases (RTKs), Cancer Drug Targets

Research Background

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 α and two β subunits, and among which, the α subunit is extracellular while the β 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

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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. Cancer Immunotherapy Immune Checkpoint Immunotherapy Targeted Therapy

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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