

Mouse Anti-Human Insulin-like Growth Factor 1 Receptor Monoclonal Antibody

Cat. No. CAB11558MH **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Mouse Monoclonal Antibody to Human Insulin-like Growth Factor 1 Receptor
Species	Human
Source	Mouse
Antigen Description	IGF1R (Insulin-like growth factor-1 receptor) is 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. IGF1 receptor/IGF1R is a receptor tyrosine kinase (RTK) expressed in all cell types and tissues, and plays a critical role in transformation events during embryogenesis, development and pathogenesis processes. IGF1R become tyrosine phosphorylated and enzymatically activated either in response to IGF1 and 2 ligands or because of the activity of the Src tyrosine kinase, and subsequently initiates an intracellular signaling cascade (MAPK) that leads to gene expression changes and correspondent cellular responses. It is commonly overexpressed in most malignant tissues including breast, prostate, pancreas and affect cancer cell proliferation, adhesion, metastasis and survival by mediating the anti-apoptotic pathway. Accordingly, IGF1R is regarded as potential anti-tumor therapeutic target, and momoclonal antibodies are probably the most promising and specific therapeutic agents.
Specificity	Human IGF1R / CD221. No cross-reactivity with human cell lysate (293 cell line) in

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

	WB and ELISA.
Immunogen	Recombinant human IGF1R protein
Isotype	Mouse IgG1
Cross Reactivity	10G1G6E2
Clone	11H2H7F3
Applications	WB
Dilution	Western blot: This antibody can be used at 1-2 ug/mL with the appropriate secondary reagents to detect human IGF1R in WB. On reducing conditions, it recognizes the β subunit. Using a DAB detection system, the detection limit for human IGF1R is approximately 1ng/lane under non-reducing conditions and 20ng/lane under reducing conditions.
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, human cell-derived, recombinant human IGF1R / CD221 extracellular domain (rhIGF1R; Met 1-Asn 932; NP_000866.1). The IgG fraction of the cell culture supernatant was purified by Protein A affinity chromatography.
Format	0.2 μ m filtered solution in PBS with 5% trehalose
Storage	This antibody can be stored at 2-8 °C for 1 month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20 to -70 °C. Preservative-Free.Sodium azide is recommended to avoid contamination (final concentration 0.05%-0.1%). It is toxic to cells and should be

disposed of properly. Avoid repeated freeze-thaw cycles.

GENE INFORMATION

Gene Name	IGF1R insulin-like growth factor 1 receptor [Homo sapiens]
Official Symbol	IGF1R
Synonyms	IGF1R; insulin-like growth factor 1 receptor; CD221; IGFI; IGFR; JTK13; MGC18216; IGF-I receptor; soluble IGF1R variant 1; soluble IGF1R variant 2; insulin-like growth factor I receptor; MGC142170; MGC142172;
Gene ID	3480
mRNA Refseq	NM_000875
Protein Refseq	NP_000866
MIM	147370
UniProt ID	P08069
Chromosome Location	15q26.3
Pathway	Adherens junction, organism-specific biosystem; Adherens junction, conserved biosystem; Apoptosis, organism-specific biosystem; Endochondral Ossification, organism-specific biosystem; Endocytosis, organism-specific biosystem; Endocytosis, conserved biosystem; Focal Adhesion, organism-specific biosystem;
Function	ATP binding; identical protein binding; insulin binding; insulin receptor binding; insulin

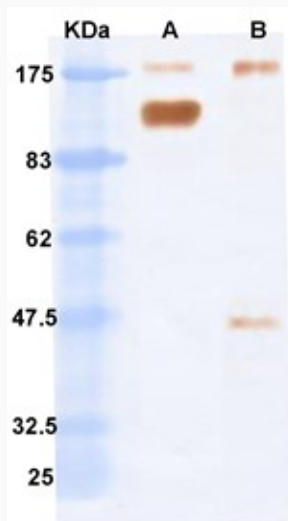
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receptor substrate binding; insulin-like growth factor I binding; insulin-like growth factor binding; insulin-like growth factor-activated receptor activity; nucleotide binding; phosphatidylinositol 3-kinase binding; protein binding; protein tyrosine kinase activity; receptor activity;

**Western blot of
human CD221 /
IGF1R Monoclonal
Antibody. Clone
ID:A-7F11B10I12B-
11H2H7F3**



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