

Anti-Annexin A1/ANXA1 Antibody Picoband™

Catalog Number: PB9127

About ANXA1

ANXA1, also known as lipocortin I or Annexin A1, is a protein that in humans is encoded by the ANXA1 gene. It is mapped to 9q21.13. ANXA1 belongs to a family of Ca (2+)-dependent phospholipid binding proteins which have a molecular weight of approximately 35,000 to 40,000 and are preferentially located on the cytosolic face of the plasma membrane. ANXA1 protein has an apparent relative molecular mass of 40 kDa, with phospholipase A2 inhibitory activity. Lower peptide concentrations possibly found in inflammatory situations elicit Ca (2+) transients without fully activating the mitogen-activated protein kinase pathway. This causes a specific inhibition of the transendothelial migration of neutrophils and a desensitization of neutrophils toward a chemoattractant challenge. These findings identified ANXA1 peptides as novel, endogenous FPR ligands and established a mechanistic basis of ANXA1-mediated antiinflammatory effects.

Overview

Product Name	Anti-Annexin A1/ANXA1 Antibody Picoband™
Reactive Species	Human, Monkey, Rat
Description	Boster Bio Anti-Annexin A1/ANXA1 Antibody Picoband™ catalog # PB9127. Tested in IHC, WB applications. This antibody reacts with Human, Monkey, Rat.
Application	IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 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	E.coli-derived human Annexin A1 recombinant protein (Position: A2-N346). Human Annexin A1 shares 88% and 89% amino acid (aa) sequences identity with mouse and rat Annexin A1, respectively.
Predicted Reactive Species	Bovine, Canine, Chicken, Drosophila, Hamster, Horse, Monkey, Rabbit
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	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, Rat Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Human, Rat, By Heat

Anti-Annexin A1/ANXA1 Antibody Picoband™ (PB9127) Images

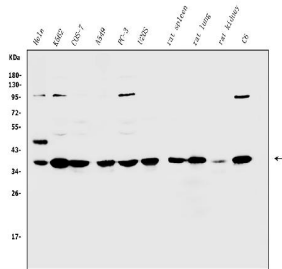


Figure 1. Western blot analysis of Annexin A1/ANXA1 using anti-Annexin A1/ANXA1 antibody (PB9127). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30ug of sample under reducing conditions.

Lane 1: human HeLa whole cell lysates,
Lane 2: human K562 whole cell lysates,
Lane 3: monkey COS-7 whole cell lysates,
Lane 4: human A549 whole cell lysates,
Lane 5: human PC-3 whole cell lysates,
Lane 6: human U2OS whole cell lysates,
Lane 7: rat spleen tissue lysates,
Lane 8: rat lung tissue lysates,
Lane 9: rat kidney tissue lysates,
Lane 10: rat C6 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 # PB9127) 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.

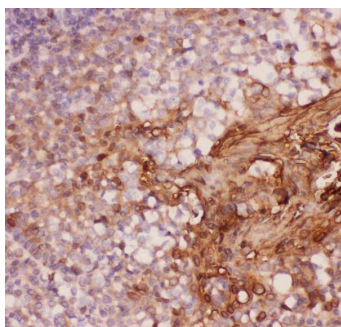
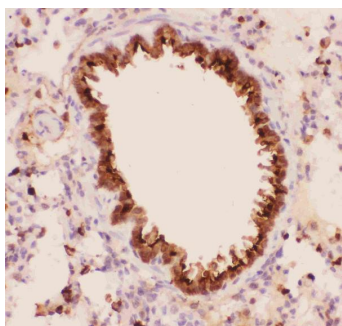


Figure 2. IHC analysis of Annexin A1 using anti-Annexin A1 antibody (PB9127).

Annexin A1 was detected in a paraffin-embedded section of human tonsil 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 1 ug/ml rabbit anti-Annexin A1 Antibody (PB9127) 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 Annexin A1 using anti-Annexin A1 antibody (PB9127).

Annexin A1 was detected in a paraffin-embedded section of rat lung 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 1 ug/ml rabbit anti-Annexin A1 Antibody (PB9127) 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.

6 Publications Citing This Product

1. PubMed ID: 10.3892/ol.2012.959, Annexin A1, A2, A4 and A5 play important roles in breast cancer, pancreatic cancer and laryngeal carcinoma, alone and/or synergistically
2. PubMed ID: 10.1007/s10534-010-9368-3, Proteomic analysis of lanthanum citrate-induced apoptosis in human cervical carcinoma SiHa cells
3. PubMed ID: 23587191, Annexin A1 protein regulates the expression of PMVEC cytoskeletal proteins in CBDL rat serum-induced pulmonary microvascular remodeling

Visit bosterbio.com/anti-annexin-a1-picoband-trade-antibody-pb9127-boster.html to see all 6 publications.

Submit a product review to Biocompare.com

Submit a review of this product to Biocompare.com to receive a \$20 Amazon.com giftcard! Your reviews help your fellow scientists make the right decisions. Thank you for your contribution.



Anti-Annexin A1/ANXA1 Antibody [™]