

Annexin A9 (m): 293T Lysate: sc-118427

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/>
- Gregory, S.G., et al. 2006. The DNA sequence and biological annotation of human chromosome 1. *Nature* 441: 315-321.
- Marzin, Y., et al. 2006. Chromosome 1 abnormalities in multiple myeloma. *Anticancer Res.* 26: 953-959.
- Scaffidi, P., et al. 2006. Lamin A-dependent nuclear defects in human aging. *Science* 312: 1059-1063.

CHROMOSOMAL LOCATION

Genetic locus: Anxa9 (mouse) mapping to 3 F2.1.

PRODUCT

Annexin A9 (m): 293T Lysate represents a lysate of mouse Annexin A9 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

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

APPLICATIONS

Annexin A9 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive Annexin A9 antibodies. Recommended use: 10-20 µl per lane.

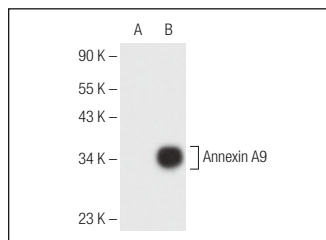
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Annexin A9 (G-4): sc-365940 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse Annexin A9 expression in Annexin A9 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

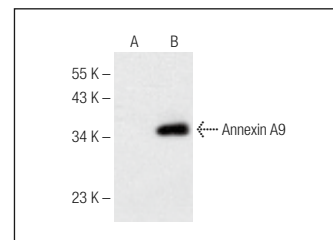
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



Annexin A9 (G-4): sc-365940. 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 (B-11): sc-373933. 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.

RESEARCH USE

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