

# **Anti-Annexin A1/ANXA1 Antibody**

Catalog Number: PA1006

### **About ANXA1**

Annexin I, also known as lipocortin I (Lipo1), belongs to the family of annexins. These proteins are though to control the biosynthesis of the potent mediators of inflammation, prostaglandins and leukotrienes. In two lipocortins (I and II) a short amino-terminal sequence distinct from the core structure has potential regulatory functions which are dependent on its phosphorylation state. The gene in the mouse encodes a protein of 346 amino acid residues. Mouse Lipo1 gene spans about 17 kb and is divided into 13 exons. Annexin I gene, mapped to 9q11-q22, is located on mouse chromosome 19. Annexin I acts through the formyl peptide receptor on human neutrophils. Peptides derived from the unique N-terminal domain of annexin I serve as FPR ligands and trigger different signaling pathways in a dose-dependent manner.

### Overview

Product Name	Anti-Annexin A1/ANXA1 Antibody
Reactive Species	Human, Monkey
Description	Boster Bio Anti-Annexin A1/ANXA1 Antibody catalog # PA1006. Tested in Flow Cytometry, IF, IHC, ICC, WB applications. This antibody reacts with Human, Monkey.
Application	Flow Cytometry, IF, IHC, ICC, WB
Clonality	Polyclonal FN-15
Formulation	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.
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	P04083

### **Technical Details**

Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human Annexin A1.
Predicted Reactive Species	Bovine
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



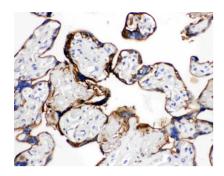


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Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Dilute the sample so that the expected range of concentrations fall within the detection range of 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, 0.1-0.5ug/ml, Human, Monkey  Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Human, By Heat  Immunocytochemistry/Immunofluorescence, 5ug/ml, Human  Flow Cytometry, 1-3ug/1x10 <sup>6</sup> cells, Human



## Anti-Annexin A1/ANXA1 Antibody (PA1006) Images



Anti-Annexin A1 antibody, PA1006, IHC(P) IHC(P): Human Placenta Tissue

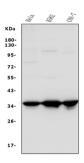


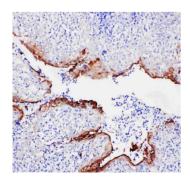
Figure 1. Western blot analysis of Annexin A1/ANXA1 using anti-Annexin A1/ANXA1 antibody (PA1006). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30ug of sample under reducing conditions.

Lane 1: human Hela whole cell lysates,

Lane 2: human K562 whole cell lysates,

Lane 3: monkey COS-7 whole cell lysates.

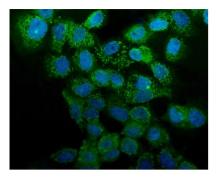
After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Annexin A1/ANXA1 antigen affinity purified polyclonal antibody (Catalog # PA1006) at 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 Annexin A1/ANXA1 at approximately 39KD. The expected band size for Annexin A1/ANXA1 is at 39KD.



Anti-Annexin A1 antibody, PA1006, IHC(P) IHC(P): Human Tonsil Tissue

Figure 4. IF analysis of Annexin A1/ANXA1 using anti-Annexin A1/ANXA1 antibody (PA1006). Annexin A1/ANXA1 was detected in immunocytochemical section of A431 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 5ug/mL rabbit anti-Annexin A1/ANXA1 Antibody (PA1006) 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.

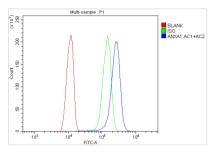


Figure 5. Flow Cytometry analysis of A431 cells using anti-Annexin A1/ANXA1 antibody (PA1006). Overlay histogram showing A431 cells stained with PA1006 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Annexin A1/ANXA1 Antibody (PA1006, 1ug/1x10<sup>6</sup> cells) for 30 min at 20°C. DyLight® 488 conjugated goat anti-rabbit IgG (BA1127, 5-10ug/1x10<sup>6</sup> cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x10<sup>6</sup>) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

## **6 Publications Citing This Product**

- 1. PubMed ID: 10.1038/s41598-020-77902-5, Defective membrane repair machinery impairs survival of invasive cancer cells
- 2. PubMed ID: 10.1016/j.bbamcr.2016.06.003, Membrane repair of human skeletal muscle cells requires Annexin-A5
- 3. PubMed ID: 23587191, Annexin A1 protein regulates the expression of PMVEC cytoskeletal proteins in CBDL rat serum-induced pulmonary microvascular remodeling

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