

Anti-PI 3 Kinase p85 alpha/PIK3R1 Antibody Picoband™

Catalog Number: A00318-1

About PIK3R1

Phosphatidylinositol 3-kinase regulatory subunit alpha is an enzyme that in humans is encoded by the PIK3R1 gene. Its gene is mapped to 5q13. the bovine PI3K p85 subunit consists of 2 closely related proteins, p85-alpha and p85-beta. They cloned cDNAs encoding both p85 subunits, each of which is a 724-amino acid polypeptide. Phosphatidylinositol 3-kinase plays an important role in the metabolic actions of insulin, and a mutation in this gene has been associated with insulin resistance.

Overview

Product Name	Anti-PI 3 Kinase p85 alpha/PIK3R1 Antibody Picoband™
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-PI 3 Kinase p85 alpha/PIK3R1 Antibody Picoband™ catalog # A00318-1. Tested in ELISA, Flow Cytometry, IF, IHC, ICC, WB applications. This antibody reacts with Human, Mouse, Rat.
Application	ELISA, Flow Cytometry, IF, IHC, ICC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
Storage Instructions	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 freezing and thawing.
Host	Rabbit
Uniprot ID	P27986

Technical Details

Immunogen	E.coli-derived human PI 3 Kinase p85 alpha/PIK3R1 recombinant protein (Position: D117-Q153).
Predicted Reactive Species	Chicken
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) and ICC.
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

Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.

If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.

Some PubMed article(s) citing the expression level of this target are as follows:

Boster Bio's internal QC testing used:

Western blot, 0.25-0.5 ug/ml, Human, Mouse, Rat

Immunohistochemistry(Paraffin-embedded Section), 2-5 ug/ml, Human, Mouse, Rat

Immunocytochemistry/Immunofluorescence, 5 ug/ml, Human

Flow Cytometry, 1-3 ug/1x10⁶ cells, Human

Direct ELISA, 0.1-0.5 ug/ml, Human

Anti-PI 3 Kinase p85 alpha/PIK3R1 Antibody Picoband™ (A00318-1) Images

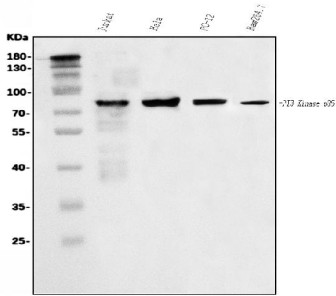


Figure 1. Western blot analysis of PI 3 Kinase p85 alpha/PIK3R1 using anti-PI 3 Kinase p85 alpha/PIK3R1 antibody (A00318-1).

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 30 ug of sample under reducing conditions.

Lane 1: human Jurkat whole cell lysates,

Lane 2: human Hela whole cell lysates,

Lane 3: rat PC-12 whole cell lysates,

Lane 4: mouse RAW264.7 whole cell lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA 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-PI 3 Kinase p85 alpha/PIK3R1 antigen affinity purified polyclonal antibody (Catalog # A00318-1) 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 1:5000 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 PI

3 Kinase p85 alpha/PIK3R1 at approximately 85 kDa. The expected band size for PI 3 Kinase p85 alpha/PIK3R1 is at 85 kDa.

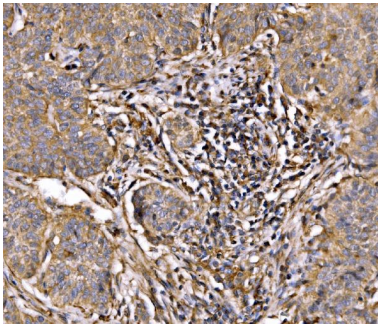


Figure 2. IHC analysis of PI 3 Kinase p85 alpha/PIK3R1 using anti-PI 3 Kinase p85 alpha/PIK3R1 antibody (A00318-1).

PI 3 Kinase p85 alpha/PIK3R1 was detected in a paraffin-embedded section of human lung cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-PI 3 Kinase p85 alpha/PIK3R1 Antibody (A00318-1) 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.

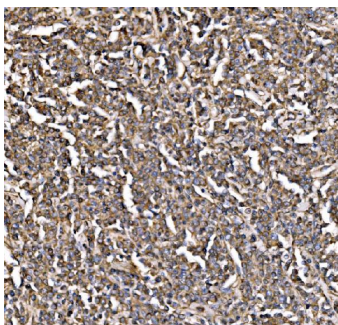


Figure 3. IHC analysis of PI 3 Kinase p85 alpha/PIK3R1 using anti-PI 3 Kinase p85 alpha/PIK3R1 antibody (A00318-1).

PI 3 Kinase p85 alpha/PIK3R1 was detected in a paraffin-embedded section of human lymphoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-PI 3 Kinase p85 alpha/PIK3R1 Antibody (A00318-1) 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.

