abcam

ab268191

Anti-Annexin A1/ANXA1 antibody [ANXA1/3566] - BSA and Azide free

Key facts

Isotype	IgG2a
Host species	Mouse
Storage buffer	pH: 7.2 - 7.4 Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	Recombinant Full Length Protein corresponding to Human ANXA1. Database link P04083
Carrier free	Yes
Clone number	ANXA1/3566
Purification technique	Affinity purification Protein A/G
Light chain type	kappa
Purification notes	Purified from bioreactor concentrate.

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	1-2 µg for 10^6 Cells

Notes	-

Not recommended

Species	Recombinant full length protein - Human
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	1-2 µg/mL
Notes	-

Not recommended

Species	Recombinant full length protein - Human
Dilution info	-
Notes	-

Protein Array

Tested

Species	Recombinant full length protein - Human
Dilution info	-
Notes	-

Expected

Species	Human
Dilution info	Use at an assay dependent concentration.
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1-2 µg/mL
Notes	-

Not recommended

Species	Recombinant full length protein - Human
Dilution info	-
Notes	-

IHC-P

Tested

Species	Human
Dilution info	1-2 µg/mL
Notes	-

Not recommended

Species	Recombinant full length protein - Human
Dilution info	-
Notes	-

Target data

See full target information ANXA1

Function Plays important roles in the innate immune response as effector of glucocorticoid-mediated responses and regulator of the inflammatory process. Has anti-inflammatory activity (PubMed:8425544). Plays a role in glucocorticoid-mediated down-regulation of the early phase of the inflammatory response (By similarity). Contributes to the adaptive immune response by enhancing signaling cascades that are triggered by T-cell activation, regulates differentiation and proliferation of activated T cells (PubMed:17008549). Promotes the differentiation of T cells into Th1 cells and negatively regulates differentiation into Th2 cells (PubMed:17008549). Has no effect on unstimulated T cells (PubMed:17008549).

Negatively regulates hormone exocytosis via activation of the formyl peptide receptors and reorganization of the actin cytoskeleton (PubMed:19625660). Has high affinity for Ca(2+) and can bind up to eight Ca(2+) ions (By similarity). Displays Ca(2+)-dependent binding to phospholipid membranes (PubMed:2532504, PubMed:8557678). Plays a role in the formation of phagocytic cups and phagosomes. Plays a role in phagocytosis by mediating the Ca(2+)-dependent interaction between phagosomes and the actin cytoskeleton (By similarity). In the context of antitumor immunity, interacts with FPR1 on dendritic cells allowing for tumor-associated antigens uptake and cross-presentation to T cells to mount an antitumor specific T cell response. Annexin Ac2-26. Functions at least in part by activating the formyl peptide receptors and downstream signaling cascades (PubMed:15187149, PubMed:22879591, PubMed:25664854). Promotes chemotaxis of granulocytes and monocytes via activation of the formyl peptide receptors (PubMed:15187149). Promotes rearrangement of the actin cytoskeleton, cell polarization and cell migration (PubMed:15187149). Promotes resolution of inflammation and wound healing (PubMed:25664854). Acts via neutrophil N-formyl peptide receptors to enhance the release of CXCL2 (PubMed:22879591).

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

ab268191 is the carrier-free version of ab268070.

Conjugation ready

Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with 1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	Annexin A1 also known as ANXA1 or annexin 1 is a multifunctional protein with a molecular mass of approximately 37 kDa. This protein belongs to the annexin family and is distributed widely in various tissue types including the central nervous system respiratory system and immune cells. Annexin A1 functions by binding to phospholipids in a calcium-dependent manner influencing membrane-related processes and signal transduction. Its expression can be examined using techniques like annexin A1 immunohistochemistry and annexin A1 ELISA to study protein localization and concentration.
Biological function summary	Annexin A1 is involved in modulating inflammatory responses and cell proliferation. It acts as a mediator in the resolution of inflammation by promoting apoptotic cell clearance and regulating leukocyte migration. Annexin A1 participates in complex interactions often associating with cell membrane phospholipids to exert its effects. It contributes significantly to cell adhesion migration and intracellular signaling events which are important for maintaining homeostasis and proper immune function.
Pathways	Annexin A1 plays a significant role in the glucocorticoid signaling pathway and the formation of the cytoskeleton. It interacts with proteins like lipocortin 1 and phospholipase A2 impacting processes such as arachidonic acid metabolism and cytoskeletal reorganization. These interactions underline annexin A1's involvement in regulating inflammation and maintaining cellular architecture linking it to cellular processes that govern stress responses and cell movement.
Associated diseases and disorders	Annexin A1 exhibits relevance to inflammatory diseases and cancer. It has been implicated in conditions such as asthma where it modulates inflammatory cell recruitment and activation. In cancer especially in breast cancer annexin A1 influences tumor progression by interacting with proteins like COX-2 affecting tumor cell invasion and metastasis. The protein's role in these conditions highlights its potential as both a biomarker and therapeutic target helping in understanding disease mechanisms and developing treatment strategies.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

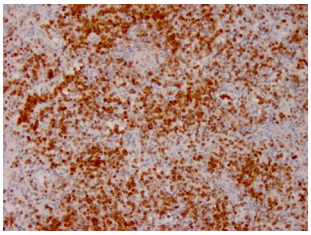
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

