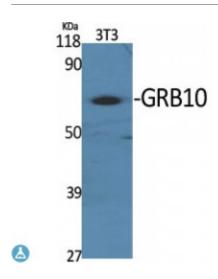


## Anti-GRB10 antibody



**Description** Rabbit polyclonal to GRB10.

Model STJ93419

**Host** Rabbit

**Reactivity** Human

**Applications** ELISA, IF, IHC, WB

**Immunogen** Synthesized peptide derived from human GRB10 around the non-

phosphorylation site of Y67.

Immunogen Region 10-90 aa

Gene ID <u>2887</u>

Gene Symbol GRB10

**Dilution range** WB 1:500-1:2000IHC 1:100-1:300IF 1:200-1:1000ELISA 1:5000

**Specificity** GRB10 Polyclonal Antibody detects endogenous levels of GRB10 protein.

Tissue Specificity Widely expressed in fetal and adult tissues, including fetal and postnatal liver,

lung, kidney, skeletal muscle, heart, spleen, skin and brain.

**Purification** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

**Note** For Research Use Only (RUO).

Protein Name Growth factor receptor-bound protein 10 GRB10 adapter protein Insulin

receptor-binding protein Grb-IR

Molecular Weight 67 kDa

**Clonality** Polyclonal

**Conjugation** Unconjugated

**Isotype** IgG

**Formulation** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

**Concentration** 1 mg/ml

**Storage Instruction** Store at -20°C, and avoid repeat freeze-thaw cycles.

Database Links <u>HGNC:4564OMIM:601523</u>

Alternative Names Growth factor receptor-bound protein 10 GRB10 adapter protein Insulin

receptor-binding protein Grb-IR

**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 insulinstimulated 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.

**Sequence and Domain Family** The PH domain binds relatively non-specifically to several phosphoinositides,

including PI(5)P, PI(4,5)P2, PI(3,4)P2 and PI(3,4,5)P3, with modest affinities.

Cellular Localization 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.

**Post-translational** Phosphorylated on serine residues upon EGF, FGF and PDGF stimulation.

Modifications Phosphorylated at Tyr-67 by TEC.

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