Annexin II (h): 293 Lysate: sc-111344



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 Ca²+-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 cPLA2, 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.
- Waisman, D.M. 1995. Annexin II tetramer: structure and function. Mol. Cell. Biochem. 149-150: 301-332.
- 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.
- Hubaishy, I., Jones, P.G., Bjorge, J., Bellagamba, C., Fitzpatrick, S., Fujita, D.J. and Waisman, D.M. 1995. Modulation of Annexin II tetramer by tyrosine phosphorylation. Biochemistry 34: 14527-14534.
- Mailliard, W.S., Haigler, H.T. and Schlaepfer, D.D. 1996. Calcium-dependent binding of S-100C to the N-terminal domain of Annexin I. J. Biol. Chem. 271: 719-725.
- 6. Croxtal, J.D., Newman, S.P., Choudhury, Q. and Flower, R.J. 1996. The concerted regulation of cPLA $_2$, COX2, and lipocortin 1 expression by IL-1 β in A549 cells. Biochem. Biophys. Res. Commun. 220: 491-495.
- Chasserot-Golaz, S., Vitale, N., Sagot, I., Delouche, B., Dirrig, S., Pradel, L.A., Henry, J.P., Aunis, D. and 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.
- 8. Puisieux, A., Ji, J. and Ozturk, M. 1996. Annexin II upregulates cellular levels of p11 protein by a post-translational mechanisms. Biochem. J. 313: 51-55.

CHROMOSOMAL LOCATION

Genetic locus: ANXA2 (human) mapping to 15q22.2.

PRODUCT

Annexin II (h): 293 Lysate represents a lysate of human Annexin II transfected 293 cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20 $^{\circ}$ 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 (h): 293 Lysate is suitable as a Western Blotting positive control for human reactive Annexin II antibodies.Recommended use: 10-20 μ l per lane

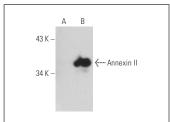
Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-transfected 293 cells.

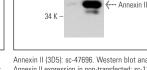
Annexin II (D1/274.5): sc-65873 is recommended as a positive control antibody for Western Blot analysis of enhanced human Annexin II expression in Annexin II transfected 293 cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG κ BP-HRP: sc-516102 or m-lgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz MarkerTM Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA





55 K

Annexin II (D1/274.5): sc-65873. Western blot analysis of Annexin II expression in non-transfected: sc-110760 (A) and human Annexin II transfected: sc-111344 (B) 293 whole cell lysates.

Annexin II (3D5): sc-47696. Western blot analysis of Annexin II expression in non-transfected: sc-110760 (A) and human Annexin II transfected: sc-111344 (B) 293

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.

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