abcam

ab201024

Anti-Annexin-6/ANXA6 antibody [EPR19536]

Recombinant | RabMAb | KO Validated

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogens	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR19536
Purification technique	Affinity purification Protein A
Concentration	0.632 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IP

Tested

Species	Human
Dilution info	1/30
Notes	-

WB

Tested

Species	Human
Dilution info	1/1000
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1/500
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/600
Notes	-

IHC-P

Tested

Species	Human
Dilution info	1/8000
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Target data

See full target information ANXA6

Function	May associate with CD21. May regulate the release of Ca(2+) from intracellular stores.

Storage

Shipped at conditions	Conditional Ambient
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

Patented technology
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?
This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

Supplementary info

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

Activity summary	Annexin-6 also known as ANXA6 is a member of the annexin family of proteins. It has a mass of approximately 68 kDa and is expressed in various tissues with substantial presence in muscle and liver. This protein acts mechanically by binding to membranes in a calcium-dependent manner playing a role in membrane-associated processes such as endocytosis and exocytosis. Annexin-6 can also interact with cytoskeletal elements influencing cell structure and stability.
Biological function summary	Annexin-6 functions as a versatile scaffold that organizes multiprotein complexes. It modulates membrane trafficking processes and participates in signaling pathways within the cell. This protein can influence intracellular calcium homeostasis by interacting with calcium channels and transporters making it an integral part of cellular signaling and communication.

Pathways	Annexin-6 plays a role in the MAPK and PI3K/Akt signaling pathways. It associates with proteins such as Ras and Protein Kinase C impacting cell proliferation survival and differentiation. These interactions highlight the importance of annexin-6 in cellular responses to external stimuli and help regulate various physiological processes in the body.
Associated diseases and disorders	Annexin-6 has been linked to cardiac disorders and cancer. In the context of cardiac health it interacts with proteins like phospholamban and calmodulin to influence heart muscle function and calcium regulation. In cancer annexin-6's involvement in the Akt signaling pathway can affect tumor growth and metastasis often interacting with other proteins like EGFR and HER2. This makes it a significant protein of interest in disease research and potential therapeutic targeting.

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

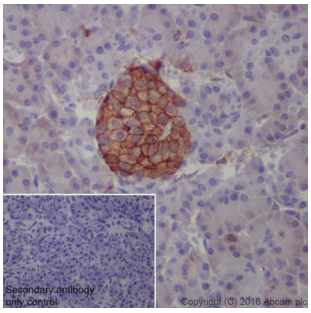
We do not recommend this combination. It is not covered by our product promise.

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.

9 product images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Annexin-6/ANXA6 antibody [EPR19536] (ab201024)

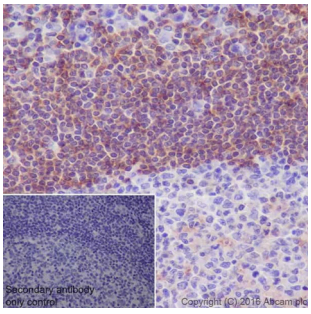
Annexin-6/ANXA6 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Annexin-6/ANXA6 antibody

Immunohistochemical analysis of paraffin-embedded Human pancreas tissue labeling Annexin-6/ANXA6 with ab201024 at 1/8000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.
Cytoplasm and membrane staining on the Human pancreas islet is observed.

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is ab97051 at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Annexin-6/ANXA6 antibody [EPR19536] (ab201024)

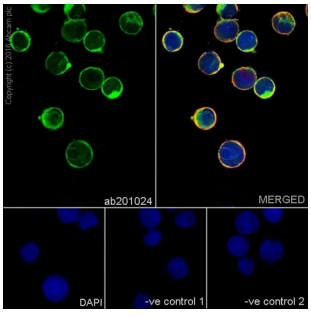
Annexin-6/ANXA6 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Annexin-6/ANXA6 antibody

Immunohistochemical analysis of paraffin-embedded Human tonsil tissue labeling Annexin-6/ANXA6 with ab201024 at 1/8000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.
Cytoplasm staining on Human tonsil is observed.

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is ab97051 at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunocytochemistry/ Immunofluorescence - Anti-Annexin-6/ANXA6 antibody [EPR19536] (ab201024)

Annexin-6/ANXA6 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-Annexin-6/ANXA6 antibody

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized Raji (Human Burkitt's lymphoma cell line) cells labeling Annexin-6/ANXA6 with ab201024 at 1/500 dilution, followed by Goat Anti-Rabbit IgG (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution (green).
Confocal image showing cytoplasmic staining on Raji cells.

