SANTA CRUZ BIOTECHNOLOGY, INC.

Annexin VI (N-19): sc-1931

BACKGROUND

The Annexin family of calcium-binding proteins is composed of at least ten mammalian genes. It is characterized by a conserved core domain, which binds to phospholipids in a Ca^{2+}-dependent manner, and a unique amino terminal region, which may confer binding specificity. The Annexin family has been implicated as regulators of such diverse processes as ion-flux, endocytosis and exocytosis, and cellular adhesion. When overexpressed in A431 cells, Annexin VI causes a partial reversal of the transformed phenotype. It has been hypothesized that growth-dependent post-translational modifications of Annexins are required for proper subcellular localization. Annexin VII, also referred to as synexin, is located at the plasma membrane in normal muscle tissue. However, in muscle samples from patients suffering from Duchenne's muscular dystrophy, Annexin VII, along with Annexins IV and VI, are released into the cytoplasm and later, as the disease progresses, into the extracellular space. Two forms of Annexin XI, designated A and B, have been identified. Transfection of COS-7 cells with Annexin XI-A, but not Annexin XI-B, causes formation of Annexin XI-associated vesicles.

CHROMOSOMAL LOCATION

Genetic locus: ANXA6 (human) mapping to 5q33.1; Anxa6 (mouse) mapping to 11 B1.3.

SOURCE

Annexin VI (N-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of Annexin VI of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-1931 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Annexin VI (N-19) is recommended for detection of Annexin VI of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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 VI siRNA (h): sc-29688, Annexin VI siRNA (m): sc-29689, Annexin VI shRNA Plasmid (h): sc-29688-SH, Annexin VI shRNA Plasmid (m): sc-29689-SH, Annexin VI shRNA (h) Lentiviral Particles: sc-29688-V and Annexin VI shRNA (m) Lentiviral Particles: c-29689-V.

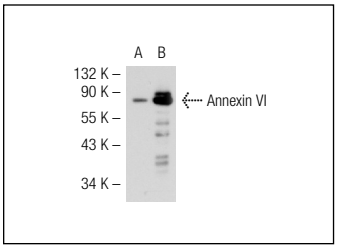
Molecular Weight of Annexin VI: 67 kDa.

Positive Controls: Annexin VI (h): 293 Lysate: sc-113205, JAR cell lysate: sc-2276 or MES-SA/Dx5 cell lysate: sc-2284.

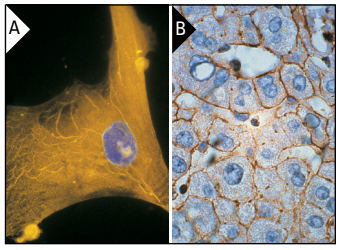
STORAGE

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

DATA



Annexin VI (N-19): sc-1931. Western blot analysis of Annexin VI expression in non-transfected: sc-110760 (**A**) and human Annexin VI transfected: sc-113205 (**B**) 293 whole cell lysates.



Annexin VI (N-19): sc-1931. Immunofluorescence staining of a methanol-fixed WI-38 cell. Note cytoplasmic and cytoskeletal rhodamine immunostaining and nuclear DAPI counterstain (**A**). Immunoperoxidase staining of formalin-fixed, paraffin-embedded normal human liver showing distinct membrane staining of hepatocytes (**B**).

SELECT PRODUCT CITATIONS

1. Cuervo, A.M., et al. 2000. Selective degradation of Annexins by chaperone-mediated autophagy. J. Biol. Chem. 275: 33329-33335.
2. Riquelme, G., et al. 2004. Annexin VI modulates the maxi-chloride channel of the apical membrane of syncytiotrophoblast isolated from human placenta. J. Biol. Chem. 279: 50601-50608.
3. Bode, G., et al. 2008. Interaction between S100A8/A9 and Annexin A6 is involved in the calcium-induced cell surface exposition of S100A8/A9. J. Biol. Chem. 283: 31776-31784.
4 Schordan, S., et al. 2009. Alterations of the podocyte proteome in response to high glucose concentrations. Proteomics 9: 4519-4528.
5. Yamatani, H., et al. 2010. Proteomics analysis of the temporal changes in axonal proteins during maturation. Dev. Neurobiol. 70: 523-537.
6. Lomnytska, M.I., et al. 2010. Diagnostic protein marker patterns in squamous cervical cancer. Proteomics Clin. Appl. 4: 17-31.
7. Trépos-Pouplard, M., et al. 2010. Proteome analysis and genome-wide regulatory motif prediction identify novel potentially sex-hormone regulated proteins in rat efferent ducts. Int. J. Androl. 33: 661-674.

RESEARCH USE

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

MONOS Satisfaction Guaranteed

Try **Annexin VI (E-5): sc-271859** or **Annexin VI (G-10): sc-166807**, our highly recommended monoclonal alternatives to Annexin VI (N-19).