

## Rabbit IGF1R Polyclonal Antibody | anti-IGF1R antibody

Phospho-IGF1R (Tyr1346) Antibody

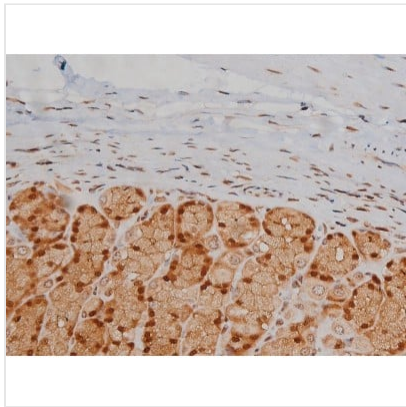
| CATALOG # | HOST   | REACTIVITY        | APPLICATIONS                                                                       |
|-----------|--------|-------------------|------------------------------------------------------------------------------------|
| AAA30993  | Rabbit | Human, Mouse, Rat | Western Blot, Immunohistochemistry, Immunofluorescence, Immunocytochemistry, ELISA |

### PRODUCT SYNONYMS

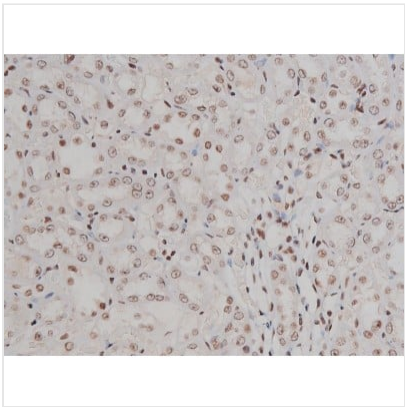
IGF1R; Polyclonal Antibody; Phospho-IGF1R (Tyr1346) Antibody; CD221; CD221 antigen; IGF 1 receptor; IGF 1R; IGF I receptor; IGF-I receptor; Igf1r; IGF1R\_HUMAN; IGFI; IGFI; IGFI; Insulin like growth factor 1 receptor; Insulin like growth factor 1 receptor precursor; Insulin-like growth factor 1 receptor beta chain; Insulin-like growth factor I receptor; JTK13; MGC142170; MGC142172; MGC18216; Soluble IGF1R variant 1; Soluble IGF1R variant 2; anti-IGF1R antibody

### PRODUCT SPECIFICATIONS

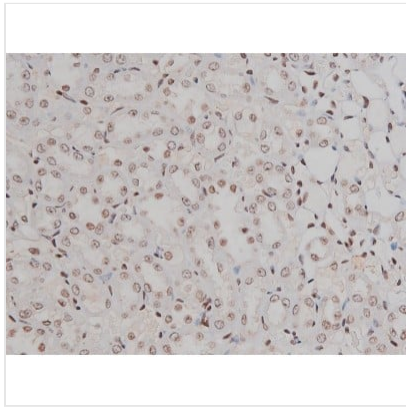
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|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                                            | Rabbit                                                                                                                                                                                                                                                                                              |
| Reactivity                                      | Human, Mouse, Rat                                                                                                                                                                                                                                                                                   |
| Clonality                                       | Polyclonal                                                                                                                                                                                                                                                                                          |
| Isotype                                         | IgG                                                                                                                                                                                                                                                                                                 |
| Specificity                                     | Phospho-IGF1R (Tyr1346) antibody detects endogenous levels of IGF1R only when phosphorylated at Tyrosine 1346                                                                                                                                                                                       |
| Purity/Purification                             | From purified rabbit serum by affinity purification via sequential chromatography on phospho-and non-phospho-peptide affinity columns.                                                                                                                                                              |
| Form/Format                                     | Liquid<br>Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.                                                                                                                                                                                                       |
| Concentration                                   | 1mg/ml (varies by lot)                                                                                                                                                                                                                                                                              |
| Sequence Length                                 | 1367                                                                                                                                                                                                                                                                                                |
| Applicable Applications for anti-IGF1R antibody | WB (Western Blot), IHC (Immunohistochemistry), IF (Immunofluorescence), ICC (Immunocytochemistry), ELISA                                                                                                                                                                                            |
| Application Notes                               | IHC: 1:50-1:200<br>WB: 1:500-1:2000<br>IF/ICC: 1:100-1:500                                                                                                                                                                                                                                          |
| Immunogen                                       | A synthesized peptide derived from human IGF1R around the phosphorylation site of Tyrosine 1346                                                                                                                                                                                                     |
| Subcellular Location                            | Cell Membrane                                                                                                                                                                                                                                                                                       |
| 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. |
| Predicted Cross Reactivity                      | <b>Pig, Bovine, Rabbit, Dog, Chicken, Xenopus</b>                                                                                                                                                                                                                                                   |
| Similarity                                      | Pig (100%), Bovine (100%), Rabbit (92%), Dog (100%), Chicken (92%), Xenopus (100%)                                                                                                                                                                                                                  |
| Conjugation                                     | Unconjugated                                                                                                                                                                                                                                                                                        |
| Epitope                                         | Phospho Tyr1346                                                                                                                                                                                                                                                                                     |
| Preparation and Storage                         | Store at -20 degree C. Stable for 12 months from date of receipt.                                                                                                                                                                                                                                   |



