abcam

ab197586

Anti-Annexin-7/ANXA7 antibody [EPR17090]

Recombinant | RabMAb

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
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR17090
Purification technique	Affinity purification Protein A
Concentration	0.364 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

WB

Tested

Species	Mouse
Dilution info	1/2000
Notes	-

Species	Rat

Dilution info	1/2000
Notes	-

Species	Human
Dilution info	1/2000
Notes	-

ICC/IF

Tested

Species	Mouse
Dilution info	1/100
Notes	-

Species	Human
Dilution info	1/100
Notes	-

Expected

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

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/60
Notes	ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Expected

Species	Mouse, Rat

Dilution info	Use at an assay dependent concentration.
Notes	-

IHC-P

Tested

Species	Mouse
Dilution info	1/600
Notes	-

Species	Human
Dilution info	1/600
Notes	-

Expected

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

Target data

See full target information ANXA7

Function	Calcium/phospholipid-binding protein which promotes membrane fusion and is involved in exocytosis.

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-7 (ANXA7) also known as synexin is a calcium-dependent phospholipid-binding protein. It has a molecular weight of approximately 51 kDa. This protein is expressed in various tissues with notable expression in the heart and brain. Mechanically ANXA7 plays a role in membrane fusion and exocytosis which are critical processes for cellular communication and transport.
Biological function summary	Annexin-7 functions as an important player in cell proliferation and signal transduction. It forms part of the annexin family of proteins which are known for their role in calcium ion binding and membrane-related activities. Annexin-7 has a role in linking Ca2+ signaling with phospholipid membrane dynamics which suggests its involvement in cellular events like growth and differentiation.
Pathways	Annexin-7 influences both the MAPK and EGFR signaling pathways. These pathways are essential for regulating cell division apoptosis and cellular response to external stimuli. Within these pathways Annexin-7 interacts with proteins such as Ras and PI3K which are important for propagating signals that control cellular behaviors.
Associated diseases and disorders	Abnormalities in Annexin-7 expression and function associate it with cancer and schizophrenia. In cancer altered ANXA7 function may disrupt normal cell communication and growth pathways contributing to tumorigenesis. In schizophrenia disrupted calcium signaling involving ANXA7 may affect neuronal communication and brain function. In these conditions Annexin-7 interacts with proteins like p53 and NMDA receptors which are critical to the pathology of cancer and neurological disorders respectively.

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

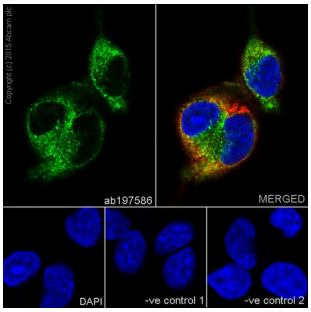
We do not recommend this combination. It is not covered by our product promise.

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.

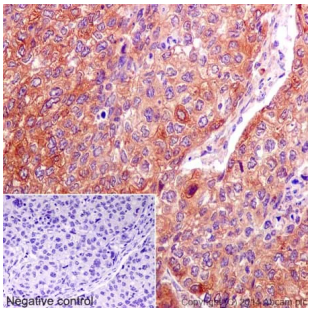
6 product images



Immunocytochemistry/ Immunofluorescence - Anti-Annexin-7/ANXA7 antibody [EPR17090] (ab197586)

Annexin-7/ANXA7 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-Annexin-7/ANXA7 antibody

Immunofluorescent analysis of 4% paraformaldehyde-fixed 0.1% Triton X-100 permeabilized SH-SY5Y (Human neuroblastoma from bone marrow cells) cells labeling ANXA7 with ab197586 at 1/100 followed by Goat anti-rabbit IgG (Alexa Fluor® 488) (ab150077) secondary antibody at 1/500 (green). Cytoplasm staining on SH-SY5Y cell line is observed. Subcellular location is citied as Cytoplasm [J Cell Sci. 1995 Jan;108 (Pt 1):85-95.] The nuclear counterstain is DAPI (blue). Tubulin is detected with ab7291 (anti-Tubulin mouse mAb) at 1/1000 and ab150120 (AlexaFluor®594 Goat anti-Mouse secondary) at 1/500 (red).
The negative controls are as follows:-
-ve control 1 - ab179586 at 1/100 followed by ab150120 (AlexaFluor®594 Goat anti-Mouse secondary) at 1/500.
-ve control 2. - ab7291 (anti-Tubulin mouse mAb) at 1/1000 followed by ab150077 (Alexa Fluor®488 Goat Anti-Rabbit IgG H&L) at 1/500.

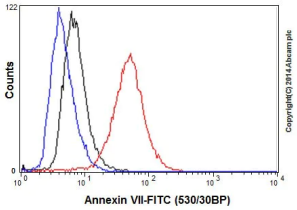


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Annexin-7/ANXA7 antibody [EPR17090] (ab197586)

Annexin-7/ANXA7 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Annexin-7/ANXA7 antibody

Immunohistochemical analysis of paraffin-embedded Human cervix carcinoma tissue labeling ANXA7 with ab197586 at 1/600 dilution followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500. Cytoplasm staining on Human cervix carcinoma tissue is observed. Subcellular location citied as Cytoplasm [J Cell Sci. 1995 Jan;108 (Pt 1):85-95.]. Counter stained with Hematoxylin. Negative control: Used PBS instead of primary ab secondary ab is Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500.

