

**Anti-PIK3R2 Antibody**  
**Catalog # ABO10993****Specification**

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**Anti-PIK3R2 Antibody - Product Information**

Application	WB, IHC-P
Primary Accession	<a href="#">O00459</a>
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 Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Thimerosal, 0.05mg NaN<sub>3</sub>.

**Immunogen**

A synthetic peptide corresponding to a sequence in the middle region of human PIK3R2 (447-461aa KVYHQYQDKSREYD), 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 reconstitution, 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.

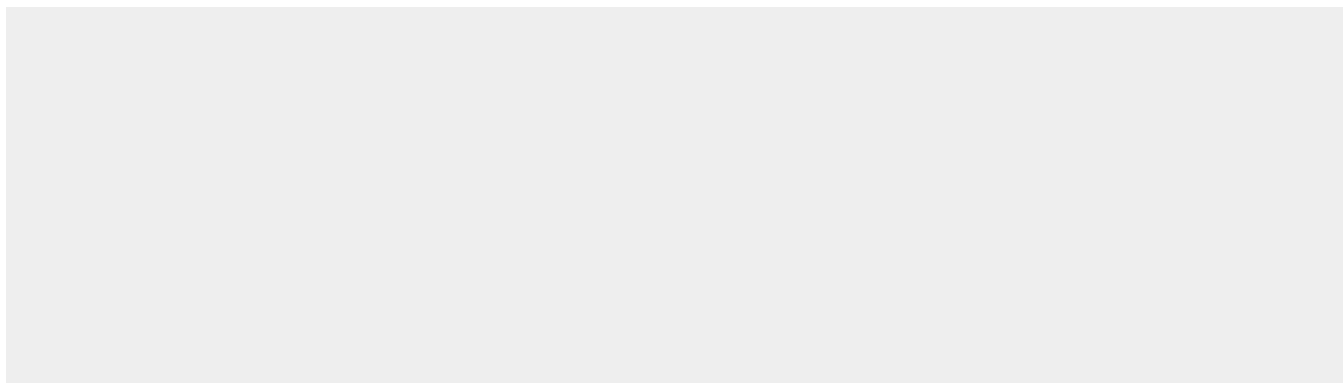
**Anti-PIK3R2 Antibody - Protein Information****Name** PIK3R2**Function**

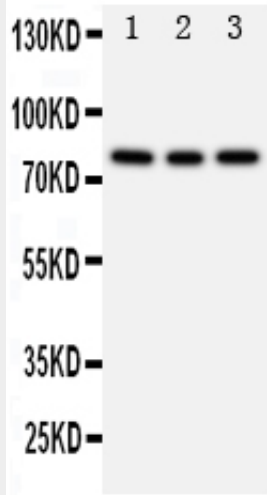
Regulatory subunit of phosphoinositide-3-kinase (PI3K), a kinase that phosphorylates PtdIns(4,5)P<sub>2</sub> (Phosphatidylinositol 4,5- biphosphate) to generate phosphatidylinositol 3,4,5-trisphosphate (PIP<sub>3</sub>). PIP<sub>3</sub> plays a key role by recruiting PH domain-containing proteins to the membrane, including AKT1 and PDK1, 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:<a href="http://www.uniprot.org/citations/23604317" target="\_blank">23604317</a>). 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**

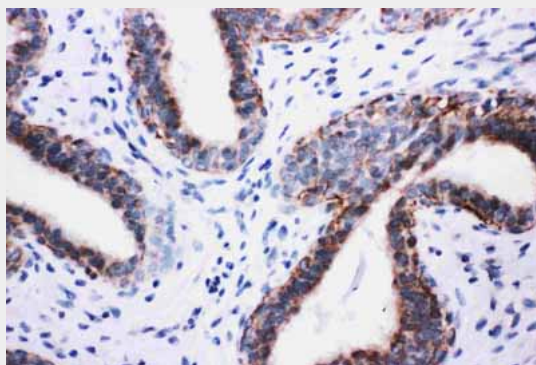
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Anti-PIK3R2 Antibody - Images**



Anti-PIK3R2 antibody, ABO10993, Western blotting All lanes: Anti PIK3R2 (ABO10993) at 0.5ug/ml  
Lane 1: Rat Testis Tissue Lysate at 50ug  
Lane 2: 293T Whole Cell Lysate at 40ug  
Lane 3: HELA Whole Cell Lysate at 40ug  
Predicted bind size: 81KD  
Observed 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.