Datasheet for ABIN7043290

anti-IGF1R antibody (Extracellular)

4 Images

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Overview

Quantity:	0.2 mL
Target:	IGF1R
Binding Specificity:	AA 883-896, Extracellular
Reactivity:	Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This IGF1R antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Flow Cytometry (FACS), Live Cell Imaging (LCI)

Product Details

Purpose:	A Rabbit Polyclonal Antibody to IGF1R
Immunogen:	Immunogen: Synthetic peptide Immunogen Sequence: (C)RQEYRKYGGAKLNR, corresponding to amino acid residues 883-896 of rat IGF1R
Isotype:	IgG
Specificity:	Extracellular, N-terminus (β chain)
Cross-Reactivity:	Human, Mouse, Rat
Predicted Reactivity:	Mouse,human - identical
Characteristics:	Anti-IGF1R (extracellular) Antibody (ABIN7043290, ABIN7044798 and ABIN7044799) is a highly

Product Details

	specific antibody directed against an epitope of the rat protein. The antibody can be used in western blot, immunohistochemistry, and live cell flow cytometry applications. It has been designed to recognize IGF1R from mouse, rat, and human samples.
Purification:	Affinity purified on immobilized antigen.

Target Details

Target:	IGF1R
Alternative Name:	IGF1R (IGF1R Products)
Background:	Insulin-like growth factor 1 receptor, IGF-I receptor, CD221,Insulin-like growth factor receptor (IGF1R) is a cell surface, tyrosine kinase receptor that can be activated by IGF1, IGF2, and insulin1.IGF receptors are tyrosine kinase-containing heterotetramers that are linked to numerous cytoplasmic signaling cascades and have important roles in various cellular functions. IGF1R displays potent anti-apoptotic, pro-survival capacities and plays a key role in malignant transformation by regulating MAPK and PI3K/AKT signaling pathways. IGF1R regulators are identified as a candidate therapeutic targets in cancer and growth-related diseases1,2.IGF1R and insulin receptor (IR) are closely related, and share 57 % sequence identity and high structural similarity. Each IGF1R and IR receptor consists of the L1, CR, L2, FnIII-1,-2,-3, transmembrane (TM), and kinase domain. Two such protomers are linked by multiple disulfide bonds, forming a stable, covalent dimer. Upon ligand binding, the dimer undergoes significant conformational changes which facilitate its further signal transduction cascade3. Alternative names: Insulin-Like Growth Factor 1 Receptor, IGF-I Receptor, CD221
Gene ID:	25718
NCBI Accession:	NM_000875
UniProt:	P24062
Pathways:	RTK Signaling, Regulation of Hormone Metabolic Process, Regulation of Hormone Biosynthetic Process, Autophagy

Application Details

Application Notes:	Antigen preadsorption control: 1 µg peptide per 1 µg antibody Application Dilutions Immunohistochemistry paraffin embedded sections ihc: 1:1200

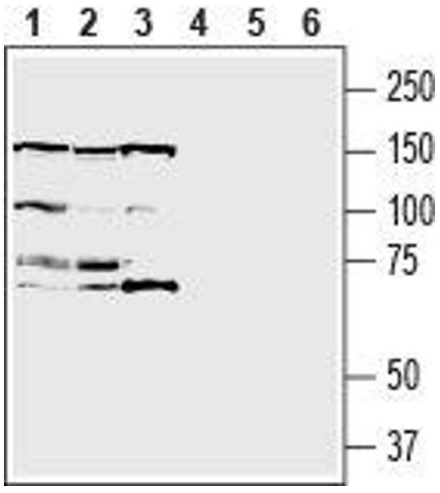
Application Details

	Application Dilutions Western blot wb: 1:400
Comment:	Negative Control: (ABIN7235817) Blocking Peptide: (ABIN7235817)
Restrictions:	For Research Use only

Handling

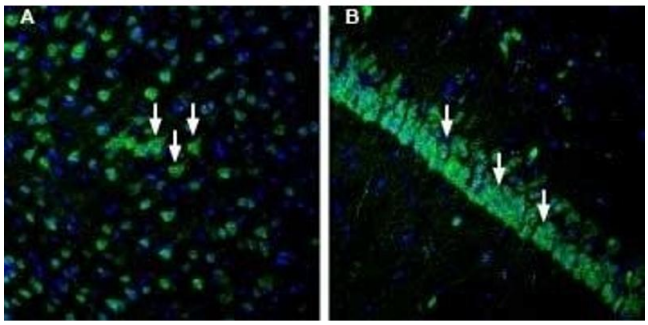
Format:	Lyophilized
Reconstitution:	Recosntitute with double distilled water (DDW) to a concentration of 1.0 mg/mL.
Concentration:	1 mg/mL
Buffer:	PBS pH 7.4
Storage:	4 °C,-20 °C
Storage Comment:	Storage before reconstitution: The antibody ships as a lyophilized powder at room temperature. Upon arrival, it should be stored at -20°C. Storage after reconstitution: The reconstituted solution can be stored at 4°C for up to 1 week. For longer periods, small aliquots should be stored at -20°C. Avoid multiple freezing and thawing. Centrifuge all antibody preparations before use (10000 x g 5 min).

Images



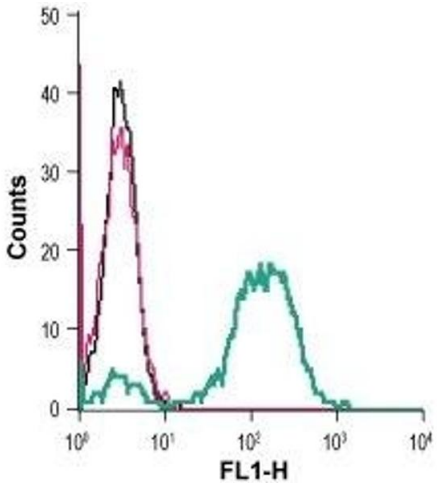
Western Blotting

Image 1. Western blot analysis of human MCF-7 breast adenocarcinoma cell line lysate (lanes 1 and 4), human U-87 MG glioblastoma cell line lysate (lanes 2 and 5) and human THP-1 monocytic leukemia cell line lysate (lanes 3 and 6): -1-3. Anti-IGF1R (extracellular) Antibody (ABIN7043290, ABIN7044798 and ABIN7044799), (1:400). 4-6. Anti-IGF1R (extracellular) Antibody, preincubated with IGF1R (extracellular) Blocking Peptide (#BLP-NT045).



Immunohistochemistry

Image 2. Expression of IGF1R in rat cortex and hippocampus - Immunohistochemical staining of perfusion-fixed frozen rat brain sections with Anti-IGF1R (extracellular) Antibody (ABIN7043290, ABIN7044798 and ABIN7044799), (1:1200), followed by goat anti-rabbit-AlexaFluor-488. A. IGF1R staining (green) in the parietal cortex is detected in neurons of the pyramidal layer (arrows). B. IGF1R immunoreactivity (green) in the hippocampal CA1 region is observed neurons of the pyramidal layer (arrows). Cell nuclei are stained with DAPI (blue).



Flow Cytometry

Image 3. Cell surface detection of IGF1R in live intact human THP-1 monocytic leukemia cells: (black line) Cells.(red line) Cells + goat-anti-rabbit-FITC.(green line) Cells + Anti-IGF1R (extracellular) Antibody (ABIN7043290, ABIN7044798 and ABIN7044799), (2.5 µg) + goat-anti-rabbit-FITC.

Please check the product details page for more images. Overall 4 images are available for ABIN7043290.