Datasheet for ABIN7156355

anti-IGF1R antibody (AA 763-931) (HRP)

Go to Product page

Overview

Quantity:	100 µg
Target:	IGF1R
Binding Specificity:	AA 763-931
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This IGF1R antibody is conjugated to HRP
Application:	ELISA

Product Details

Immunogen:	Recombinant Human Insulin-like growth factor 1 receptor protein (763-931AA)
Isotype:	IgG
Cross-Reactivity:	Human
Purification:	>95%, Protein G purified

Target Details

Target:	IGF1R
Alternative Name:	IGF1R (IGF1R Products)
Background:	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

Target Details

	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. IGF1 exerts inhibiting activities on JNK activation via phosphorylation and inhibition of MAP3K5/ASK1, which is able to directly associate with the IGF1R. Aliases: CD221 antibody, CD221 antigen antibody, IGF 1 receptor antibody, IGF 1R antibody, IGF I receptor antibody, IGF-I receptor antibody, Igf1r antibody, IGF1R_HUMAN antibody, IGFIR antibody, IGFIRC antibody, IGFR antibody, Insulin like growth factor 1 receptor antibody, Insulin like growth factor 1 receptor precursor antibody, Insulin-like growth factor 1 receptor beta chain antibody, Insulin-like growth factor I receptor antibody, JTK13 antibody, MGC142170 antibody, MGC142172 antibody, MGC18216 antibody, Soluble IGF1R variant 1 antibody, Soluble IGF1R variant 2 antibody
UniProt:	P08069
Pathways:	RTK Signaling, Regulation of Hormone Metabolic Process, Regulation of Hormone Biosynthetic Process, Autophagy

Application Details

Application Notes:	Optimal working dilution should be determined by the investigator.

Application Details

Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	Preservative: 0.03 % Proclin 300 Constituents: 50 % Glycerol, 0.01M PBS, PH 7.4
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C,-80 °C
Storage Comment:	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.