

Rabbit Anti-Phospho-GRB10 (Tyr67) antibody

SL3157R

Product Name:	Phospho-GRB10 (Tyr67)
Chinese Name:	磷酸化生长因子受体Binding protein10抗体
Alias:	GRB10 (Phospho-Tyr67); GRB10 (Phospho Tyr67); GRB10 (Phospho Y67); GRB IR; grb-10; GRB10 adaptor protein; GRBIR; Growth factor receptor bound protein 10; Insulin receptor binding protein; Insulin receptor binding protein GRB IR; IRBP; MEG1; RSS.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Horse, Rabbit,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	65kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated Synthesised phosphopeptide derived from human GRB10 around the phosphorylation site of Tyr67:SL(p-Y)SA
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	GRB 10 belongs to a small family of adapter proteins that interact with receptor tyrosine

kinases and signaling molecules. In particular, GRB 10 interacts with insulin receptors and insulin-like growth-factor receptors. Alternatively spliced transcript variants encoding different isoforms have been identified: overexpression of some of them inhibits tyrosine kinase activity and results in growth suppression. This gene is imprinted in a highly isoform- and tissue-specific manner.

Function:

Adapter protein which modulates coupling of a number of cell surface receptor kinases with specific signaling pathways. Binds to, and suppress signals from, activated receptors tyrosine kinases, including the insulin (INSR) and insulin-like growth factor (IGF1R) receptors. The inhibitory effect can be achieved by 2 mechanisms: interference with the signaling pathway and increased receptor degradation. Delays and reduces AKT1 phosphorylation in response to insulin stimulation. Blocks association between INSR and IRS1 and IRS2 and prevents insulin-stimulated IRS1 and IRS2 tyrosine phosphorylation. Recruits NEDD4 to IGF1R, leading to IGF1R ubiquitination, increased internalization and degradation by both the proteasomal and lysosomal pathways. May play a role in mediating insulin-stimulated ubiquitination of INSR, leading to proteasomal degradation. Negatively regulates Wnt signaling by interacting with LRP6 intracellular portion and interfering with the binding of AXIN1 to LRP6. Positive regulator of the KDR/VEGFR-2 signaling pathway. May inhibit NEDD4-mediated degradation of KDR/VEGFR-2.

Subunit:

Interacts with ligand-activated tyrosine kinase receptors, including FGFR1, INSR, IGF1R, MET and PDGFRB in a phosphotyrosine-dependent manner through the SH2 domain. Poorly binds to the EGFR. Directly interacts with MAP3K14/NIK and is recruited to the EGFR-ERBB2 complex. Interacts with GIGYF1/PERQ1 and GIGYF2/TNRC15. When unphosphorylated, interacts with AKT1 and when phosphorylated with YWHAE/14-3-3 epsilon. Interacts with NEDD4. Interacts with LRP6, thus interfering with the binding of AXIN1 to LRP6. Binds to activated NRAS.

Subcellular Location:

Cytoplasm. When complexed with NEDD4 and IGF1R, follows IGF1R internalization, remaining associated with early endosomes. Uncouples from IGF1R-containing endosomes before the sorting of the receptor to the lysosomal compartment.

Tissue Specificity:

Widely expressed in fetal and adult tissues, including fetal and postnatal liver, lung, kidney, skeletal muscle, heart, spleen, skin and brain.

Post-translational modifications:

phosphorylated on serine residues upon EGF, FGF and PDGF stimulation.

Similarity:

Belongs to the GRB7/10/14 family. Contains 1 PH domain.

	Contains 1 Ras-associating domain.
	Contains 1 SH2 domain.
	SWISS:
	Q13322
	Gene ID:
	2887
	Database links:
	Entrez Gene: 2887Human
	Entrez Gene: 14783 Mouse
	Entrez Gene: 498416Rat
	Omim: 601523Human
	SwissProt: Q13322Human
	Entrez Gene: 14783Mouse Entrez Gene: 498416Rat Omim: 601523Human SwissProt: Q13322Human SwissProt: Q60760Mouse SwissProt: P0CE43Rat Unigene: 164060Human Unigene: 273117Mouse
	SwissProt: P0CE43Rat
	Unigene: 164060Human
	<u>Unigene: 273117</u> Mouse
	Unigene: 479549Mouse
	Unigene: 63942Rat
	Important Note:
	This product as supplied is intended for research use only, not for use in human,
	therapeutic or diagnostic applications.
•	and approache of an approaches.
	生长因子受体Binding protein10与胰岛素抵抗、2型Diabetes以及个体生长发育有关。