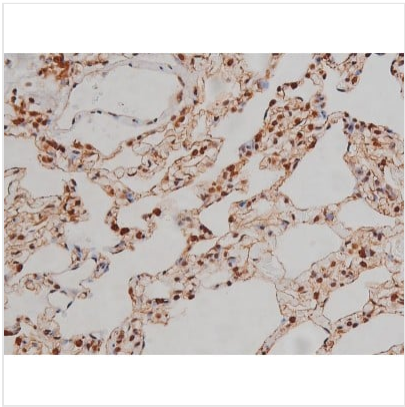
**IHC (Immunohistochemistry)**  
AAA30993 at 1/200 staining Rat ganstric tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



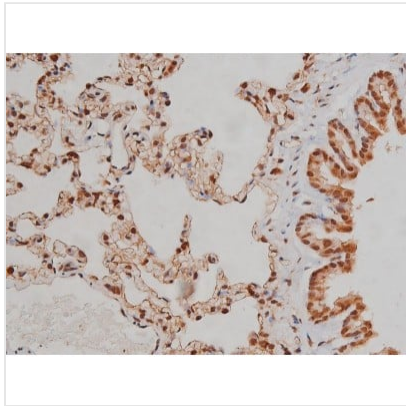
**IHC (Immunohistochemistry)**  
AAA30993 at 1/200 staining Rat kidney tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



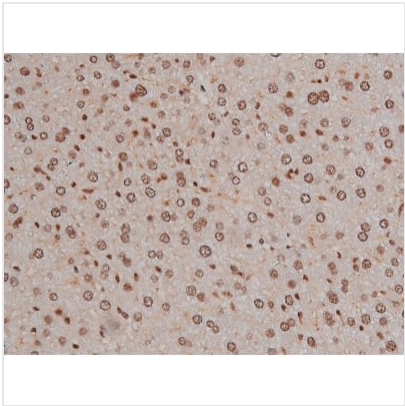
**IHC (Immunohistochemistry)**  
AAA30993 at 1/200 staining Rat kidney tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



**IHC (Immunohistochemistry)**  
AAA30993 at 1/200 staining Rat lung tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



**IHC (Immunohistochemistry)**  
AAA30993 at 1/200 staining Rat lung tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



**IHC (Immunohistochemistry)**  
AAA30993 at 1/200 staining Mouse brain tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.

