SANTA CRUZ BIOTECHNOLOGY, INC.

Annexin XI (H-6): sc-271486

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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. 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.

REFERENCES

1. Smith, P.D. and Moss, S.E. 1994. Structural evolution of the Annexin supergene family. Trends Genet. 10: 241-246.
2. Waisman, D.M. 1995. Annexin II tetramer: structure and function. Mol. Cell. Biochem. 149: 301-322.
3. Mailliard, W.S., Haigler, H.T. and Schlaepfer, D.D. 1996. Calcium-dependent binding of S100C to the N-terminal domain of Annexin I. J. Biol. Chem. 271: 719-725.
4. Chasserot-Golaz, S., Vitale, N., Sagot, I., Delouche, B., Dirrig, S., Pradel, L.A., Henry, J.P., Aunis, D. adn Bader, M.F. 1996. Annexin II in exocytosis: catecholamine secretion requires the translocation of p36 to the subplasmalemmal region in chromaffin cells. J. Cell Biol. 133: 1217-1236.
5. Sudo, T., Mamiya, N., Goto, M., Watanabe, Y. and Hidaka, H. 1996. Isoform-specific intracellular vesicle formation by recombinant Annexin XI-A in Sf9 cells. Biochem. Biophys. Res. Commun. 223: 706-711.
6. Williams, L.H., McClive, P.J., Van Den Bergen, J.A. and Sinclair, A.H. 2005. Annexin XI co-localises with Calcyclin in proliferating cells of the embryonic mouse testis. Dev. Dyn. 234: 432-437.

CHROMOSOMAL LOCATION

Genetic locus: ANXA11 (human) mapping to 10q22.3; Anxa11 (mouse) mapping to 14 A3.

SOURCE

Annexin XI (H-6) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 61-77 at the N-terminus of Annexin XI of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-271486 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

STORAGE

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

APPLICATIONS

Annexin XI (H-6) is recommended for detection of Annexin XI 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 XI siRNA (h): sc-29694, Annexin XI siRNA (m): sc-29695, Annexin XI shRNA Plasmid (h): sc-29694-SH, Annexin XI shRNA Plasmid (m): sc-29695-SH, Annexin XI shRNA (h) Lentiviral Particles: sc-29694-V and Annexin XI shRNA (m) Lentiviral Particles: sc-29695-V.

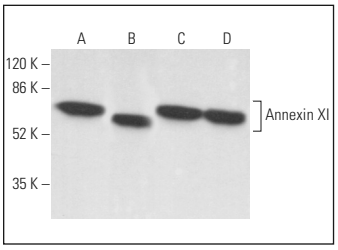
Molecular Weight of Annexin XI: 50-56 kDa.

Positive Controls: Hep G2 nuclear extract: sc-364819, NIH/3T3 nuclear extract: sc-2138 or 3T3-L1 cell lysate: sc-2243.

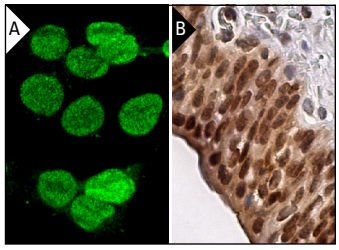
RECOMMENDED SUPPORT REAGENTS

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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



Annexin XI (H-6): sc-271486. Western blot analysis of Annexin XI expression in NIH/3T3 (**A**) and Hep G2 (**B**) nuclear extracts and 3T3-L1 (**C**) and C3H/10T1/2 (**D**) whole cell lysates.



Annexin XI (H-6): sc-271486. Immunofluorescence staining of formalin-fixed Hep G2 cells showing nuclear localization (**A**). Immunoperoxidase staining of formalin fixed, paraffin-embedded human urinary bladder tissue showing nuclear and cytoplasmic staining of urothelial cells (**B**).

RESEARCH USE

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

PROTOCOLS

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