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Anti-PIK3R2 Antibody

Catalog # ABO10993

Specification

Anti-PIK3R2 Antibody - Product Information

Application	**WB, IHC-P**
Primary Accession	O00459
Host	**Rabbit**
Reactivity	**Human, Mouse, Rat**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for Phosphatidylinositol 3-kinase regulatory subunit beta(PIK3R2) detection. Tested with WB, IHC-P in Human;Mouse;Rat.

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

Anti-PIK3R2 Antibody - Additional Information

Gene ID 5296

Other Names
Phosphatidylinositol 3-kinase regulatory subunit beta, PI3-kinase regulatory subunit beta, PI3K regulatory subunit beta, PtdIns-3-kinase regulatory subunit beta, Phosphatidylinositol 3-kinase 85 kDa regulatory subunit beta, PI3-kinase subunit p85-beta, PtdIns-3-kinase regulatory subunit p85-beta, PIK3R2

Calculated MW
81545 MW KDa

Application Details
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Rat, Mouse, By Heat

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

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

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 in the middle region of human PIK3R2 (447-461aa KVYHQQYQDKSREYD), 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-PIK3R2 Antibody - Protein Information

Name PIK3R2

Function
Regulatory subunit of phosphoinositide-3-kinase (PI3K), a kinase that phosphorylates PtdIns(4,5)P2 (Phosphatidylinositol 4,5- bisphosphate) to generate phosphatidylinositol 3,4,5-trisphosphate (PIP3). PIP3 plays a key role by recruiting PH domain-containing proteins to the membrane, including AKT1 and PDPK1, activating signaling cascades involved in cell growth, survival, proliferation, motility and morphology. Binds to activated (phosphorylated) protein- tyrosine kinases, through its SH2 domain, and acts as an adapter, mediating the association of the p110 catalytic unit to the plasma membrane. Indirectly regulates autophagy (PubMed:23604317). Promotes 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 (By similarity).

Anti-PIK3R2 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-PIK3R2 Antibody - Images

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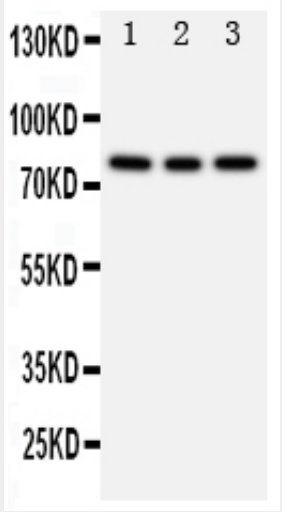
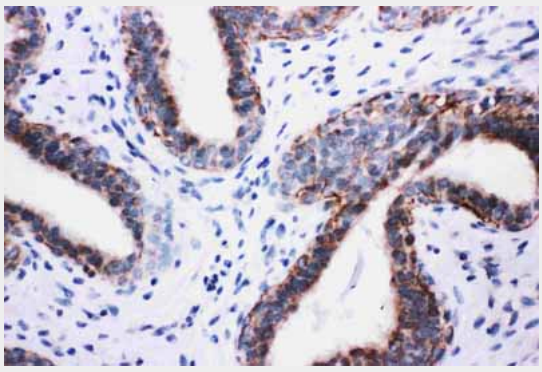


Anti-PIK3R2 antibody, ABO10993, Western blottingAll lanes: Anti PIK3R2 (ABO10993) at 0.5ug/mlLane 1: Rat Testis Tissue Lysate at 50ugLane 2: 293T Whole Cell Lysate at 40ugLane 3: HELA Whole Cell Lysate at 40ugPredicted bind size: 81KDObserved bind size: 81KD



Anti-PIK3R2 antibody, ABO10993, IHC(P)IHC(P): Human Mammary Cancer Tissue

Anti-PIK3R2 Antibody - Background

PIK3R2 (Phosphatidylinositol 3-kinase, regulatory subunit 2), also called p85-Beta, is an enzyme that in humans is encoded by the PIK3R2 gene. The PIK3R2 gene is mapped on 19p13.11. Phosphatidylinositol 3-kinase (PI3K) is a lipid kinase that phosphorylates phosphatidylinositol and similar compounds, creating second messengers important in growth signaling pathways. PI3K functions as a heterodimer of a regulatory and a catalytic subunit. The protein encoded by this gene is a regulatory component of PI3K. Two transcript variants, one protein coding and the other non-protein coding, have been found for this gene.