abcam

ab140068

Anti-Annexin V/ANXA5 antibody

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7 Preservative: 0.01% Thimerosal (merthiolate) Constituents: PBS, 20% Glycerol (glycerin, glycerine)
Form	Liquid
Clonality	Polyclonal
Immunogen	Recombinant Full Length Protein corresponding to Human ANXA5. Database link P08758
Purification technique	Affinity purification Immunogen
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	1/50 - 1/200
Notes	-

Expected

Species	Mouse, Rat

Dilution info	Use at an assay dependent concentration.
Notes	-

WB

Tested

Species	Mouse
Dilution info	1/500 - 1/50000
Notes	-

Species	Rat
Dilution info	1/500 - 1/50000
Notes	-

Species	Human
Dilution info	1/500 - 1/50000
Notes	-

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

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

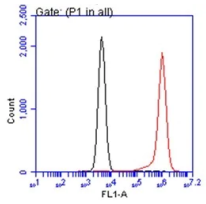
We do not recommend this combination. It is not covered by our product promise.

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.

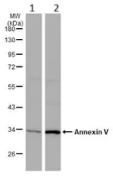
3 product images



Flow Cytometry - Anti-Annexin V/ANXA5 antibody (ab140068)

Annexin V/ANXA5 Flow Cytometry staining of HeLa cells using rabbit Anti-Annexin V/ANXA5 antibody

Flow cytometry analysis of HeLa cells labelling Annexin V protein with ab140068 at a 1/50 dilution compared with unlabelled control. Acquisition of 20,000 events were collected for FACS.



Western blot - Anti-Annexin V/ANXA5 antibody (ab140068)

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

Samples were separated by 10 % SDS.
All lanes:
Western blot - Anti-Annexin V/ANXA5 antibody (ab140068) at 1/5000 dilution

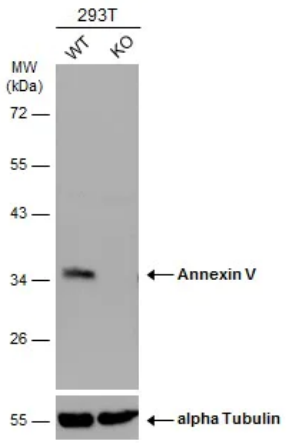
Lane 1:
293T whole cell extract at 30 µg

Lane 2:
HepG2 whole cell extract at 30 µg

Secondary

All lanes:
HRP-conjugated anti-rabbit IgG antibody

Predicted band size: 36 kDa



Western blot - Anti-Annexin V/ANXA5 antibody (ab140068)

All lanes:
Western blot - Anti-Annexin V/ANXA5 antibody (ab140068) at 1/50000 dilution

Lane 1:
WT 293T cell extracts at 30 µg

Lane 2:
Annexin V/ANXA5 Knockout 293T cell extracts at 30 µg

Secondary

All lanes:
HRP-conjugated anti-rabbit IgG

Predicted band size: 35 kDa

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