

Anti-IGF1 Receptor (pY1165/Y1166) Antibody
Rabbit polyclonal antibody to IGF1 Receptor (pY1165/Y1166)
Catalog # AP59585

Specification

Anti-IGF1 Receptor (pY1165/Y1166) Antibody - Product Information

Application	WB
Primary Accession	P08069
Other Accession	Q60751
Reactivity	Human, Mouse, Rat, Zebrafish, Chicken, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	154793

Anti-IGF1 Receptor (pY1165/Y1166) Antibody - Additional Information

Gene ID 3480

Other Names

Insulin-like growth factor 1 receptor; Insulin-like growth factor I receptor; IGF-I receptor; CD221

Target/Specificity

Recognizes endogenous levels of IGF1 Receptor (pY1165/Y1166) protein.

Dilution

WB~~WB (1/500 - 1/1000)

Format

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage

Store at -20 °C. Stable for 12 months from date of receipt

Anti-IGF1 Receptor (pY1165/Y1166) Antibody - Protein Information

Name IGF1R

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 IGF1R 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.

Cellular Location

Cell membrane; Single-pass type I membrane protein

Tissue Location

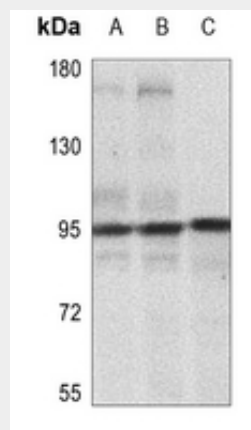
Found as a hybrid receptor with INSR in muscle, heart, kidney, adipose tissue, skeletal muscle, hepatoma, fibroblasts, spleen and placenta (at protein level). Expressed in a variety of tissues. Overexpressed in tumors, including melanomas, cancers of the colon, pancreas prostate and kidney.

Anti-IGF1 Receptor (pY1165/Y1166) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-IGF1 Receptor (pY1165/Y1166) Antibody - Images



Western blot analysis of IGF1 Receptor (pY1165/Y1166) expression in MCF7 (A),

MCF7-insulin-15min (B), A2780 (C) whole cell lysates.

Anti-IGF1 Receptor (pY1165/Y1166) Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human IGF1 Receptor. The exact sequence is proprietary.