

IGF-IR Polyclonal Antibody

Catalog No: YT2282

Reactivity: Human; Mouse; Rat

Applications: IF;WB;IHC;ELISA

Target: IGF-IR

Fields: >>EGFR tyrosine kinase inhibitor resistance;>>Endocrine resistance;>>MAPK

signaling pathway;>>Ras signaling pathway;>>Rap1 signaling pathway;>>HIF-1 signaling pathway;>>FoxO signaling pathway;>>Oocyte meiosis;>>Autophagy -

animal;>>Endocytosis;>>mTOR signaling pathway;>>PI3K-Akt signaling

pathway;>>AMPK signaling pathway;>>Longevity regulating

pathway;>>Longevity regulating pathway - multiple species;>>Focal

adhesion;>>Adherens junction;>>Signaling pathways regulating pluripotency of stem cells;>>Long-term depression;>>Ovarian steroidogenesis;>>Progesterone-

mediated oocyte maturation;>>Pathways in cancer;>>Transcriptional misregulation in cancer;>>Proteoglycans in cancer;>>Glioma;>>Prostate cancer;>>Melanoma;>>Breast cancer;>>Hepatocellular carcinoma

Gene Name: IGF1R

Protein Name: Insulin-like growth factor 1 receptor

Human Gene Id: 3480/3643

Human Swiss Prot

riss Prot P08069/P06213

No:

Mouse Gene ld: 16001/16337

Rat Gene ld: 25718

Rat Swiss Prot No: P24062/P15127

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.

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

Source : Polyclonal, Rabbit, IgG

Dilution: IF 1:50-200 WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:10000. Not yet

tested in other applications.

Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

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

Observed Band : pro: 155kD, recetor beta: 95kD

Cell Pathway: Oocyte meiosis;Endocytosis;Focal adhesion;Adherens_Junction;Long-term

depression;Progesterone-mediated oocyte maturation;Pathways in cancer;Colorectal cancer;Glioma;Prostate cancer;Melanoma;

Background: 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. It is highly overexpressed in most malignant tissues where it functions as an anti-apoptotic agent by enhancing cell survival. Alternatively spliced transcript variants encoding distinct isoforms have been found for this gene.

[provided by RefSeq, May 2014],

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 a

Subcellular Location :

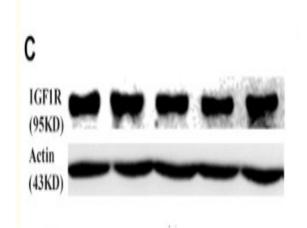
Cell membrane; Single-pass type I membrane protein.

Expression: Found as a hybrid receptor with INSR in muscle, heart, kidney, adipose tissue,

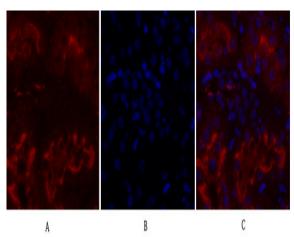
skeletal muscle, hepatoma, fibroblasts, spleen and placenta (at protein level). Expressed in a variety of tissues. Overexpressed in tumors, including melanomas,

cancers of the colon, pancreas prostate and kidney.

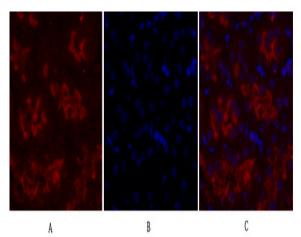
Products Images



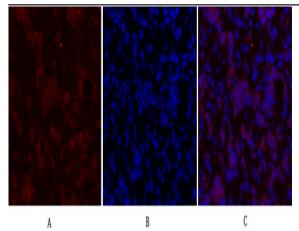
Xie, Jing, et al. "Negative regulation of Grb10 Interacting GYF Protein 2 on insulin-like growth factor-1 receptor signaling pathway caused diabetic mice cognitive impairment." PloS one 9.9 (2014): e108559.



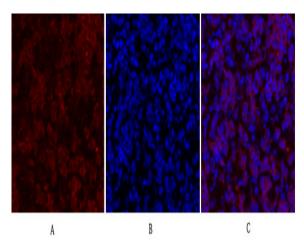
Immunofluorescence analysis of rat-kidney tissue. 1,IGF-IR Polyclonal Antibody(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



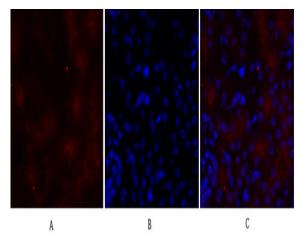
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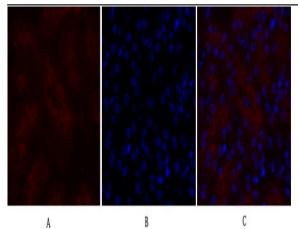
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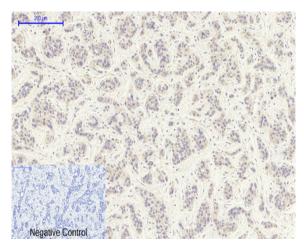
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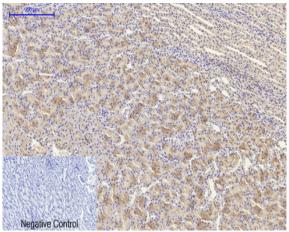
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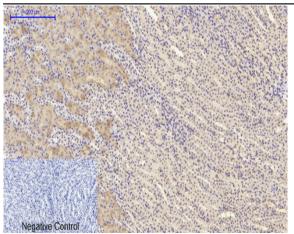
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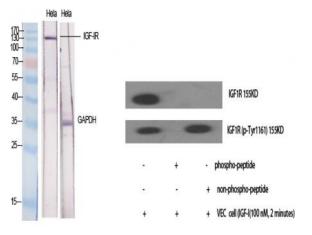
Immunohistochemical analysis of paraffin-embedded Human-liver-cancer tissue. 1,IGF-IR Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was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



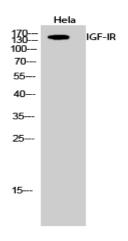
Immunohistochemical analysis of paraffin-embedded Rat-kidney tissue. 1,IGF-IR Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by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



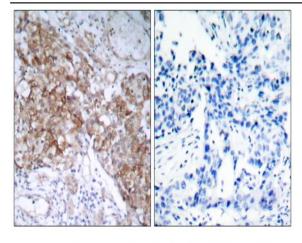
Immunohistochemical analysis of paraffin-embedded Mouse-kidney tissue. 1,IGF-IR Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used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



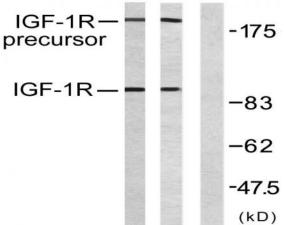
Western Blot analysis of various cells using IGF-IR Polyclonal Antibody diluted at 1:2000



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.