IGF-IR (Phospho Tyr1161) Rabbit pAb

CatalogNo: YP0138 Orthogonal Validated Comparable Abs

Key Features

Host Species
- Rabbit

Reactivity
- Human,Mouse,Rat

Applications
- WB,IHC,IF,IP,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

WB 1:500-1:2000
IHC 1:100-1:300
IP 2-5 ug/mg lysate
ELISA 1:20000
IF 1:50-200

Basic Information

Clonality	Polyclonal

Immunogen Information

Immunogen	The antiserum was produced against synthesized peptide derived from human IGF1R around the phosphorylation site of Tyr1161. AA range:1131-1180

Specificity	Phospho-IGF-IR (Y1161) Polyclonal Antibody detects endogenous levels of IGF-IR protein only when phosphorylated at Y1161.The name of modified sites may be influenced by many factors, such as species (the modified site was not originally found in human samples) and the change of protein sequence (the previous protein sequence is incomplete, and the protein sequence may be prolonged with the development of protein sequencing technology). When naming, we will use the "numbers" in historical reference to keep the sites consistent with the reports. The antibody binds to the following modification sequence (lowercase letters are modification sites):DIyET

Target Information

Gene name	IGF1R
Protein Name	Insulin-like growth factor 1 receptor

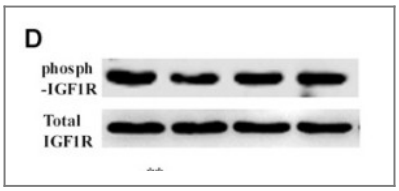
Organism	Gene ID	UniProt ID
Human	3480; 3643;	P08069; P06213;
Mouse	16001; 16337;	
Rat	25718;	P24062; P15127;

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.

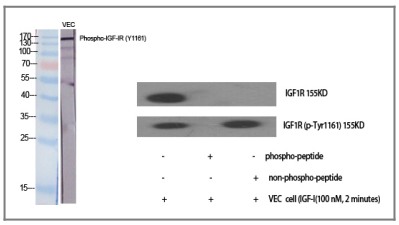
Function

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 gowth 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. ,

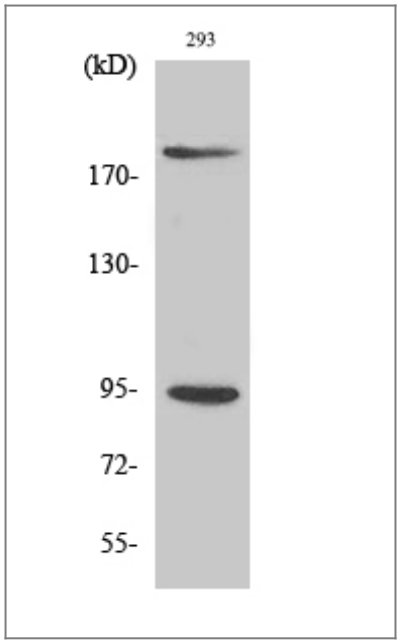
Validation Data



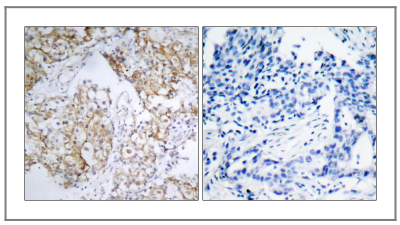
Xie, Jing, et al. "Negative regulation of Grb10 Interacting GYF Protein 2 on insulin-like growth factor-1 receptor signaling pathway caused diabetic mice cognitive impairment." PloS one 9.9 (2014): e108559.



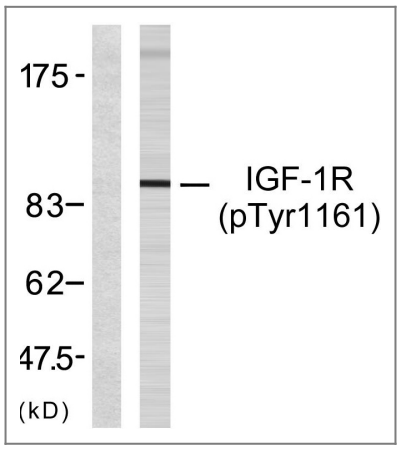
Western Blot analysis of various cells using Phospho-IGF-IR (Y1161) Polyclonal Antibody diluted at 1:2000



Western Blot analysis of 293 cells using Phospho-IGF-IR (Y1161) Polyclonal Antibody diluted at 1:2000



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using IGF1R (Phospho-Tyr1161) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from 293 cells treated with Insulin, using IGF1R (Phospho-Tyr1161) Antibody. The lane on the left is blocked with the phospho peptide.

Contact information

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