

# IGF1 Receptor (PT0136R) PT® Rabbit mAb

CatalogNo: YM8077 Recombinant R

#### **Key Features**

Host Species Reactivity Applications

Rabbit
 Human,
 WB,IHC,IF,IP,ELISA

MW Isotype
• 154kD (Calculated) • IgG,Kappa

200kD (Observed)

#### **Recommended Dilution Ratios**

IHC 1:100-200 WB 1:1000-5000 IF 1:200-1000

ELISA 1:5000-20000

IP 1:50-200

## 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

#### **Basic Information**

**Clonality** Monoclonal

Clone Number PT0136R

## Immunogen Information

**Specificity** Endogenous

### | Target Information

Gene name

IGF1R

**Protein Name** 

Insulin-like growth factor 1 receptor

Organism	Gene ID	UniProt ID
Human	<u>3480;</u>	<u>P08069</u> ;
Mouse	<u>16001;</u>	Q60751;
Rat	<u>25718;</u>	<u>P24062;</u>

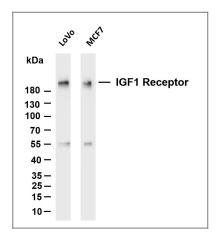
#### Cellular Localization

Membranous

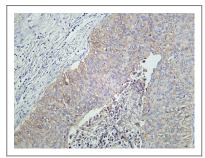
Tissue specificity Found as a hybrid receptor with INSR in muscle, heart, kidney, adipose tissue, skeletal muscle, hepatoma, fibroblasts, spleen and placenta (at protein level). Expressed in a variety of tissues. Overexpressed in tumors, including melanomas, cancers of the colon, pancreas prostate and 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 insulinlike 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.,



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-IGF1 Receptor (PT0136R) antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: LoVo Lane 2: MCF7 Predicted band size: 154kDa Observed band size: 200kDa



Human bladder carcinoma was stained with Anti-IGF1 Receptor (PT0136R) rabbit antibody

#### **|** Contact information

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Please scan the QR code to access additional product information: IGF1 Receptor (PT0136R) PT®

Rabbit mAb

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

Antibody | ELISA Kits | Protein | Reagents