

Anti-PI 3 Kinase p85 beta/PIK3R2 Antibody

Catalog Number: PA1680

About PIK3R2

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.

Overview

Product Name	Anti-PI 3 Kinase p85 beta/PIK3R2 Antibody
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-PI 3 Kinase p85 beta/PIK3R2 Antibody catalog # PA1680. Tested in IHC, WB applications. This antibody reacts with Human, Mouse, Rat.
Application	IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg Thimerosal, 0.05mg NaN ₃ .
Storage Instructions	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	O00459

Technical Details

Immunogen	A synthetic peptide corresponding to a sequence in the middle region of human PIK3R2, identical to the related rat and mouse sequences.
Predicted Reactive Species	Hamster
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P).
Cross Reactivity	No cross-reactivity with other proteins
Isotype	Rabbit IgG
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.

Purification	Immunogen affinity purified.
Suggested Dilutions	<p>Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.</p> <p>If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.</p> <p>Some PubMed article(s) citing the expression level of this target are as follows:</p> <p>Boster Bio's internal QC testing used:</p> <p>Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Human, Rat, Mouse, By Heat</p> <p>Western blot, 0.1-0.5ug/ml, Human, Rat, Mouse</p>

Anti-PI 3 Kinase p85 beta/PIK3R2 Antibody (PA1680) Images

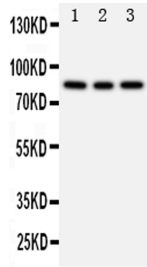


Figure 1. Western blot analysis of PIK3R2 using anti-PIK3R2 antibody (PA1680).

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 50ug 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 rabbit anti-PIK3R2 antigen affinity purified polyclonal antibody (Catalog # PA1680) at 0.5 ug/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 (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for PIK3R2 at approximately 85KD. The expected band size for PIK3R2 is at 85KD.

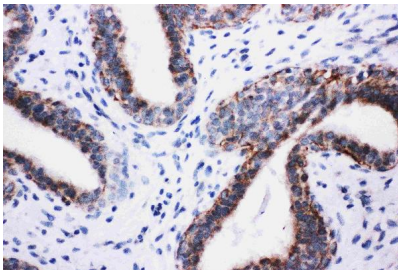


Figure 2. IHC analysis of PIK3R2 using anti-PIK3R2 antibody (PA1680).

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 1ug/ml rabbit anti-PIK3R2 Antibody (PA1680) 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)(Catalog # SA1022) with DAB as the chromogen.

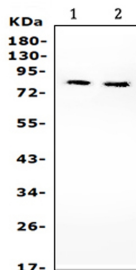


Figure 3. Western blot analysis of PIK3R2 using anti-PIK3R2 antibody (PA1680).

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 50ug 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 rabbit anti-PIK3R2 antigen affinity purified polyclonal antibody (Catalog # PA1680) at 0.5 ug/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 (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for PIK3R2 at approximately 85KD. The expected band size for PIK3R2 is at 85KD.

1 Publications Citing This Product

1. PubMed ID: 10.1189/jlb.1A1215-541RR, PI3K p85 beta regulatory subunit deficiency does not affect NK cell differentiation and increases NKG2D-mediated activation

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