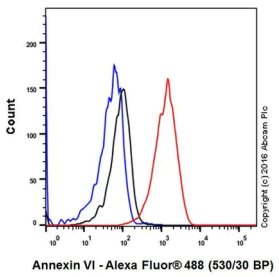
The nuclear counterstain is DAPI (blue).

Tubulin is detected with Anti-alpha Tubulin antibody [DM1A] - Loading Control (ab7291) at 1/1000 dilution and Goat Anti-Mouse IgG H&L (Alexa Fluor® 594) preadsorbed (ab150120) at 1/1000 dilution (red).

The negative controls are as follows:-

-ve control 1: ab201024 at 1/500 dilution followed by ab150120 at 1/1000 dilution.

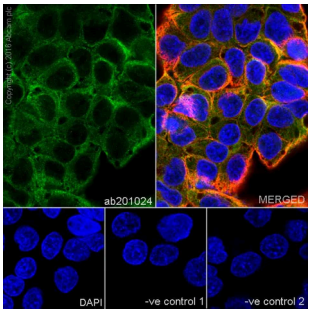
-ve control 2: ab7291 at 1/1000 dilution followed by ab150077 at 1/1000 dilution.



Flow Cytometry (Intracellular) - Anti-Annexin-6/ANXA6 antibody [EPR19536] (ab201024)

Annexin-6/ANXA6 Flow Cytometry (Intracellular) staining using rabbit Anti-Annexin-6/ANXA6 antibody

Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed HepG2 (Human liver hepatocellular carcinoma cell line) cells labeling Annexin-6/ANXA6 with ab201024 at 1/600 dilution (red) compared with a a Rabbit IgG, monoclonal [EPR25A] - Isotype Control (ab172730) (black) and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (blue). Goat anti Rabbit IgG (Alexa Fluorr® 488) at 1/2000 dilution was used as the secondary antibody.



Immunocytochemistry/ Immunofluorescence - Anti-Annexin-6/ANXA6 antibody [EPR19536] (ab201024)

Annexin-6/ANXA6 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-Annexin-6/ANXA6 antibody

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HepG2 (Human liver hepatocellular carcinoma cell line) cells labeling Annexin-6/ANXA6 with ab201024 at 1/500 dilution, followed by Goat Anti-Rabbit IgG (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution (green).
Confocal image showing cytoplasmic staining on HepG2 cells.

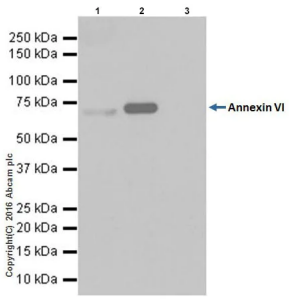
The nuclear counterstain is DAPI (blue).

Tubulin is detected with Anti-alpha Tubulin antibody [DM1A] - Loading Control (ab7291) at 1/1000 dilution and Goat Anti-Mouse IgG H&L (Alexa Fluor® 594) preadsorbed (ab150120) at 1/1000 dilution (red).

The negative controls are as follows:-

-ve control 1: ab201024 at 1/500 dilution followed by ab150120 at 1/1000 dilution.

-ve control 2: ab7291 at 1/1000 dilution followed by ab150077 at 1/1000 dilution.



Immunoprecipitation - Anti-Annexin-6/ANXA6 antibody [EPR19536] (ab201024)

Annexin-6/ANXA6 was immunoprecipitated from 0.35mg of Human fetal liver whole cell lysate with ab201024 at 1/30 dilution.
Western blot was performed from the immunoprecipitate using ab201024 at 1/1000 dilution.

VeriBlot for IP Detection Reagent (HRP) (ab131366), was used for detection at 1/10000 dilution.

Lane 1: Human fetal liver whole cell lysate,10µg (Input).

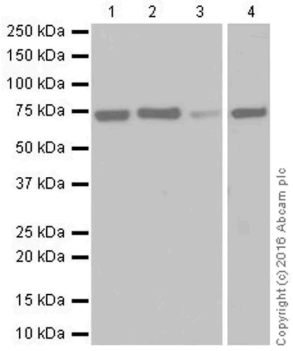
Lane 2: ab201024 IP in Human fetal liver whole cell lysate.

