

Annexin II (m): 293T Lysate: sc-118430

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 has 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, exists as a monomer or as 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 PKC family and Src pp60.

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.* 149-150: 301-332.
3. McLeod, J.D. and Bolton, C. 1995. Dexamethasone induces an increase in intracellular and membrane-associated lipocortin 1 (Annexin I) in rat astrocyte primary cultures. *Cell. Mol. Neurobiol.* 15: 193-205.
4. Hubaishy, I., et al. 1995. Modulation of Annexin II tetramer by tyrosine phosphorylation. *Biochemistry* 34: 14527-14534.
5. Mailliard, W.S., et al. 1996. Calcium-dependent binding of S-100C to the N-terminal domain of Annexin I. *J. Biol. Chem.* 271: 719-725.
6. Croxal, J.D., et al. 1996. The concerted regulation of cPLA_2 , COX2, and lipocortin 1 expression by IL-1 β in A-549 cells. *Biochem. Biophys. Res. Commun.* 220: 491-495.
7. Chasserot-Golaz, S., et al. 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.
8. Puisieux, A., et al. 1996. Annexin II upregulates cellular levels of p11 protein by a posttranslational mechanisms. *Biochem. J.* 313: 51-55.

CHROMOSOMAL LOCATION

Genetic locus: Anxa2 (mouse) mapping to 9 C.

PRODUCT

Annexin II (m): 293T Lysate represents a lysate of mouse Annexin II 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.

APPLICATIONS

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

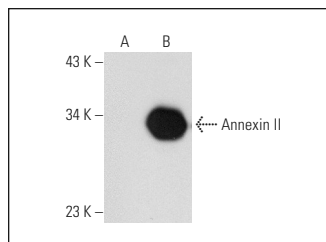
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Annexin II (E-11): sc-166762 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse Annexin II expression in Annexin II transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

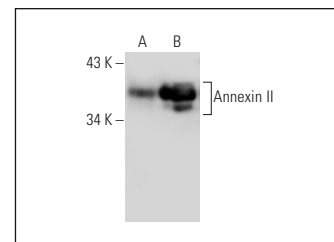
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ 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 II (E-11): sc-166762. Western blot analysis of Annexin II expression in non-transfected: sc-117752 (A) and mouse Annexin II transfected: sc-118430 (B) 293T whole cell lysates.



Annexin II (C-10): sc-28385. Western blot analysis of Annexin II expression in non-transfected: sc-117752 (A) and mouse Annexin II transfected: sc-118430 (B) 293T whole cell lysates.

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.