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PIK3R1/2 Antibody (Center)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP20767c

Specification

PIK3R1/2 Antibody (Center) - Product Information

Application	**WB,E**
Primary Accession	P27986
Other Accession	O00459, P23726, Q63787, P26450, P23727, Q8UUU2
Reactivity	**Human**
Predicted	**Xenopus, Bovine, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**83598**

PIK3R1/2 Antibody (Center) - Additional Information

Gene ID 5295

Other Names
Phosphatidylinositol 3-kinase regulatory subunit alpha, PI3-kinase regulatory subunit alpha, PI3K regulatory subunit alpha, PtdIns-3-kinase regulatory subunit alpha, Phosphatidylinositol 3-kinase 85 kDa regulatory subunit alpha, PI3-kinase subunit p85-alpha, PtdIns-3-kinase regulatory subunit p85-alpha, PIK3R1, GRB1

Target/Specificity
This PIK3R1/2 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 337-370 amino acids from the Central region of human PIK3R1/2.

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
PIK3R1/2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

PIK3R1/2 Antibody (Center) - Protein Information

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Name PIK3R1

Synonyms GRB1

Function Binds to activated (phosphorylated) protein-Tyr kinases, through its SH2 domain, and acts as an adapter, mediating the association of the p110 catalytic unit to the plasma membrane. Necessary for the insulin-stimulated increase in glucose uptake and glycogen synthesis in insulin-sensitive tissues. Plays an important role in signaling in response to FGFR1, FGFR2, FGFR3, FGFR4, KITLG/SCF, KIT, PDGFRA and PDGFRB. Likewise, plays a role in ITGB2 signaling (PubMed:17626883, PubMed:19805105, PubMed:7518429). Modulates the cellular response to ER stress by promoting nuclear translocation of XBP1 isoform 2 in a ER stress- and/or insulin-dependent manner during metabolic overloading in the liver and hence plays a role in glucose tolerance improvement (PubMed:20348923).

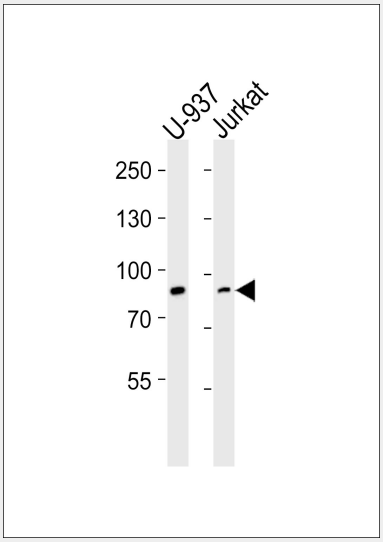
Tissue Location
Isoform 2 is expressed in skeletal muscle and brain, and at lower levels in kidney and cardiac muscle. Isoform 2 and isoform 4 are present in skeletal muscle (at protein level)

PIK3R1/2 Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

PIK3R1/2 Antibody (Center) - Images



Western blot analysis of lysates from U-937, Jurkat cell line (from left to right), using PIK3R1/2 Antibody (Center)(Cat. #AP20767c). AP20767c was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysates at 35ug per lane.

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PIK3R1/2 Antibody (Center) - Background

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PIK3R1/2 Antibody (Center) - References

Skolnik E.Y.,et al.Cell 65:83-90(1991).
Antonetti D.A.,et al.Mol. Cell. Biol. 16:2195-2203(1996).
Udelhoven M.,et al.Submitted (JUN-2000) to the EMBL/GenBank/DDBJ databases.
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Totoki Y.,et al.Submitted (APR-2005) to the EMBL/GenBank/DDBJ databases.