

IGF-IR Rabbit pAb

CatalogNo: YT2282 **Orthogonal Validated** 

Key Features

Host Species

- Rabbit

Reactivity

- Human, Mouse, Rat

Applications

- IF, WB, IHC, ELISA

MW

- pro:155kD, recetor beta:95kD (Observed)

Isotype

- IgG

Storage

Storage* -15°C to -25°C/1 year (Do not lower than -25°C)

Formulation Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Recommended Dilution Ratios

IF 1:50-200

WB 1:500-1:2000

IHC 1:100-1:300

ELISA 1:10000

Not yet tested in other applications

Basic Information

Clonality Polyclonal

Immunogen Information

Immunogen The antiserum was produced against synthesized peptide derived from human IGF1R. AA range:1126-1175

Specificity IGF-IR Polyclonal Antibody detects endogenous levels of IGF-IR protein.

| Target Information

Gene name IGF1R

Protein Name Insulin-like growth factor 1 receptor

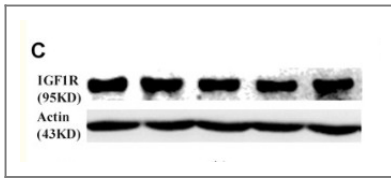
Organism	Gene ID	UniProt ID
Human	3480 ; 3643 ;	P08069 ; P06213 ;
Mouse	16001 ; 16337 ;	
Rat	25718 ;	P24062 ; P15127 ;

Cellular Localization Cell membrane ; Single-pass type I membrane protein .

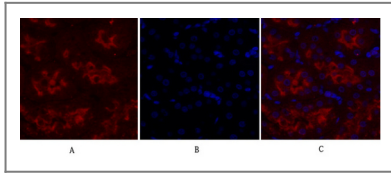
Tissue specificity Found as a hybrid receptor with INSR in muscle, heart, kidney, adipose tissue, skeletal muscle, hepatoma, fibroblasts, spleen and placenta (at protein level). Expressed in a variety of tissues. Overexpressed in tumors, including melanomas, cancers of the colon, pancreas prostate and kidney.

Function Catalytic activity:ATP + a [protein]-L-tyrosine = ADP + a [protein]-L-tyrosine phosphate.,Disease:Defects in IGF1R may be a cause in some cases of resistance to insulin-like growth factor 1 (IGF1 resistance) [MIM:270450]. IGF1 resistance is a growth deficiency disorder characterized by intrauterine growth retardation and poor postnatal growth accompanied with increased plasma IGF1.,enzyme regulation:Autophosphorylation activates the kinase activity.,Function:This receptor binds insulin-like growth factor 1 (IGF1) with a high affinity and IGF2 with a lower affinity. It has a tyrosine-protein kinase activity, which is necessary for the activation of the IGF1-stimulated downstream signaling cascade. When present in a hybrid receptor with INSR, binds IGF1. PubMed:12138094 shows that hybrid receptors composed of IGF1R and INSR isoform Long are activated with a high affinity by IGF1, with low affinity by IGF2 and not significantly activated by insulin, and that hybrid receptors composed of IGF1R and INSR isoform Short are activated by IGF1, IGF2 and insulin. In contrast, PubMed:16831875 shows that hybrid receptors composed of IGF1R and INSR isoform Long and hybrid receptors composed of IGF1R and INSR isoform Short have similar binding characteristics, both bind IGF1 and have a low affinity for insulin.,online information:IGF-1 receptor entry,PTM:Phosphorylation of Tyr-980 is required for IRS1- and SHC1-binding.,PTM:The cytoplasmic domain of the beta subunit is autophosphorylated on tyrosine residues in response to insulin-like growth factor I (IGF I).,similarity:Belongs to the protein kinase superfamily. Tyr protein kinase family. Insulin receptor subfamily.,similarity:Contains 1 protein kinase domain.,similarity:Contains 3 fibronectin type-III domains.,subunit:Tetramer of 2 alpha and 2 beta chains linked by disulfide bonds. The alpha chains contribute to the formation of the ligand-binding domain, while the beta chain carries the kinase domain. Interacts with PIK3R1 and with the PTB/PID domains of IRS1 and SHC1 in vitro when autophosphorylated on tyrosine residues. Forms a hybrid receptor with INSR, the hybrid is a tetramer consisting of 1 alpha chain and 1 beta chain of INSR and 1 alpha chain and 1 beta chain of IGF1R.,tissue specificity:Found as a hybrid receptor with INSR in muscle, heart, kidney, adipose tissue, skeletal muscle, hepatoma, fibrobasts, spleen and placenta (at protein level). Expressed in a variety of tissues.,