Lane 3: Rabbit IgG, monoclonal [EPR25A] - Isotype Control (ab172730) instead of ab201024 in Human fetal liver whole cell lysate.

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 3 seconds.
All lanes:
Immunoprecipitation - Anti-Annexin-6/ANXA6 antibody [EPR19536] (ab201024)

Predicted band size: 76 kDa



Western blot - Anti-Annexin-6/ANXA6 antibody [EPR19536] (ab201024)

Blocking/Dilution buffer: 5% NFDM/TBST.
Exposure time: Lane 1,2 and 3: 5 seconds; Lane 4: 30 seconds.

All lanes:
Western blot - Anti-Annexin-6/ANXA6 antibody [EPR19536] (ab201024) at 1/1000 dilution

Lane 1:
Human fetal liver lysate at 10 µg

Lane 2:
Human fetal heart lysate at 10 µg

Lane 3:
Human fetal kidney lysate at 10 µg

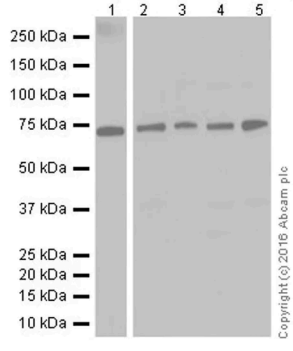
Lane 4:
Human spleen lysate at 10 µg

Secondary

All lanes:
Goat Anti-Rabbit IgG Peroxidase Conjugate, specific to the non-reduced form of IgG at 1/10000 dilution

Predicted band size: 76 kDa

Observed band size: 72 kDa



Western blot - Anti-Annexin-6/ANXA6 antibody [EPR19536] (ab201024)

Annexin-6/ANXA6 Western blot staining using rabbit Anti-Annexin-6/ANXA6 antibody

Blocking/Dilution buffer: 5% NFDM/TBST.
Exposure time: Lane 1: 3 minutes; Lane 2,3,4 and 5: 30 seconds.

All lanes:
Western blot - Anti-Annexin-6/ANXA6 antibody [EPR19536] (ab201024) at 1/5000 dilution

Lane 1:
Human skeletal muscle lysate at 20 µg

Lane 2:
Jurkat (Human T cell leukemia cell line from peripheral blood) whole cell lysate at 20 µg

Lane 3:
Raji (Human Burkitt's lymphoma cell line) whole cell lysate at 20 µg

Lane 4:
HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate at 20 µg

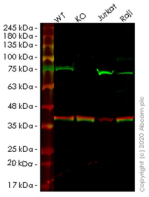
Lane 5:
HepG2 (Human liver hepatocellular carcinoma cell line) whole cell lysate at 20 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Predicted band size: 76 kDa

Observed band size: 72 kDa



Western blot - Anti-Annexin-6/ANXA6 antibody [EPR19536] (ab201024)

Annexin-6/ANXA6 Western blot staining using rabbit Anti-Annexin-6/ANXA6 antibody

Lanes 1-4: Merged signal (red and green). Green - ab201024 observed at 75 kDa. Red - loading control ab8245 observed at 36 kDa.
ab201024 Anti-Annexin-6/ANXA6 antibody [EPR19536] was shown to specifically react with Annexin-6/ANXA6 in wild-type HeLa cells. Loss of signal was observed when knockout cell line ab265677 (knockout cell lysate ab257351) was used. Wild-type and Annexin-6/ANXA6 knockout samples were subjected to SDS-PAGE. ab201024 and Anti-GAPDH antibody [6C5] - Loading Control (ab8245) were incubated at room temperature for 2. 5 hours at 1 in 1000 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (ab216773) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (ab216776) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.

All lanes:
Western blot - Anti-Annexin-6/ANXA6 antibody [EPR19536] (ab201024) at 1/1000 dilution

Lane 1:
Wild-type HeLa cell lysate at 20 µg

Lane 2:
Western blot - Human ANXA6 (Annexin-6) knockout HeLa cell lysate (ab257351) at 20 µg

Lane 3:
Jurkat cell lysate at 20 µg

Lane 4:
Raji cell lysate at 20 µg

Secondary

All lanes:
Western blot - Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (ab216773) at 1/10000 dilution

Predicted band size: 76 kDa

Observed band size: 75 kDa

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.