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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.

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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. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	ELISA, Flow Cytometry, IF, IHC, ICC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
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

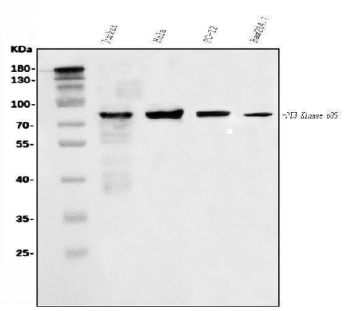
Immunogen	E.coli-derived human PI 3 Kinase p85 alpha/PIK3R1 recombinant protein (Position: D117-Q153).
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P) and ICC.

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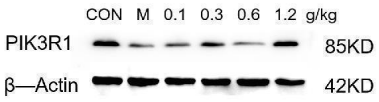
Cross Reactivity	No cross-reactivity with other proteins
Isotype	Rabbit IgG
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.25-0.5 ug/ml, Human, Mouse, Rat Immunohistochemistry(Paraffin-embedded Section), 2-5 ug/ml, Human, Mouse, Rat Immunocytochemistry/Immunofluorescence, 5 ug/ml, Human Flow Cytometry (Fixed), 1-3 ug/1x10^6 cells, Human ELISA, 0.1-0.5 ug/ml, - Note: For flow cytometry (FCM), suitable for fixed cells only. Not suitable for FACS or surface flow cytometry using live cells.

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



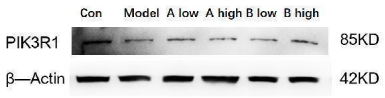
Western blot analysis of PI 3 Kinase p85 alpha/PIK3R1 using anti-PI 3 Kinase p85 alpha/PIK3R1 antibody (A00318-1). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing 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.



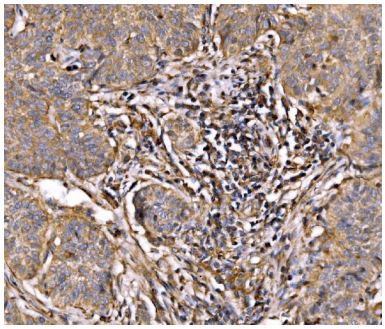
Western blot analysis of PI 3 Kinase p85 alpha/PIK3R1 using anti-PI 3 Kinase p85 alpha/PIK3R1 antibody (A00318-1). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 80V (Stacking gel) / 120V (Resolving gel) for 2 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: control group-mouse hippocampus tissue lysates, Lane 2: model group-mouse hippocampus tissue lysates Lane 3:Drug treatment (0.1g/kg) – Mouse hippocampus tissue lysates, Lane 4:Drug treatment (0.3g/kg) – Mouse hippocampus tissue lysates, Lane 5: Drug treatment (0.6g/kg) – Mouse hippocampus tissue lysates, Lane 6: Drug treatment (1.2g/kg) – Mouse hippocampus tissue 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 (A00318-1) 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 (Catalog # BA1054) at a dilution of 1:5000 for 1 hour at RT. The signal is developed using an ECL Plus Western Blotting Substrate with ChemiDoc MP 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.

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

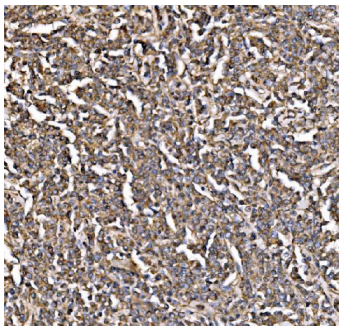
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Electrophoresis was performed on a 5-20% SDS-PAGE gel at 80V (Stacking gel) / 120V (Resolving gel) for 2 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: control group-mouse brain tissue lysates, Lane 2: model group-mouse brain tissue lysates Lane 3: A drug low-concentration treatment– Mouse brain tissue lysates, Lane 4: A drug high-concentration treatment– Mouse brain tissue lysates, Lane 5: B drug low-concentration treatment– Mouse brain tissue lysates, Lane 6: B drug high-concentration treatment– Mouse brain tissue 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 (A00318-1) 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 (Catalog # BA1054) at a dilution of 1:5000 for 1 hour at RT. The signal is developed using an ECL Plus Western Blotting Substrate with ChemiDoc MP 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.