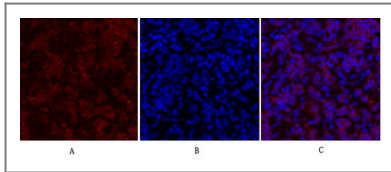
| Validation Data



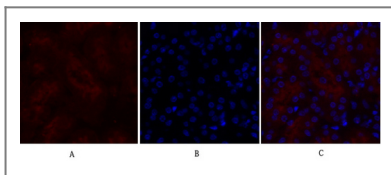
Xie, Jing, et al. "Negative regulation of Grb10 Interacting GYF Protein 2 on insulin-like growth factor-1 receptor signaling pathway caused diabetic mice cognitive impairment." PloS one 9.9 (2014): e108559.



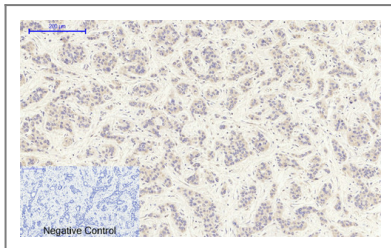
Immunofluorescence analysis of rat-kidney tissue. 1,IGF-IR Polyclonal Antibody(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



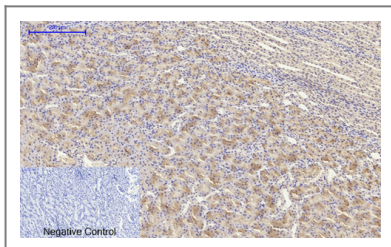
Immunofluorescence analysis of mouse-lung tissue. 1,IGF-IR Polyclonal Antibody(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



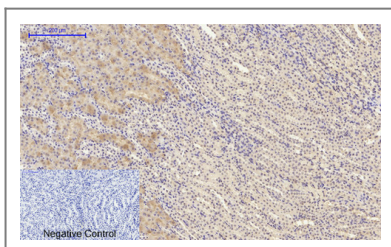
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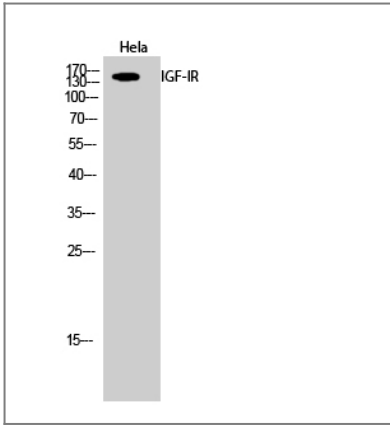
Immunohistochemical analysis of paraffin-embedded Human-liver-cancer tissue. 1,IGF-IR Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room temperature, 30min). Negative control was used by secondary antibody only.



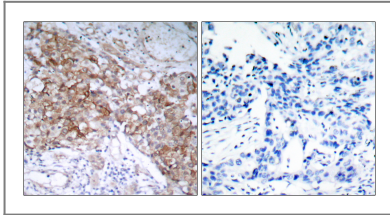
Immunohistochemical analysis of paraffin-embedded Rat-kidney tissue. 1,IGF-IR Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room temperature, 30min). Negative control was used by secondary antibody only.



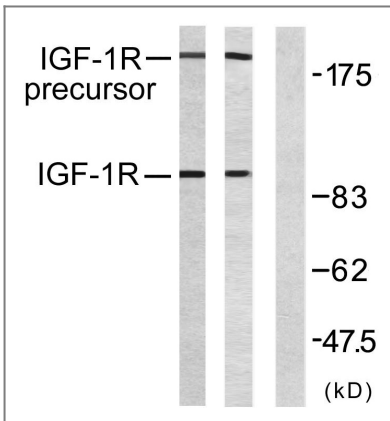
Immunohistochemical analysis of paraffin-embedded Mouse-kidney tissue. 1,IGF-IR Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room temperature, 30min). Negative control was used by secondary antibody only.



Western Blot analysis of HeLa cells using IGF-IR Polyclonal Antibody diluted at 1:2000



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma tissue, using IGF1R Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from 293 cells, treated with Insulin, using IGF1R Antibody. The lane on the right is blocked with the synthesized peptide.

Contact information

Orders: order.cn@immunoway.com
 Support: support.cn@immunoway.com
 Telephone: 400-8787-807(China)
 Website: <http://www.immunoway.com.cn>
 Address: 2200 Ringwood Ave San Jose, CA 95131 USA



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