

Datasheet for 600-401-R17**PIK3R2 Antibody****Overview**

Description:	Anti-PIK3R2 (RABBIT) Antibody - 600-401-R17
Item No.:	600-401-R17
Size:	100 µg
Applications:	IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

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. The NS1 protein from various influenza strains also bound p85-beta, but not p85-alpha. Binding of p85-beta and activation of PI3K required tyr89 of NS1, and mutant viruses expressing NS1 with a tyr89-to-phe substitution grew more slowly in cell culture than wildtype viruses. Using mouse embryonic fibroblasts, Park et al. showed that, in addition to regulating PI3K function, p85-alpha and p85-beta regulated the function of Xbp1s, a transcription factor that orchestrates the unfolded protein response (UPR) following endoplasmic reticulum (ER) stress. Overexpression of PIK3R2 in livers of ob/ob mice increased glucose tolerance and reduced blood glucose concentrations. This antibody is suitable for researchers interested in cancer research.

Synonyms:	Phosphatidylinositol 3-kinase 85 kDa regulatory subunit beta,
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	PIK3R2
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Conjugated Peptide

Immunogen:	PIK3R2 affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to an internal region of human PIK3R2.
Purity/Specificity:	Anti-PIK3R2 antibody is directed against human PIK3R2 protein. The product was affinity purified from monospecific antiserum by immunoaffinity purification. A BLAST analysis was used to suggest reactivity with this protein from human, rat, and mouse based on 100% homology for the immunogen sequence. Cross reactivity with PIK3R2 from other sources has not been determined.
Relevant Links:	<ul style="list-style-type: none">• UniProtKB - O00459• GeneID - 5296• NCBI - NP_005018.1

Application Details

Tested Applications:	IHC, WB
Application Note:	Anti-PIK3R2 is tested for Immunohistochemistry -P and Western Blotting. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately ~81.5 kDa corresponding to the appropriate cell lysate or extract.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
IHC:	1:100-1:500
WB:	0.5µg/mL

Formulation

Physical State:	Lyophilized
Concentration:	0.5 mg/mL by UV absorbance at 280 nm
Buffer:	0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg Na ₃
Preservative:	0.05mg Thimerosal
Stabilizer:	5mg BSA
Reconstitution Volume:	100 µL
Reconstitution Buffer:	Restore with deionized water (or equivalent)

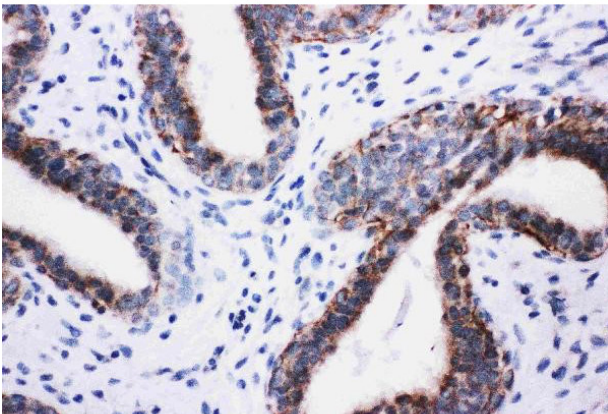
Shipping & Handling

Shipping Condition:	Ambient
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Storage Condition: Store vial at 4° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

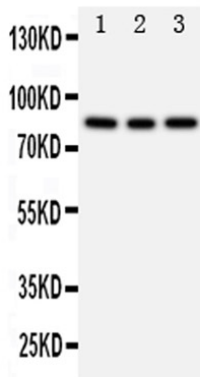
Expiration: Expiration date is one (1) year from date of receipt.

Images



Immunohistochemistry

Immunohistochemistry analysis of PIK3R2 using anti-PIK3R2 antibody. PIK3R2 was detected in paraffin-embedded section of human mammary cancer tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1µg/ml rabbit anti-PIK3R2 Antibody overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

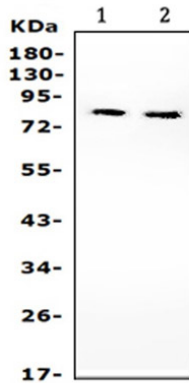


Western Blot

Western blot analysis of PIK3R2 using anti-PIK3R2 antibody. Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50µg of sample under reducing conditions.

Lane 1: Rat Testis tissue lysates, Lane 2: 293T whole cell lysates, Lane 3: HeLa whole cell lysates.

After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with affinity purified rabbit anti-PIK3R2 antigen polyclonal antibody at 0.5 µg/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for PIK3R2 at approximately 85KD. The expected band size for PIK3R2 is at 85KD.



Western Blot

Western blot analysis of PIK3R2 using anti-PIK3R2 antibody. Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50µg of sample under reducing conditions.

Lane 1: mouse liver tissue lysates, Lane 2: mouse brain tissue lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with affinity purified rabbit anti-PIK3R2 antigen polyclonal antibody at 0.5 µg/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for PIK3R2 at approximately 85KD. The expected band size for PIK3R2 is at 85KD.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.