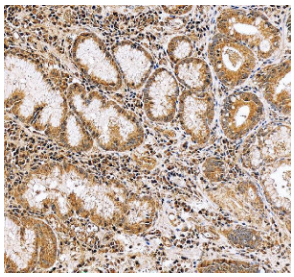
Annexin A3 Antibody / Calcium Binding Protein Antibody (R31948)

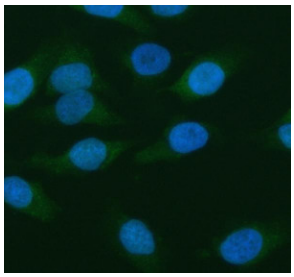
Catalog No.	Formulation	Size
R31948	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

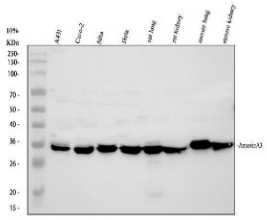
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P12429
Localization	Cytoplasmic, membranous
Applications	Western blot: 0.5-1ug/ml Immunohistochemistry (FFPE): 2-5ug/ml Immunofluorescence: 5ug/ml: 0.5-1ug/ml Immunoprecipitation: 2ug per 500ug of lysate Flow cytometry: 1-3ug/million cells
Limitations	This Annexin A3 Antibody / Calcium Binding Protein Antibody is available for research use only.



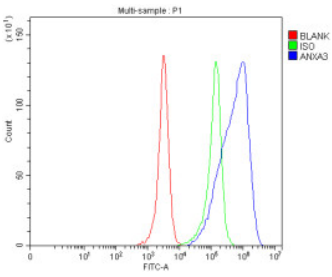
Annexin A3 Antibody Human Gastric Carcinoma IHC. Immunohistochemical staining of FFPE human gastric carcinoma tissue using Annexin A3 antibody. Heat-induced epitope retrieval was performed in pH 8.0 EDTA buffer before incubation with Annexin A3 antibody at 2 ug/ml. An HRP-conjugated secondary antibody with DAB chromogen was used for visualization. Tumor cells exhibit strong cytoplasmic and membranous staining, consistent with the membrane-associated functions of Annexin A3 in calcium-dependent phospholipid binding and vesicle trafficking. This Annexin A3 Antibody, also called Calcium Binding Protein Antibody, is suitable for studies of calcium-dependent phospholipid binding, membrane trafficking, vesicle dynamics, and cancer biology.



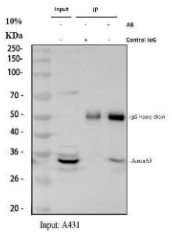
Annexin A3 Antibody HeLa Cell IF. Immunofluorescent staining of HeLa cells using Annexin A3 antibody. Cells were treated with enzymatic antigen retrieval for 15 minutes before incubation with Annexin A3 antibody at 5 ug/ml. A Fluoro488-conjugated secondary antibody was used to detect Annexin A3 (green), and nuclei were counterstained with DAPI (blue). Annexin A3 staining is predominantly cytoplasmic with enrichment along the cell periphery, consistent with its role as a calcium-dependent phospholipid-binding protein involved in membrane trafficking and membrane dynamics. This Annexin A3 Antibody, also called Calcium Binding Protein Antibody, is suitable for studies of calcium-dependent phospholipid binding, membrane trafficking, vesicle dynamics, and cancer biology.



Annexin A3 Antibody Human, Rat and Mouse WB. Western blot analysis of Annexin A3 expression in human cell lines and rodent tissues using Annexin A3 antibody. Lane 1: A431; Lane 2: Caco-2; Lane 3: SiHa; Lane 4: HeLa; Lane 5: rat lung; Lane 6: rat kidney; Lane 7: mouse lung; Lane 8: mouse kidney. Proteins were resolved on a 10% SDS-PAGE gel, transferred to nitrocellulose, and the membrane was incubated with Annexin A3 antibody at 0.5 ug/ml followed by an HRP-conjugated secondary antibody. A specific band was detected at the expected molecular weight of approximately 36 kDa in all samples examined. This Annexin A3 Antibody, also called Calcium Binding Protein Antibody, is suitable for studies of calcium-dependent phospholipid binding, membrane trafficking, vesicle dynamics, and cancer biology.



