

Annexin A9 (F-9): sc-374288

BACKGROUND

The annexin family of calcium-binding proteins contains several family members that are characterized by a conserved core domain, which binds phospholipids in a Ca^{2+} -dependent manner, and a unique amino-terminal region, which may confer binding specificity. Annexin family members have been implicated as regulators of diverse processes, such as ion flux, endocytosis, exocytosis and cellular adhesion. Annexin A9 (ANXA9), also known as Annexin-31 (ANX31) or Pemphaxin, is a 345 amino acid protein that contains four Annexin domains and may act as a low affinity receptor for acetylcholine. It is an atypical member of the annexin family because its intracellular activity is not subject to Ca^{2+} regulation as a result of sequence mutations. Annexin A9 is one of the target proteins that is recognized by autoantibodies in patients with pemphigus vulgaris, a rare autoimmune skin condition in which blisters occur in the epidermis due to loss of cell-cell adhesion.

REFERENCES

- Goebeler, V., et al. 2003. Atypical properties displayed by Annexin A9, a novel member of the annexin family of Ca^{2+} and lipid binding proteins. *FEBS Lett.* 546: 359-364.
- Chlystun, M., et al. 2004. Structural and functional characterisation of the mouse Annexin A9 promoter. *Biochim. Biophys. Acta* 1742: 141-149.
- Weise, A., et al. 2005. New insights into the evolution of chromosome 1. *Cytogenet. Genome Res.* 108: 217-222.
- Online Mendelian Inheritance in Man, OMIM™. 2005. Johns Hopkins University, Baltimore, MD. MIM Number: 603319. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

CHROMOSOMAL LOCATION

Genetic locus: ANXA9 (human) mapping to 1q21.3; Anxa9 (mouse) mapping to 3 F2.1.

SOURCE

Annexin A9 (F-9) is a mouse monoclonal antibody raised against amino acids 186-270 mapping within an internal region of Annexin A9 of human origin.

PRODUCT

Each vial contains 200 μg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Annexin A9 (F-9) is available conjugated to agarose (sc-374288 AC), 500 μg /0.25 ml agarose in 1 ml, for IP; to HRP (sc-374288 HRP), 200 μg /ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-374288 PE), fluorescein (sc-374288 FITC), Alexa Fluor® 488 (sc-374288 AF488), Alexa Fluor® 546 (sc-374288 AF546), Alexa Fluor® 594 (sc-374288 AF594) or Alexa Fluor® 647 (sc-374288 AF647), 200 μg /ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-374288 AF680) or Alexa Fluor® 790 (sc-374288 AF790), 200 μg /ml, for Near-Infrared (NIR) WB, IF and FCM.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

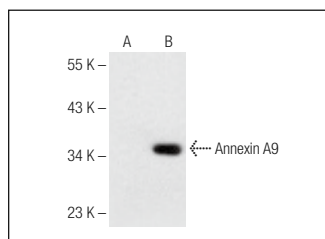
Annexin A9 (F-9) is recommended for detection of Annexin A9 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μg per 100-500 μg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Annexin A9 siRNA (h): sc-88790, Annexin A9 siRNA (m): sc-105071, Annexin A9 shRNA Plasmid (h): sc-88790-SH, Annexin A9 shRNA Plasmid (m): sc-105071-SH, Annexin A9 shRNA (h) Lentiviral Particles: sc-88790-V and Annexin A9 shRNA (m) Lentiviral Particles: sc-105071-V.

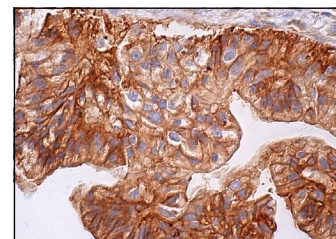
Molecular Weight of Annexin A9: 38 kDa.

Positive Controls: Annexin A9 (m): 293T Lysate: sc-118427 or BJ whole cell lysate: sc-364359.

DATA



Annexin A9 (F-9): sc-374288. Western blot analysis of Annexin A9 expression in non-transfected: sc-117752 (A) and mouse Annexin A9 transfected: sc-118427 (B) 293T whole cell lysates.



Annexin A9 (F-9): sc-374288. Immunoperoxidase staining of formalin fixed, paraffin-embedded human gall bladder tissue showing cytoplasmic and membrane staining of glandular cells.

SELECT PRODUCT CITATIONS

- Wang, Z., et al. 2023. miR-186-ANXA9 signaling inhibits tumorigenesis in breast cancer. *Front. Oncol.* 13: 1166666.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

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