IGF-IR (pTyr1135/6) /INSR β (pTyr1150/1) (PT0867R) PT™ Rabbit mAb

CatalogNo: YM8636 Recombinant

Key Features

Host Species
- Rabbit

Reactivity
- Human,Mouse,Rat

Applications
- WB,ICC/IF,ELISA

MW
- 156kD (Calculated)

95kD (Observed)

Isotype
- IgG, Kappa

Storage

Storage*	-15°C to -25°C/1 year (Do not lower than -25°C)
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA

Recommended Dilution Ratios

WB 1:2000-1:10000
ICC/IF 1:200-1:1000
ELISA 1:5000-1:20000

Basic Information

Clonality	Monoclonal
Clone Number	PT0867R

Immunogen Information

Immunogen	The specific immunogen used to produce this antibody is proprietary information.

Specificity	Antibody detects endogenous levels of IGF-I receptor only when phosphorylated at tyrosine 1162/1163 or (insulin receptor)1189/1190, respectively. 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 When naming, we will use the "numbers" in historical reference to keep the sites consistent with the reports.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): TDyyRK

Target Information

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

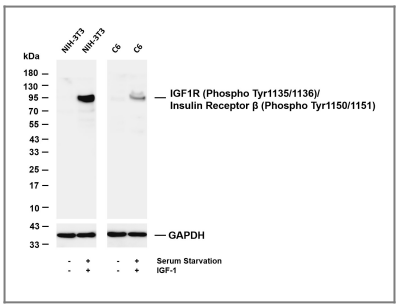
Organism	Gene ID	UniProt ID
Human	3480; 3643;	P08069; P06213;
Mouse	16001; 16337;	
Rat	25718;	P24062; P15127;

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



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-IGF1 Receptor (Phospho Tyr1135/1136)/Insulin Receptor β (Phospho Tyr1150/1151) antibody. The HRP-conjugated Goat anti-Rabbit IgG (H + L) antibody was used to detect the antibody. Lane 1: NIH-3T3 Lane 2: NIH-3T3 serum was starved for 24 hours and then treated with IGF-1 (100ng/ml) for 20 minutes Lane 3: C6 Lane 4: C6 serum was starved for 24 hours and then treated with IGF-1 (100ng/ml) for 20 minutes Predicted band size: 156kDa Observed band size: 95kDa

Contact information

Orders: order@immunoway.com
Support: tech@immunoway.com
Telephone: 877-594-3616 (Toll Free), 408-747-0185
Website: http://www.immunoway.com
Address: 2200 Ringwood Ave San Jose, CA 95131 USA

Please scan the QR code to access additional product information:
IGF-IR (pTyr1135/6) /INSR β (pTyr1150/1) (PT0867R) PT™ Rabbit mAb

For Research Use Only. Not for Use in Diagnostic Procedures.