Annexin A3 Antibody HeLa Cell FACS. Flow cytometric analysis of fixed and permeabilized HeLa cells using Annexin A3 antibody. Cells were incubated with Annexin A3 antibody at 1 ug/10^6 cells followed by a Fluoro488-conjugated secondary antibody. The blue histogram (Annexin A3 antibody) shows a clear rightward shift relative to the rabbit IgG isotype control (green) and the unstained control (red), demonstrating specific detection of endogenous Annexin A3 expression. This Annexin A3 Antibody, also called Calcium Binding Protein Antibody, is suitable for studies of calcium-dependent phospholipid binding, membrane trafficking, vesicle dynamics, and cancer biology.



Annexin A3 Antibody A431 Cell IP. Immunoprecipitation of Annexin A3 from A431 whole cell lysate using Annexin A3 antibody. Input: A431 whole cell lysate (30 ug). IP Control: rabbit IgG with A431 lysate. IP: 2 ug Annexin A3 antibody incubated with 500 ug A431 whole cell lysate. Immunoprecipitated proteins were analyzed by Western blot using the same Annexin A3 antibody at 0.5 ug/ml. A specific band corresponding to Annexin A3 was detected in the immunoprecipitated sample, demonstrating successful target enrichment, while the IgG heavy chain is visible at approximately 50 kDa. This Annexin A3 Antibody, also called Calcium Binding Protein Antibody, is suitable for studies of calcium-dependent phospholipid binding, membrane trafficking, vesicle dynamics, and cancer biology.

Description

Annexin A3 Antibody / Calcium Binding Protein Antibody recognizes Annexin A3, a member of the annexin family of calcium-dependent phospholipid-binding proteins encoded by the ANXA3 gene. Annexin A3 participates in membrane organization, vesicle trafficking, membrane repair, and signal transduction by reversibly associating with phospholipid membranes in response to intracellular calcium. Like other annexins, it contributes to dynamic membrane remodeling during normal cellular processes including secretion, endocytosis, exocytosis, and cytoskeletal organization. Because of its diverse cellular functions, Annexin A3 Antibody is widely used for investigations into membrane biology, calcium signaling, and protein trafficking.

Annexin A3 is expressed in numerous epithelial and immune cell populations and has been implicated in inflammatory responses, cellular differentiation, angiogenesis, and tissue remodeling. The protein influences intracellular signaling

pathways through interactions with membrane phospholipids and regulatory proteins, helping coordinate responses to environmental stress and changes in calcium concentration. Annexin A3 has also been reported to contribute to neutrophil function, vascular biology, and wound healing, making it an important target for studies of inflammation and innate immunity.

Altered Annexin A3 expression has been associated with multiple malignancies, including cancers of the breast, lung, liver, ovary, prostate, and colon. Increased expression has been linked to tumor progression, metastatic potential, angiogenesis, and resistance to chemotherapy in several tumor types, although these relationships may vary depending on tissue context. As interest grows in identifying biomarkers that predict therapeutic response and disease progression, Annexin A3 Antibody has become an increasingly valuable reagent for cancer biology, biomarker discovery, and translational research involving membrane-associated signaling pathways.

Annexin A3 is commonly detected by Western blotting, immunohistochemistry, immunofluorescence, immunoprecipitation, and flow cytometry to evaluate protein expression, localization, and regulation in normal and diseased tissues. An Annexin A3 Antibody is a valuable research tool for investigating calcium-dependent membrane interactions, phospholipid binding, vesicle trafficking, inflammatory signaling, angiogenesis, and cancer-associated biological processes.

Explore our Cancer Marker Antibodies page to discover additional antibodies for investigating tumor progression, metastasis, therapeutic resistance, angiogenesis, cell signaling, and cancer-associated molecular pathways.

Application Notes

Optimal dilution of the Annexin A3 Antibody / Calcium Binding Protein Antibody should be determined by the researcher.

Immunogen

Amino acids RKALLTLADGRRDESLKVDEHLAKQDAQILYK of human Annexin A3 were used as the immunogen for the Annexin A3 antibody.

Storage

After reconstitution, the Annexin A3 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Alternate Names

Annexin A3 antibody, ANXA3 antibody, Lipocortin III antibody, Calcium Binding Protein antibody

Copyright © NSJ Bioreagents. All rights reserved.