SANTA CRUZ BIOTECHNOLOGY, INC.

Annexin I (H-65): sc-11387

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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 (H-65) is a rabbit polyclonal antibody raised against amino acids 235-299 of Annexin I 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.

APPLICATIONS

Annexin I (H-65) is recommended for detection of Annexin I 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Annexin I (H-65) is also recommended for detection of Annexin I in additional species, including canine, bovine, porcine and avian.

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 (m): 293T Lysate: sc-118428, K-562 whole cell lysate: sc-2203 or Caki-1 cell lysate: sc-2224.

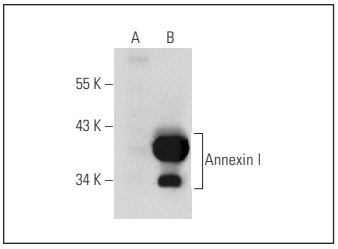
STORAGE

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

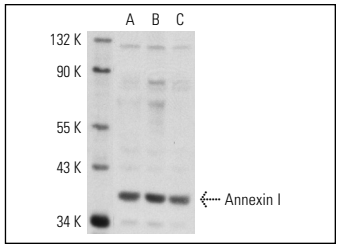
RESEARCH USE

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

DATA



Annexin I (H-65): sc-11387. Western blot analysis of Annexin I expression in non-transfected: sc-117752 (**A**) and mouse Annexin I transfected: sc-118428 (**B**) 293T whole cell lysates.



Annexin I (H-65): sc-11387. Western blot analysis of Annexin I expression in A-431 (**A**), K-562 (**B**) and Caki-1 (**C**) whole cell lysates.

SELECT PRODUCT CITATIONS

1. 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.
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3. Rondepierre, F., et al. 2009. Proteomic studies of B16 lines: involvement of annexin A1 in melanoma dissemination. Biochim. Biophys. Acta 1794: 61-69.
4. Cauwe, B., et al. 2009. Multidimensional degradomics identifies systemic autoantigens and intracellular matrix proteins as novel gelatinase B/MMP-9 substrates. Integr. Biol. 1: 404-426.
5. Ma, C., et al. 2009. Proteomic analysis of possible target-related proteins of cyclophosphamide in mice thymus. Food Chem. Toxicol. 47: 1841-1847.
6. Roth, U., et al. 2010. Differential expression proteomics of human colorectal cancer based on a syngeneic cellular model for the progression of adenoma to carcinoma. Proteomics 10: 194-202.
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8. Ammirante, M., et al. 2010. IKKγ protein is a target of BAG3 regulatory activity in human tumor growth. Proc. Natl. Acad. Sci. USA. 107: 7497-7502.
9. Pei, L., et al. 2011. Annexin 1 exerts anti-nociceptive effects after peripheral inflammatory pain through formyl-peptide-receptor-like 1 in rat dorsal root ganglion. Br. J. Anaesth. 107: 948-958.
10. Taga, H., et al. 2011. Cellular and molecular large-scale features of fetal adipose tissue: is bovine perirenal adipose tissue brown? J. Cell. Physiol. 227: 1688-1700.