

# GRB10 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP20489a

## Product Information

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Application	WB, E
Primary Accession	<a href="#">Q13322</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	67231
Antigen Region	1-30

## Additional Information

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Gene ID	2887
Other Names	Growth factor receptor-bound protein 10, GRB10 adapter protein, Insulin receptor-binding protein Grb-IR, GRB10, GRBIR, KIAA0207
Target/Specificity	This GRB10 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human GRB10.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	GRB10 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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Name	GRB10
Synonyms	GRBIR, KIAA0207
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.

**Cellular Location**

Cytoplasm. Note=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 (By similarity).

**Tissue Location**

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

## Background

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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.

## References

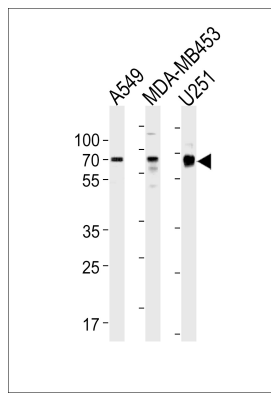
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Liu F., et al. Proc. Natl. Acad. Sci. U.S.A. 92:10287-10291(1995).  
O'Neill T.J., et al. J. Biol. Chem. 271:22506-22513(1996).  
Frantz J.D., et al. J. Biol. Chem. 272:2659-2667(1997).  
Dong L.Q., et al. J. Biol. Chem. 272:29104-29112(1997).  
Nantel A., et al. J. Biol. Chem. 273:10475-10484(1998).

## Images

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GRB10 Antibody (N-term) (Cat. #AP20489a) western blot analysis in A549,MDA-MB453,U251 cell line lysates (35ug/lane).This demonstrates the GRB10 antibody detected the GRB10 protein (arrow).



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.