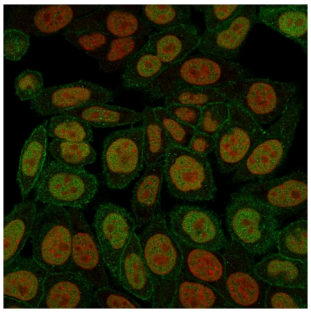
8 product images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Annexin A1/ANXA1 antibody [ANXA1/3566] - BSA and Azide free (ab268191)

Annexin A1/ANXA1 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using mouse Anti-Annexin A1/ANXA1 antibody

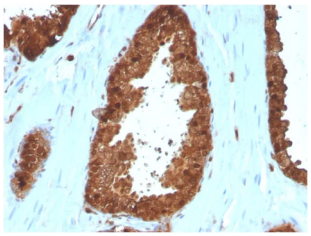
Formalin-fixed, paraffin-embedded human lymph node tissue stained for Annexin I using ab268070 at 2 µg/ml in immunohistochemical analysis.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA and Sodium azide (ab268070)



Immunocytochemistry/ Immunofluorescence - Anti-Annexin A1/ANXA1 antibody [ANXA1/3566] - BSA and Azide free (ab268191)

Annexin A1/ANXA1 Immunocytochemistry/ Immunofluorescence staining using mouse Anti-Annexin A1/ANXA1 antibody

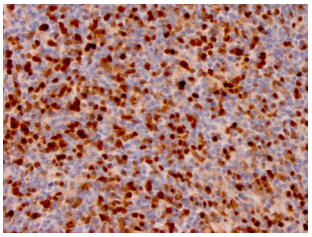
Immunofluorescence staining of paraformaldehyde-fixed HeLa (Human epithelial cell line from cervix adenocarcinoma) cells stained for Annexin I with ab268070 at 2 µg/ml followed by a goat anti-Mouse IgG-CF488 (Green). Nuclei are labeled with Reddot (Red).
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA and Sodium azide (ab268070)



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Annexin A1/ANXA1 antibody [ANXA1/3566] - BSA and Azide free (ab268191)

Annexin A1/ANXA1 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using mouse Anti-Annexin A1/ANXA1 antibody

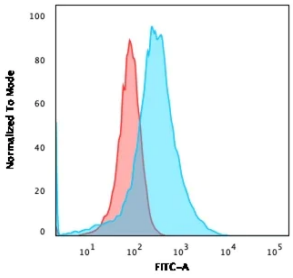
Formalin-fixed, paraffin-embedded human prostate carcinoma tissue stained for Annexin I using ab268070 at 2 µg/ml in immunohistochemical analysis.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA and Sodium azide (ab268070)



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Annexin A1/ANXA1 antibody [ANXA1/3566] - BSA and Azide free (ab268191)

Annexin A1/ANXA1 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using mouse Anti-Annexin A1/ANXA1 antibody

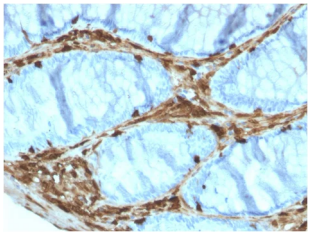
Formalin-fixed, paraffin-embedded human lymph node tissue stained for Annexin I using ab268070 at 2 µg/ml in immunohistochemical analysis.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA and Sodium azide (ab268070)



Flow Cytometry - Anti-Annexin A1/ANXA1 antibody [ANXA1/3566] - BSA and Azide free (ab268191)

Annexin A1/ANXA1 Flow Cytometry staining using mouse Anti-Annexin A1/ANXA1 antibody

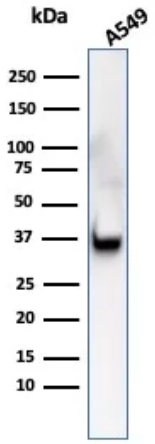
Flow cytometric analysis of PFA-fixed HeLa (Human epithelial cell line from cervix adenocarcinoma) cells labeling Annexin I using ab268070 at 2 µg/million cells followed by a goat anti-Mouse IgG-CF488 (Blue); Isotype Control (Red).
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA and Sodium azide (ab268070)



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Annexin A1/ANXA1 antibody [ANXA1/3566] - BSA and Azide free (ab268191)

Annexin A1/ANXA1 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using mouse Anti-Annexin A1/ANXA1 antibody

Formalin-fixed, paraffin-embedded human colon carcinoma tissue stained for Annexin I using ab268070 at 2 µg/ml in immunohistochemical analysis.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA and Sodium azide (ab268070)



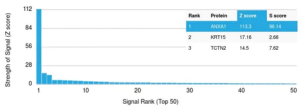
Western blot - Anti-Annexin A1/ANXA1 antibody [ANXA1/3566] - BSA and Azide free (ab268191)

Annexin A1/ANXA1 Western blot staining of A549 (Human lung carcinoma cell line) whole cell lysate using mouse Anti-Annexin A1/ANXA1 antibody

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA and Sodium azide (ab268070)
All lanes:
Western blot - Anti-Annexin A1/ANXA1 antibody [ANXA1/3566] (ab268070) at 2 µg/mL

All lanes:
A549 (Human lung carcinoma cell line) whole cell lysate

Predicted band size: 38 kDa



Protein Array - Anti-Annexin A1/ANXA1 antibody [ANXA1/3566] - BSA and Azide free (ab268191)

Protein Array containing more than 19,000 full-length human proteins using ab268070.
Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProtTM array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProtTM are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target. A MAb is considered to specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA and Sodium azide (ab268070)

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