IGF1R Antibody HRP Conjugated

Catalog No: #C05474H

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Description

Product Name	IGF1R Antibody HRP Conjugated
Host Species	Rabbit
Clonality	Polyclonal
Isotype	IgG
Purification	Purified by Protein A.
Applications	WB IHC-P IHC-F ICC
Species Reactivity	Hu Ms Rt
Immunogen Description	KLH conjugated synthetic peptide aa 850-900 1367 derived from human IGF1R CD221 beta chain
Conjugates	HRP
Target Name	IGF1R
Other Names	IGFR; CD221; IGFIR; JTK13; Insulin-like growth factor 1 receptor; Insulin-like growth factor I receptor; IGF-I receptor; IGF1R
Accession No.	Swiss-Prot#P08069NCBI Gene ID3480
Uniprot	P08069
GeneID	3480;
Excitation Emission	N A
Cell Localization	Extracellular
Concentration	1mg ml
Formulation	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage	Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Application Details

WB=1:500-2000 IHC-P=1:50-200 IHC-F=1:50-200 ICC=1:50-200

Background

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.

Note: This product is for in vitro research use only