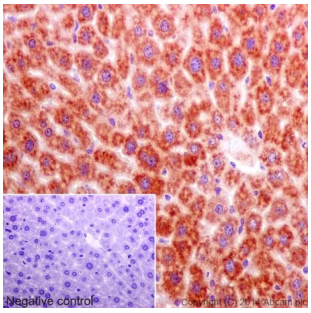
Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Flow Cytometry (Intracellular) - Anti-Annexin-7/ANXA7 antibody [EPR17090] (ab197586)

Annexin-7/ANXA7 Flow Cytometry (Intracellular) staining using rabbit Anti-Annexin-7/ANXA7 antibody

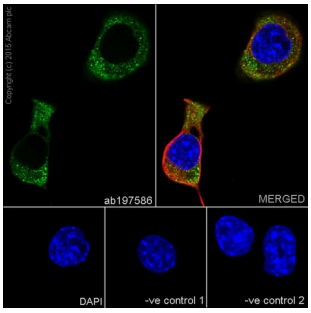
Intracellular flow cytometric analysis of 2% paraformaldehyde-fixed SH-SY5Y (Human neuroblastoma from bone marrow) cellslabeling ANXA7 with ab197586 at 1/60 (red) compared with a rabbit monoclonal IgG isotype control (ab172730) (black) and a unlabelled control (cells without incubation with primary antibody and secondary antibody (blue). Goat anti rabbit IgG (FITC) at 1/150 dilution was used as the secondary antibody.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Annexin-7/ANXA7 antibody [EPR17090] (ab197586)

Annexin-7/ANXA7 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Annexin-7/ANXA7 antibody

Immunohistochemical analysis of paraffin-embedded Mouse liver tissue labeling ANXA7 with ab197586 at 1/600 dilution followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500. Cytoplasm staining on Mouse liver tissue is observed. Subcellular location citied as Cytoplasm [J Cell Sci. 1995 Jan;108 (Pt 1):85-95.]. Counter stained with Hematoxylin.
Negative control: Used PBS instead of primary ab secondary ab is Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500.
Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

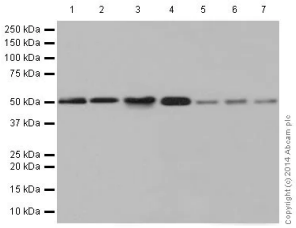


Immunocytochemistry/ Immunofluorescence - Anti-Annexin-7/ANXA7 antibody [EPR17090] (ab197586)

Annexin-7/ANXA7 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-Annexin-7/ANXA7 antibody

Immunofluorescent analysis of 4% paraformaldehyde-fixed 0.1% Triton X-100 permeabilized Neuro-2a (Mouse neuroblastoma cells) cells labeling ANXA7 with ab197586 at 1/100 followed by Goat anti-rabbit IgG (Alexa Fluor® 488) (ab150077) secondary antibody at 1/500 (green). Cytoplasm

staining on Neuro-2a cell line is observed. Subcellular location is citied as Cytoplasm [J Cell Sci. 1995 Jan;108 (Pt 1):85-95.] The nuclear counterstain is DAPI (blue). Tubulin is detected with ab7291 (anti-Tubulin mouse mAb) at 1/1000 and ab150120 (AlexaFluor®594 Goat anti-Mouse secondary) at 1/500 (red).
The negative controls are as follows:-
-ve control 1 - ab179586 at 1/100 followed by ab150120 (AlexaFluor®594 Goat anti-Mouse secondary) at 1/500.
-ve control 2. - ab7291 (anti-Tubulin mouse mAb) at 1/1000 followed by ab150077 (Alexa Fluor®488 Goat Anti-Rabbit IgG H&L) at 1/500.



Western blot - Anti-Annexin-7/ANXA7 antibody [EPR17090] (ab197586)

Annexin-7/ANXA7 Western blot staining using rabbit Anti-Annexin-7/ANXA7 antibody

Blocking and diluting buffer was 5% NFDM /TBST
All lanes:
Western blot - Anti-Annexin-7/ANXA7 antibody [EPR17090] (ab197586) at 1/2000 dilution

Lane 1:
Jurkat (Human T cell leukemia cells from peripheral blood) whole cell lysate at 10 µg

Lane 2:
SH-SY5Y (Human neuroblastoma from bone marrow cells) whole cell lysate at 10 µg

Lane 3:
Rat brain lysate at 10 µg

Lane 4:
C6 (Rat glial tumor cells) whole cell lysate at 10 µg

Lane 5:
Raw264.7 (Mouse macrophage cells transformed with Abelson murine leukemia virus) whole cell lysate at 10 µg

Lane 6:
PC-12 (Rat adrenal gland pheochromocytoma) whole cell lysate at 10 µg

Lane 7:
NIH/3T3 (Mouse embryo fibroblast cells) whole cell lysate at 10 µg

Secondary

All lanes:
Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

Predicted band size: 53 kDa

Observed band size: 53 kDa

Exposure time: 3min

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