

Annexin I (N-19): sc-1923

BACKGROUND

The Annexin family of calcium-binding proteins is composed of at least ten mammalian genes and is 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. The interaction between these proteins and biological membranes have led to the hypothesis that they are involved in cellular trafficking processes such as endocytosis, exocytosis and cellular adhesion. Annexin I, alternatively referred to as lipocortin, has been implicated as a mediator of the anti-inflammatory response produced by glucocorticoids and as an inhibitor of $cPLA_2$, a potent mediator of inflammation. Annexin II, also called p36, has been shown to exist as a monomer or a heterotetramer, complexed with the S-100-related protein p11. This complex is termed Calpactin I. In the tetrameric form, Annexin II is an efficient substrate of the PKC family and Src pp60.

CHROMOSOMAL LOCATION

Genetic locus: ANXA1 (human) mapping to 9q21.13; Anxa1 (mouse) mapping to 19 B.

SOURCE

Annexin I (N-19) is available as either goat (sc-1923) or rabbit (sc-1923-R) polyclonal affinity purified antibody raised against a peptide mapping at the N-terminus of Annexin I of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-1923 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Annexin I (N-19) is recommended for detection of Annexin I of human and, to a lesser extent, mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

Annexin I (N-19) is also recommended for detection of Annexin I in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Annexin I siRNA (h): sc-29198, Annexin I siRNA (m): sc-29682, Annexin I shRNA Plasmid (h): sc-29198-SH, Annexin I shRNA Plasmid (m): sc-29682-SH, Annexin I shRNA (h) Lentiviral Particles: sc-29198-V and Annexin I shRNA (m) Lentiviral Particles: sc-29682-V.

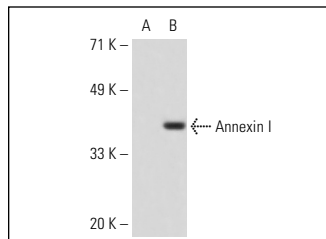
Molecular Weight of Annexin I: 35 kDa.

Positive Controls: Annexin I (h): 293T Lysate: sc-110462, A-431 whole cell lysate: sc-2201 or K-562 whole cell lysate: sc-2203.

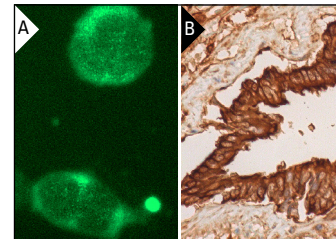
STORAGE

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

DATA



Annexin I (N-19): sc-1923. Western blot analysis of Annexin I expression in non-transfected: sc-117752 (A) and human Annexin I transfected: sc-110462 (B) 293T whole cell lysates.



Annexin I (N-19): sc-1923. Immunofluorescence staining of methanol-fixed A-431 cells showing cytoplasmic localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human bronchus tissue showing cytoplasmic, membrane and cilium staining of respiratory epithelial cells (B).

SELECT PRODUCT CITATIONS

- Xin, W., et al. 2003. Dysregulation of the Annexin family protein family is associated with prostate cancer progression. *Am. J. Pathol.* 162: 255-261.
- Ling, T.Y., et al. 2004. Identification and characterization of the acidic pH binding sites for growth regulatory ligands of low density lipoprotein receptor-related protein-1. *J. Biol. Chem.* 279: 38736-38748.
- Bensalem, N., et al. 2005. Down-regulation of the anti-inflammatory protein Annexin A1 in cystic fibrosis knock-out mice and patients. *Mol. Cell. Proteomics* 4: 1591-1601.
- Gotoh, M., et al. 2005. Annexins I and IV inhibit *Staphylococcus aureus* attachment to human macrophages. *Immunol. Lett.* 98: 297-302.
- Liu, J., et al. 2005. Glucocorticoid-induced surface expression of Annexin 1 blocks β_2 -integrin adhesion of human eosinophils to intercellular adhesion molecule 1 surrogate protein. *J. Allergy Clin. Immunol.* 115: 493-500.
- González-Reyes, S., et al. 2009. Role of annexin A2 in cellular entry of rabbit vesivirus. *J. Gen. Virol.* 90: 2724-2730.
- Mladinic, M., et al. 2010. Developmental changes of gene expression after spinal cord injury in neonatal opossums. *Brain Res.* 1363: 20-39.

RESEARCH USE

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

PROTOCOLS

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