ADDITIONAL INFORMATION

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
| Related Product Information for anti-IGF1R antibody | <p>Description: This receptor binds insulin-like growth factor with a high affinity. It has tyrosine kinase activity. The insulin-like growth factor I receptor plays a critical role in transformation events. Cleavage of the precursor generates alpha and beta subunits.</p> <p>Function: Receptor tyrosine kinase which mediates actions of insulin-like growth factor 1 (IGF1). Binds IGF1 with high affinity and IGF2 and insulin (INS) with a lower affinity. The activated IGF1R is involved in cell growth and survival control. IGF1R is crucial for tumor transformation and survival of malignant cell. Ligand binding activates the receptor kinase, leading to receptor autophosphorylation, and tyrosines phosphorylation of multiple substrates, that function as signaling adapter proteins including, the insulin-receptor substrates (IRS1/2), Shc and 14-3-3 proteins. Phosphorylation of IRSs proteins lead to the activation of two main signaling pathways: the PI3K-AKT/PKB pathway and the Ras-MAPK pathway. The result of activating the MAPK pathway is increased cellular proliferation, whereas activating the PI3K pathway inhibits apoptosis and stimulates protein synthesis. Phosphorylated IRS1 can activate the 85 kDa regulatory subunit of PI3K (PIK3R1), leading to activation of several downstream substrates, including protein AKT/PKB. AKT phosphorylation, in turn, enhances protein synthesis through mTOR activation and triggers the antiapoptotic effects of IGFIR through phosphorylation and inactivation of BAD. In parallel to PI3K-driven signaling, recruitment of Grb2/SOS by phosphorylated IRS1 or Shc leads to recruitment of Ras and activation of the ras-MAPK pathway. In addition to these two main signaling pathways IGF1R signals also through the Janus kinase/signal transducer and activator of transcription pathway (JAK/STAT). Phosphorylation of JAK proteins can lead to phosphorylation/activation of signal transducers and activators of transcription (STAT) proteins. In particular activation of STAT3, may be essential for the transforming activity of IGF1R. The JAK/STAT pathway activates gene transcription and may be responsible for the transforming activity. JNK kinases can also be activated by the IGF1R. IGF1 exerts inhibiting activities on JNK activation via phosphorylation and inhibition of MAP3K5/ASK1, which is able to directly associate with the IGF1R.</p> <p>Subunit Structure: 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. Interacts with ARRB1 and ARRB2. Interacts with GRB10. Interacts with RACK1. Interacts with SOCS1, SOCS2 and SOCS3. Interacts with 14-3-3 proteins. Interacts with NMD2. Interacts with MAP3K5. Interacts with STAT3. Found in a ternary complex with IGF1 and ITGAV:ITGB3 or ITGA6:ITGB4 (PubMed:19578119, PubMed:22351760). Interacts (nascent precursor form) with ZFAND2B (PubMed:26692333).</p> <p>Post-translational Modifications: Autophosphorylated on tyrosine residues in response to ligand binding. Autophosphorylation occurs in trans, i.e. one subunit of the dimeric receptor phosphorylates tyrosine residues on the other subunit. Autophosphorylation occurs in a sequential manner; Tyr-1165 is predominantly phosphorylated first, followed by phosphorylation of Tyr-1161 and Tyr-1166. While every single phosphorylation increases kinase activity, all three tyrosine residues in the kinase activation loop (Tyr-1165, Tyr-1161 and Tyr-1166) have to be phosphorylated for optimal activity. Can be autophosphorylated at additional tyrosine residues (in vitro). Autophosphorylated is followed by phosphorylation of juxtamembrane tyrosines and C-terminal serines. Phosphorylation of Tyr-980 is required for IRS1-and SHC1-binding. Phosphorylation of Ser-1278 by GSK-3beta restrains kinase activity and promotes cell surface expression, it requires a priming phosphorylation at Ser-1282. Dephosphorylated by PTPN1 (By similarity). Polyubiquitinated at Lys-1168 and Lys-1171 through both 'Lys-48' and 'Lys-29' linkages, promoting receptor endocytosis and subsequent degradation by the proteasome. Ubiquitination is facilitated by pre-existing phosphorylation. Sumoylated with SUMO1. Controlled by regulated intramembrane proteolysis (RIP). Undergoes metalloprotease-dependent constitutive ectodomain shedding to produce a membrane-anchored 52 kDa C-Terminal fragment which is further processed by presenilin gamma-secretase to yield an intracellular 50 kDa fragment.</p> <p>Similarity: Belongs to the protein kinase superfamily. Tyr protein kinase family. Insulin receptor subfamily.</p> |
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NCBI AND UNIPROT INFORMATION

|                           |                                                 |
|---------------------------|-------------------------------------------------|
| NCBI GI #                 | 4557665                                         |
| NCBI GeneID               | 3480                                            |
| NCBI Accession #          | NP_000866.1                                     |
| NCBI GenBank Nucleotide # | NM_000875.4                                     |
| UniProt Accession #       | P08069; Q14CV2; Q9UCC0; B1B5Y2                  |
| Molecular Weight          | Predicted: 155 kDa                              |
| NCBI Official Full Name   | insulin-like growth factor 1 receptor isoform 1 |

|                                  |                                       |
|----------------------------------|---------------------------------------|
| NCBI Official Synonym Full Names | insulin like growth factor 1 receptor |
| NCBI Official Symbol             | IGF1R                                 |
| NCBI Official Synonym Symbols    | IGFR; CD221; IGFIR; JTK13             |
| NCBI Protein Information         | insulin-like growth factor 1 receptor |
| UniProt Protein Name             | Insulin-like growth factor 1 receptor |
| UniProt Gene Name                | <b>IGF1R</b>                          |
| UniProt Synonym Gene Names       | IGF-I receptor                        |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/igf1r-antibody-western-blot-immunohistochemistry-immunofluorescence-immunocytochemistry-elisa/30993>