

Anti-PI 3 Kinase p85 alpha PIK3R1 Rabbit Monoclonal Antibody Catalog # ABO14284

Specification

Anti-PI 3 Kinase p85 alpha PIK3R1 Rabbit Monoclonal Antibody - Product Information

Application Primary Accession Host Isotype Reactivity Clonality Format **Description** WB <u>P27986</u> Rabbit Rabbit IgG Rat, Human, Mouse Monoclonal Liquid

Anti-PI 3 Kinase p85 alpha PIK3R1 Rabbit Monoclonal Antibody . Tested in WB application. This antibody reacts with Human, Mouse, Rat.

Anti-PI 3 Kinase p85 alpha PIK3R1 Rabbit Monoclonal Antibody - 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

Calculated MW 83598 MW KDa

Application Details WB 1:500-1:2000

Tissue Specificity

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).

Contents

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen A synthesized peptide derived from human PI 3 Kinase p85 alpha

Purification Affinity-chromatography

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated



freeze-thaw cycles.

Anti-PI 3 Kinase p85 alpha PIK3R1 Rabbit Monoclonal Antibody - 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:17626883, PubMed:19805105, 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

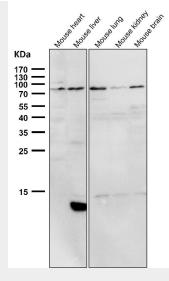
Isoform 2 is expressed in skeletal muscle and brain, and at lower levels in kidney and cardiac muscle. Isoform 2 and isoform 4 are present in skeletal muscle (at protein level)

Anti-PI 3 Kinase p85 alpha PIK3R1 Rabbit Monoclonal Antibody - Protocols

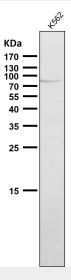
Provided below are standard protocols that you may find useful for product applications.

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

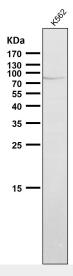
Anti-PI 3 Kinase p85 alpha PIK3R1 Rabbit Monoclonal Antibody - Images



All lanes use the Antibody at 1:2K dilution for 1 hour at room temperature.

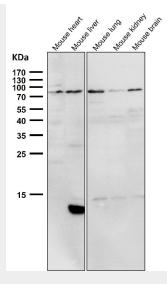


All lanes use the Antibody at 1:2K dilution for 1 hour at room temperature.

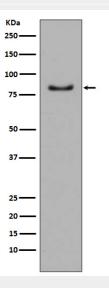


All lanes use the Antibody at 1:4K dilution for 1 hour at room temperature.





All lanes use the Antibody at 1:4K dilution for 1 hour at room temperature.



Western blot analysis of PI 3 Kinase p85 alpha expression in A431 cell lysate.