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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:	• 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

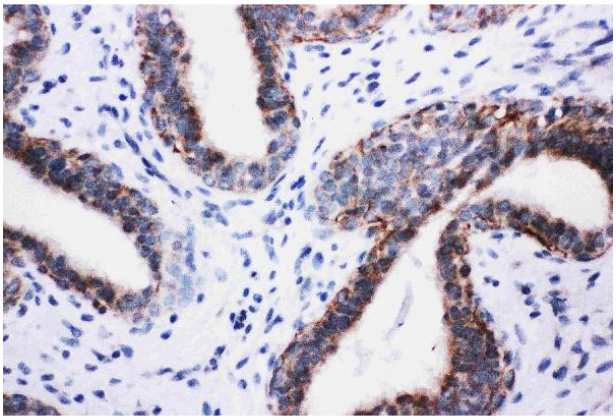
Physical State:	Lyophilized
Concentration:	0.5 mg/mL by UV absorbance at 280 nm
Buffer:	0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3
Preservative:	0.05mg Thimerosal
Stabilizer:	5mg BSA
Reconstitution Volume:	100 µL
Reconstitution Buffer:	Restore with deionized water (or equivalent)

Shipping & Handling

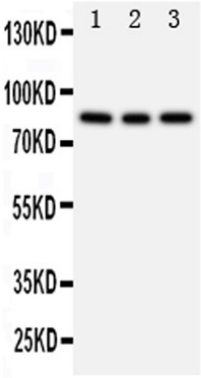
Shipping Condition:	Ambient

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.

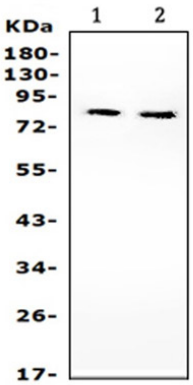
Images



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 Strepavidin-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

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