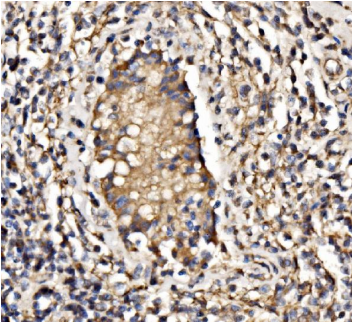


Figure 4. IHC analysis of PI 3 Kinase p85 alpha/PIK3R1 using anti-PI 3 Kinase p85 alpha/PIK3R1 antibody (A00318-1). PI 3 Kinase p85 alpha/PIK3R1 was detected in a paraffin-embedded section of human testicular cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-PI 3 Kinase p85 alpha/PIK3R1 Antibody (A00318-1) 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.

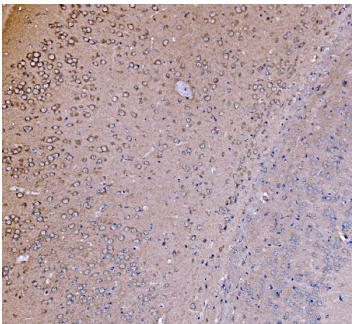


Figure 5. IHC analysis of PI 3 Kinase p85 alpha/PIK3R1 using anti-PI 3 Kinase p85 alpha/PIK3R1 antibody (A00318-1). PI 3 Kinase p85 alpha/PIK3R1 was detected in a paraffin-embedded section of mouse brain tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-PI 3 Kinase p85 alpha/PIK3R1 Antibody (A00318-1) 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.

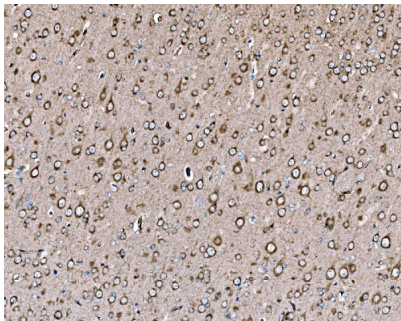


Figure 6. IHC analysis of PI 3 Kinase p85 alpha/PIK3R1 using anti-PI 3 Kinase p85 alpha/PIK3R1 antibody (A00318-1). PI 3 Kinase p85 alpha/PIK3R1 was detected in a paraffin-embedded section of rat brain tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-PI 3 Kinase p85 alpha/PIK3R1 Antibody (A00318-1) 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.

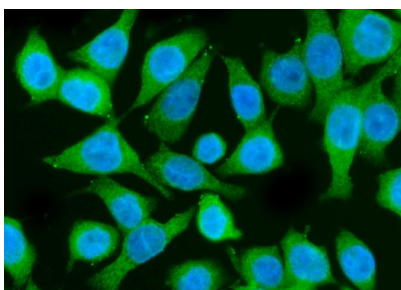


Figure 7. IF analysis of PI 3 Kinase p85 alpha/PIK3R1 using anti-PI 3 Kinase p85 alpha/PIK3R1 antibody (A00318-1). PI 3 Kinase p85 alpha/PIK3R1 was detected in an immunocytochemical section of Caco-2 cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5 ug/mL rabbit anti-PI 3 Kinase p85 alpha/PIK3R1 Antibody (A00318-1) overnight at 4°C. DyLight®488 Conjugated Goat Anti-Rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37°C. The section was counterstained with DAPI. Visualize using a

fluorescence microscope and filter sets appropriate for the label used.

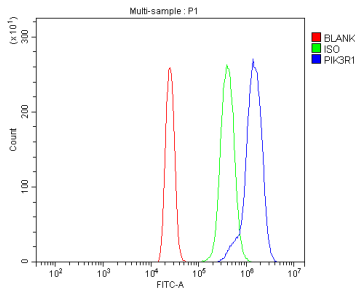


Figure 8. Flow Cytometry analysis of HL-60 cells using anti-PI 3 Kinase p85 alpha/PIK3R1 antibody (A00318-1). Overlay histogram showing HL-60 cells stained with A00318-1 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-PI 3 Kinase p85 alpha/PIK3R1 Antibody (A00318-1, 1 ug/1x10⁶ cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10 ug/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1 ug/1x10⁶) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.

6 Publications Citing This Product

1. PubMed ID: 10.3892/or.2016.4757, SPOCK1 promotes the proliferation, migration and invasion of glioma cells through PI3K/AKT and Wnt/beta-catenin signaling pathways
2. PubMed ID: 10.3892/mmr.2015.3393, Short hairpin RNA targeting AKT1 and PI3K/p85 suppresses the proliferation and self-renewal of lung cancer stem cells
3. PubMed ID: 10.1016/j.imlet.2015.04.007, Suppressive oligodeoxynucleotides induced tolerogenic plasmacytoid dendritic cells and ameliorated the experimental autoimmune neuritis

Visit bosterbio.com/anti-pi-3-kinase-p85-alpha-pik3r1-picoband-trade-antibody-a00318-1-boster.html to see all 6 publications.

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