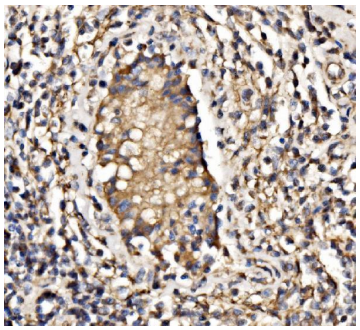
IHC analysis of PI 3 Kinase p85 alpha/PIK3R1 using anti-PI 3 Kinase p85 alpha/PIK3R1 antibody (A00318-1). PI 3 Kinase p85 alpha/PIK3R1 was detected in a paraffin-embedded section of human lung cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). 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 Strepavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.



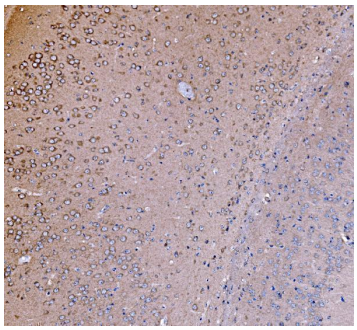
IHC analysis of PI 3 Kinase p85 alpha/PIK3R1 using anti-PI 3 Kinase p85 alpha/PIK3R1 antibody (A00318-1). PI 3 Kinase p85 alpha/PIK3R1 was detected in a paraffin-embedded section of human lymphoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). 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 Strepavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.

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

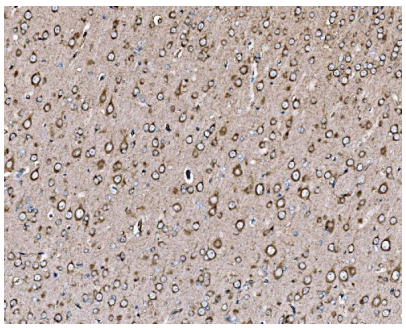
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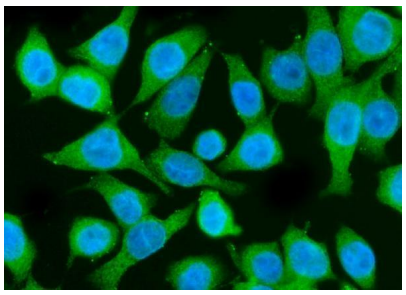
antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-PI 3 Kinase p85 alpha/PIK3R1 Antibody (A00318-1) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.



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 Strepavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.



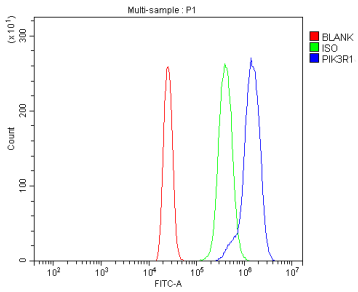
IHC analysis of PI 3 Kinase p85 alpha/PIK3R1 using anti-PI 3 Kinase p85 alpha/PIK3R1 antibody (A00318-1). PI 3 Kinase p85 alpha/PIK3R1 was detected in a paraffin-embedded section of rat brain tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The 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 Strepavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.



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.

Flow Cytometry analysis of HL-60 cells using anti-PI 3 Kinase p85 alpha/PIK3R1 antibody (A00318-1). Overlay histogram

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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/mmr.2015.3393, Short hairpin RNA targeting AKT1 and PI3K/p85 suppresses the proliferation and self-renewal of lung cancer stem cells

2. 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

3. PubMed ID: 10.1016/j.imlet.2015.04.007, Suppressive oligodeoxynucleotides induced tolerogenic plasmacytoid dendritic cells and ameliorated the experimental autoimmune neuritis

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