abcam

## ab54775

# Anti-Annexin V/ANXA5 antibody [1F4-1A5]

Anti-Annexin V/ANXA5 antibody [1F4-1A5] (ab54775) is a mouse monoclonal antibody detecting Annexin V/ANXA5 in **Western Blot, Flow Cytometry, IP, IHC-P, ICC/IF**. Suitable for **Human**.

- Over 20 publications
- Trusted since 2007

## Key facts

| | |
|---|---|
| **Isotype** | IgG1 |
| **Host species** | Mouse |
| **Storage buffer** | pH: 7.4 Constituents: PBS |
| **Form** | Liquid |
| **Clonality** | Monoclonal |
| **Immunogen** | Recombinant Full Length Protein corresponding to Human ANXA5. Database link P08758 |
| **Carrier free** | Yes |
| **Clone number** | 1F4-1A5 |
| **Purity** | Tissue culture supernatant |
| **Light chain type** | kappa |

## Reactivity data

## IP

**Tested**

| | |
|---|---|
| **Species** | Human |
| **Dilution info** | - |
| **Notes** | - |

## Flow Cyt

### Tested

| | |
|---|---|
| **Species** | Human |
| **Dilution info** | - |
| **Notes** | ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody. |

## WB

### Tested

| | |
|---|---|
| **Species** | Human |
| **Dilution info** | - |
| **Notes** | - |

## ICC/IF

### Tested

| | |
|---|---|
| **Species** | Human |
| **Dilution info** | - |
| **Notes** | - |

## IHC-P

### Tested

| | |
|---|---|
| **Species** | Human |
| **Dilution info** | - |
| **Notes** | Perform heat-mediated antigen retrieval via the microwave method before commencing with IHC staining protocol. |

## Target data

See full target information ANXA5

| | |
|---|---|
| **Function** | This protein is an anticoagulant protein that acts as an indirect inhibitor of the thromboplastin-specific complex, which is involved in the blood coagulation cascade. |

## Storage

| | |
|---|---|
| **Shipped at conditions** | Blue Ice |
| **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

**What is this antibody validated in?**
Anti-Annexin V/ANXA5 antibody [1F4-1A5] (ab54775) is a mouse monoclonal antibody and is validated for use in Western Blot (WB), Flow Cytometry (Flow Cyt), Immunoprecipitation (IP), Immunohistochemistry (IHC-P), Immunocytochemistry/immunofluorescence (ICC/IF) in Human samples.

**What is the molecular weight of Annexin V/ANXA5?**
Anti-Annexin V/ANXA5 [1F4-1A5] (ab54775) specifically detects a band for Annexin V/ANXA5 (UniProt: P08758) at a molecular weight of 36kDa.

**Trusted by the scientific community**
Anti-Annexin V/ANXA5 [1F4-1A5] (ab54775) was first used in a scientific publication in 2007 and has been cited over 20 times in peer-reviewed journals.

**Reviewed by scientists**
Anti-Annexin V/ANXA5 [1F4-1A5] (ab54775) has over 5 independent reviews from customers.

## Supplementary info

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

| | |
|---|---|
| **Activity summary** | Annexin V also known as ANXA5 is a protein with a mass of approximately 35-36 kDa. This protein belongs to the annexin family which includes proteins capable of |

| | |
|---|---|
| | binding to phospholipids in a calcium-dependent manner. Annexin V is mostly expressed in placental tissue though it can be found in various other tissues like the vascular endothelium. Researchers often utilize annexin V for staining dead cells or identifying apoptosis using assays such as annexin V FITC or 7-AAD staining. It forms part of the annexin V binding buffer which enhances its binding affinity. |
| **Biological function summary** | Annexin V has an important role in cell membrane dynamics and signaling. The protein does not function as part of a larger complex but its ability to bind negatively charged phospholipids like phosphatidylserine makes it important in apoptosis. During apoptosis phosphatidylserine translocates to the outer leaflet of the plasma membrane where annexin V marks these apoptotic cells. This property enables annexin V-based assays to detect early stages of apoptosis. |
| **Pathways** | Annexin V involvement is seen in pathways associated with blood coagulation and apoptosis. In the apoptosis pathway annexin V interacts with apoptotic markers to identify dying cells. It relates to proteins such as caspases which are key executors of apoptosis. In coagulation annexin V has been shown to interact with prothrombinase complex and can affect calcium ion concentration thereby influencing blood clotting processes. |
| **Associated diseases and disorders** | Annexin V plays a role in antiphospholipid syndrome and cardiovascular diseases. Annexin V has been researched for its connection to antiphospholipid antibodies where it affects normal annexin V function impacting clot formation. In cardiovascular diseases annexin V can interact with proteins such as thrombomodulin influencing thrombotic and atherosclerotic pathways. Understanding these interactions helps researchers develop potential therapeutic approaches for related conditions. |

## 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**

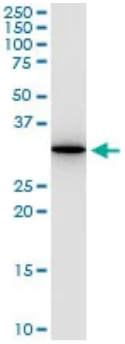
We do not recommend this combination. It is not covered by our product promise.

