

# PIK3R1/2 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP20768c

### Specification

# PIK3R1/2 Antibody (Center) - Product Information

Application Primary Accession Other Accession

Reactivity Predicted Host Clonality Isotype Calculated MW WB,E <u>P27986</u> <u>O00459</u>, <u>P23726</u>, <u>O63787</u>, <u>P26450</u>, <u>P23727</u>, <u>Q8UUU2</u> Human, Rat Xenopus, Bovine, Mouse Rabbit Polyclonal Rabbit IgG 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, 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

#### 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



# 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:<u>17626883</u>, PubMed:<u>19805105</u>, PubMed:<u>7518429</u>). 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:<u>20348923</u>).

#### **Tissue Location**

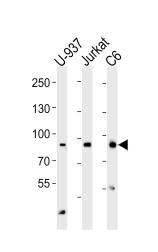
Isoform 2 is expressed in skeletal muscle and brain, and at lower levels in kidney and cardiac muscle. Isoform 2 and isoform 4 are present in skeletal muscle (at protein level)

# PIK3R1/2 Antibody (Center) - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

## PIK3R1/2 Antibody (Center) - Images



Western blot analysis of lysates from U-937, Jurkat, C6 cell line (from left to right), using PIK3R1/2 Antibody (Center)(Cat. #AP20768c). AP20768c 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.



# PIK3R1/2 Antibody (Center) - Background

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.

# 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.