

Anti-PLA2G10 Antibody Picoband®

Catalog Number: A07633

About PLA2G10

This gene encodes a member of the phospholipase A2 family of proteins. Alternative splicing results in multiple transcript variants, at least one of which encodes a preproprotein that is proteolytically processed to generate the mature enzyme. This calcium-dependent enzyme hydrolyzes glycerophospholipids to produce free fatty acids and lysophospholipids. In one example, this enzyme catalyzes the release of arachidonic acid from cell membrane phospholipids, thus playing a role in the production of various inflammatory lipid mediators, such as prostaglandins. The encoded protein may promote the survival of breast cancer cells through its role in lipid metabolism.

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Overview

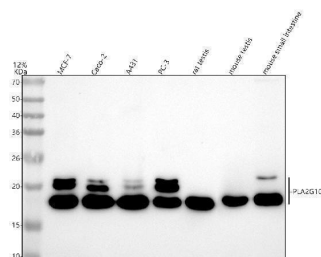
Product Name	Anti-PLA2G10 Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-PLA2G10 Antibody Picoband® catalog # A07633. Tested in WB, IHC, IF, IP, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium 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	Flow Cytometry, IP, IF, IHC, 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	O15496

Technical Details

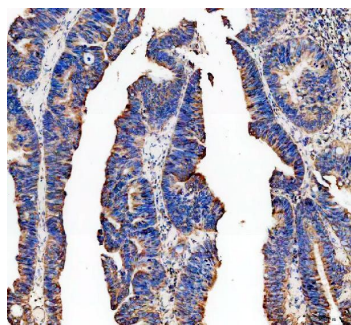
Immunogen	A synthetic peptide corresponding to a sequence in the middle region of human PLA2G10.
Form	Lyophilized

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 Immunofluorescence, 5 ug/ml, Human Immunoprecipitation, 0.5-2 ug/ml, Human Flow Cytometry (Fixed), 1-3 ug/1x10 ⁶ cells, Human

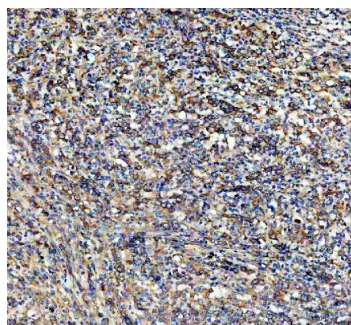
Anti-PLA2G10 Antibody Picoband® (A07633) Images



Western blot analysis of PLA2G10 using anti-PLA2G10 antibody (A07633). Electrophoresis was performed on a 12% 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: human MCF-7 whole cell lysates, Lane 2: human Caco-2 whole cell lysates, Lane 3: human A431 whole cell lysates, Lane 4: human PC-3 whole cell lysates, Lane 5: rat testis tissue lysates, Lane 6: mouse testis tissue lysates, Lane 7: mouse small intestine 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-PLA2G10 antigen affinity purified polyclonal antibody (A07633) 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 ECL Plus Western Blotting Substrate (Catalog # AR1196-200) with Tanon 5200 system. A specific band was detected for PLA2G10 at approximately 18-20 kDa. The expected band size for PLA2G10 is at 18 kDa.

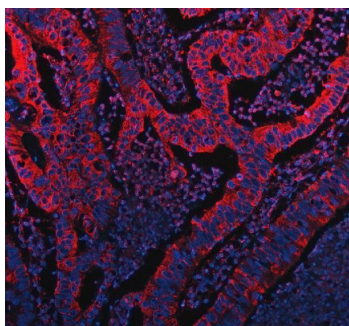


IHC analysis of PLA2G10 using anti-PLA2G10 antibody (A07633). PLA2G10 was detected in a paraffin-embedded section of human colon cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-PLA2G10 Antibody (A07633) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

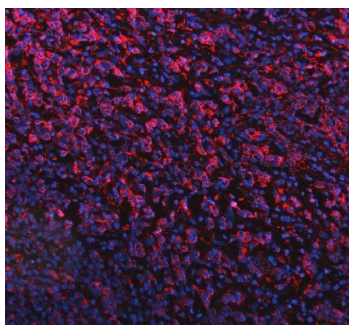


IHC analysis of PLA2G10 using anti-PLA2G10 antibody (A07633). PLA2G10 was detected in a paraffin-embedded section of human stomach cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-PLA2G10 Antibody (A07633) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

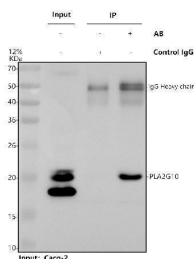
IF analysis of PLA2G10 using anti-PLA2G10 antibody (A07633). PLA2G10 was detected in a paraffin-embedded



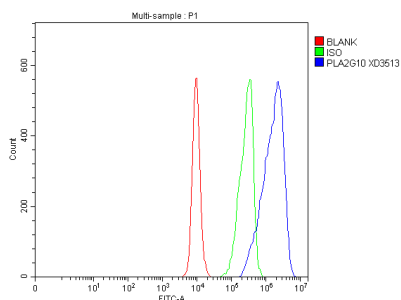
section of human colon cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 5 ug/mL rabbit anti-PLA2G10 Antibody (A07633) overnight at 4°C. Cy3 Conjugated Goat Anti-Rabbit IgG (BA1032) was used as secondary antibody at 1:500 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.



IF analysis of PLA2G10 using anti-PLA2G10 antibody (A07633). PLA2G10 was detected in a paraffin-embedded section of human stomach 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 5 ug/mL rabbit anti-PLA2G10 Antibody (A07633) overnight at 4°C. Cy3 Conjugated Goat Anti-Rabbit IgG (BA1032) was used as secondary antibody at 1:500 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.



Immunoprecipitating PLA2G10 in Caco-2 whole cell lysate. Western blot analysis of PLA2G10 using anti-PLA2G10 antibody (A07633). Lane 1: Caco-2 whole cell lysates (30ug), Lane 2: Rabbit control IgG instead of anti-PLA2G10 antibody in Caco-2 whole cell lysate, Lane 3: anti-PLA2G10 antibody (2ug) + Caco-2 whole cell lysate (500ug). After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-PLA2G10 antigen affinity purified polyclonal antibody (A07633) at a dilution of 0.5 ug/mL and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for PLA2G10 at approximately 20 kDa. The expected band size for PLA2G10 is at 18 kDa.



Flow Cytometry analysis of CACO-2 cells using anti-PLA2G10 antibody (A07633). Overlay histogram showing CACO-2 cells stained with A07633 (Blue line). The cells were fixed with 4% paraformaldehyde and blocked with 10% normal goat serum. And then incubated with rabbit anti-PLA2G10 Antibody (A07633, 1 ug/1x10⁶ cells) for 30 min at 20°C. Fluoro488 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.

Anti-PLA2G10 Antibody

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