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Anti-PI 3 Kinase p85 Alpha Antibody

Catalog # ABO10732

Specification

Anti-PI 3 Kinase p85 Alpha Antibody - Product Information

Application	**WB**
Primary Accession	P27986
Host	**Rabbit**
Reactivity	**Human, Mouse, Rat**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for Phosphatidylinositol 3-kinase regulatory subunit alpha(PIK3R1) detection. Tested with WB in Human;Mouse;Rat.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-PI 3 Kinase p85 Alpha 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, PIK3R1, GRB1

Calculated MW
83598 MW KDa

Application Details
Western blot, 0.1-0.5 µg/ml, Human, Rat, Mouse

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). .

Protein Name
Phosphatidylinositol 3-kinase regulatory subunit alpha(PI3-kinase regulatory subunit alpha/PI3K regulatory subunit alpha/PtdIns-3-kinase regulatory subunit alpha)

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen
A synthetic peptide corresponding to a sequence at the N-terminus of human PI 3 Kinase p85 alpha(65-80aa ERGDFPGTYVEYIGRK), identical to the related rat and mouse sequences.

Purification
Immunogen affinity purified.

Cross Reactivity
No cross reactivity with other proteins

Storage

At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.

Sequence Similarities
Belongs to the PI3K p85 subunit family.

Anti-PI 3 Kinase p85 Alpha 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: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 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
- Cell Culture

Anti-PI 3 Kinase p85 Alpha Antibody - Images

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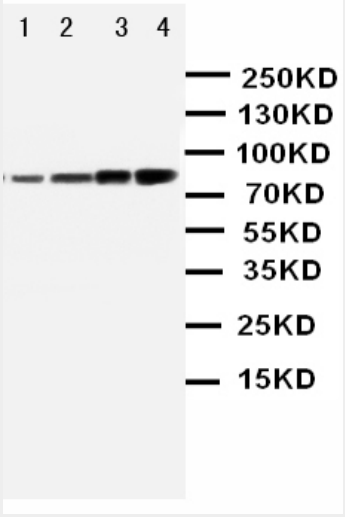

Anti-PI 3 Kinase p85 alpha antibody, ABO10732, Western blottingLane 1: MCF-7 Cell LysateLane 2: HELA Cell LysateLane 3: COLO Cell LysateLane 4: SW620 Cell Lysate

Anti-PI 3 Kinase p85 Alpha Antibody - Background

Phosphatidylinositol 3-kinase regulatory subunit alpha is an enzyme that in humans is encoded by the PIK3R1 gene. Its gene is mapped to 5q13. the bovine PI3K p85 subunit consists of 2 closely related proteins, p85-alpha and p85-beta. They cloned cDNAs encoding both p85 subunits, each of which is a 724-amino acid polypeptide. Phosphatidylinositol 3-kinase plays an important role in the metabolic actions of insulin, and a mutation in this gene has been associated with insulin resistance.