

# **ANXA2 Antibody / Annexin A2 (FY12921)**

Catalog No.	Formulation	Size
FY12921	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml	100 ug

## **Bulk quote request**

Availability	1-2 days
Species Reactivity	Human, Mouse, Rat
Format	Lyophilized
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Immunogen affinity purified
Buffer	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
UniProt	P07355
Applications	Western Blot : 0.25-0.5ug/ml Flow Cytometry : 1-3ug/million cells
Limitations	This ANXA2 antibody is available for research use only.

## **Description**

ANXA2 antibody detects Annexin A2, a calcium-dependent phospholipid-binding protein involved in membrane organization, cytoskeletal interactions, and fibrinolysis. Encoded by the ANXA2 gene on chromosome 15q26.1, this multifunctional protein participates in membrane trafficking, endocytosis, cell-cell adhesion, and extracellular matrix remodeling. Annexin A2 also acts as a cell surface receptor for tissue plasminogen activator (tPA) and plasminogen, facilitating localized fibrin degradation and vascular repair.

Structurally, Annexin A2 is a 339-amino-acid protein of approximately 39 kilodaltons containing four annexin repeats that mediate calcium-dependent phospholipid binding and a unique N-terminal domain that interacts with S100A10 (p11) to form a heterotetrameric complex. This complex localizes to the plasma membrane, cytoskeleton, and endosomal compartments, where it modulates vesicle fusion, cytoskeletal anchoring, and membrane curvature. Annexin A2 is expressed in endothelial, epithelial, and tumor cells, as well as macrophages and neurons.

The ANXA2 antibody is widely used in cell biology, vascular biology, and cancer research to study membrane organization, signal transduction, and fibrinolytic regulation. Western blot analysis detects a 39 kilodalton band corresponding to Annexin A2, while immunofluorescence shows cytoplasmic, membrane, and perinuclear localization. This antibody provides a powerful reagent for investigating calcium-dependent membrane remodeling and extracellular

proteolytic activity.

Functionally, Annexin A2 regulates actin cytoskeleton rearrangement and vesicle trafficking, influencing endocytosis, exocytosis, and cell motility. At the cell surface, it promotes plasmin generation, contributing to fibrin degradation, angiogenesis, and tumor invasion. Dysregulation of ANXA2 expression is associated with cancer progression, thrombosis, and inflammatory disease. The ANXA2 antibody supports detailed studies of its role in cellular dynamics, extracellular matrix remodeling, and vascular homeostasis. NSJ Bioreagents validates this antibody for western blotting, immunohistochemistry, and immunofluorescence, ensuring precise detection in studies of cytoskeletal and membrane biology.

## **Application Notes**

Optimal dilution of the ANXA2 antibody should be determined by the researcher.

## **Immunogen**

A synthetic peptide corresponding to a sequence at the N-terminus of human ANXA2 was used as the immunogen for the ANXA2 antibody.

## **Storage**

After reconstitution, the ANXA2 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.