

IGF-IR Monoclonal Antibody

Catalog No: YM0357

Reactivity: Human

Applications: WB;IHC;IF;ELISA

Target: IGF-1R

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

P08069

Human Gene Id: 3480

Human Swiss Prot

No:

Mouse Swiss Prot Q60751

No:

Immunogen: Purified recombinant fragment of IGF-IR expressed in E. Coli.

Specificity: IGF-IR Monoclonal Antibody detects endogenous levels of IGF-IR protein.

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

Source: Monoclonal, Mouse

Dilution : WB 1:500 - 1:2000. IHC 1:200 - 1:1000. ELISA: 1:10000.. IF 1:50-200



Purification : Affinity purification

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;

P References: 1. Zhu Z. Jiang W. Thompson HJ. Carcinogenesis. 2003, Jul, 24(7):1225-31.

Epub 2003 May 9.

2. Ling Y. Maile LA. Clemmons DR. Mol Endocrinol. 2003, Sep,17(9):1824-33.

Epub 2003 Jun 5.

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 RefSeg, 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 :

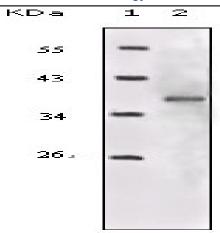
Cell membrane; Single-pass type I membrane protein.

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

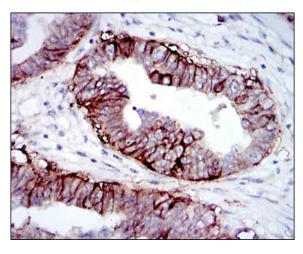
skeletal muscle, hepatoma, fibroblasts, spleen and placenta (at protein level). Expressed in a variety of tissues. Overexpressed in tumors, including melanomas,

cancers of the colon, pancreas prostate and kidney.

Products Images



Western Blot analysis using IGF-IR Monoclonal Antibody against truncated IGF-IR recombinant protein.



Immunohistochemistry analysis of paraffin-embedded ovarian cancer tissues using IGF-IR Monoclonal Antibody with DAB staining.