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



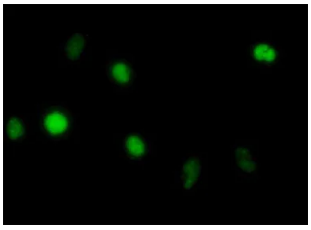

### Western blot - Anti-Annexin V/ANXA5 antibody [1F4-1A5] (ab54775)

Annexin V/ANXA5 Western blot staining using mouse Anti-Annexin V/ANXA5 antibody

ab54775 Western Blot analysis of ANXA5/ANXA5 expression in Hela cells.
This image was generated using the ascites version of the product.

All lanes:
Western blot - Anti-Annexin V/ANXA5 antibody [1F4-1A5] (ab54775)

Predicted band size: 35 kDa

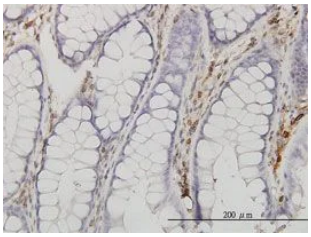


### Immunocytochemistry/ Immunofluorescence - Anti-Annexin V/ANXA5 antibody [1F4-1A5] (ab54775)

Annexin V/ANXA5 Immunocytochemistry/ Immunofluorescence staining using mouse Anti-Annexin V/ANXA5 antibody

ab54775 at 10 ug/ml staining Annexin V/ANXA5 in human Hela cells by Immunocytochemistry / Immunofluorescence.

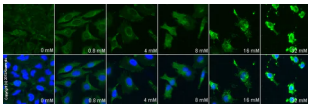
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### Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Annexin V/ANXA5 antibody [1F4-1A5] (ab54775)

Annexin V/ANXA5 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using mouse Anti-Annexin V/ANXA5 antibody

Annexin V/ANXA5 antibody (ab54775) used in immunohistochemistry at 3ug/ml on formalin fixed and paraffin embedded human colon.
This image was generated using the ascites version of the product.

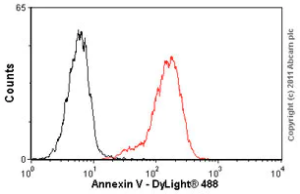


### Immunocytochemistry/ Immunofluorescence - Anti-Annexin V/ANXA5 antibody [1F4-1A5] (ab54775)

Annexin V/ANXA5 Immunocytochemistry/ Immunofluorescence staining using mouse Anti-Annexin V/ANXA5 antibody

ab54775 staining Annexin V/ANXA5 in HeLa cells treated with pentoxifylline (ab120725), by ICC/IF. Increase of Annexin V/ANXA5 correlates with increased concentration of pentoxifylline, as described in literature.

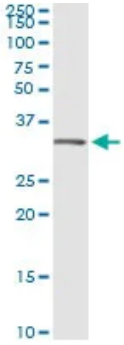
The cells were incubated at 37°C for 24h in media containing different concentrations of ab120725 (pentoxifylline) in DMSO, fixed with 4% formaldehyde for 10 minutes at room temperature and blocked with PBS containing 10% goat serum, 0.3 M glycine, 1% BSA and 0.1% tween for 2h at room temperature. Staining of the treated cells with ab54775 (10 µg/ml) was performed overnight at 4°C in PBS containing 1% BSA and 0.1% tween. A DyLight 488 goat anti-mouse polyclonal antibody (ab96879) at 1/250 dilution was used as the secondary antibody. Nuclei were counterstained with DAPI and are shown in blue.
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## Flow Cytometry - Anti-Annexin V/ANXA5 antibody [1F4-1A5] (ab54775)

Annexin V/ANXA5 Flow Cytometry staining using mouse Anti-Annexin V/ANXA5 antibody

Overlay histogram showing HeLa cells stained with ab54775 (red line). The cells were fixed with 100% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab54775, 1µg/1x$10^6$ cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (ab96879) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] (ab91353, 2µg/1x$10^6$ cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a positive signal in HeLa cells fixed with 4% paraformaldehyde (10 min)/permeabilized in 0.1% PBS-Tween used under the same conditions.
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## Immunoprecipitation - Anti-Annexin V/ANXA5 antibody [1F4-1A5] (ab54775)

Immunoprecipitation of ANXA5 transfected lysate using ab54775 monoclonal antibody and Protein A Magnetic Bead and immunoblotted with a ANXA5 rabbit polyclonal antibody.
This image was generated using the ascites version of the product.

All lanes:
Immunoprecipitation - Anti-Annexin V/ANXA5 antibody [1F4-1A5] (ab54775)

Predicted band size: 35 kDa

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