Annexin I (235-299): sc-4485 WB



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++-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, has been shown to exist as a 36 kDa monomer or as 90 kDa heterotetramer, complexed with the S-100-related protein p11. This 90 kDa complex is termed calpactin I. In the tetrameric form, Annexin II is an efficient substrate of PKC family and Src pp60.

REFERENCES

- Smith, P.D. and Moss, S.E. 1994. Structural evolution of the annexin supergene family. Trends Gen. 10: 241-246.
- Waisman, D.M. 1995. Annexin II tetramer: structure and function. Mol. Cell. Biochem. 149-150: 301-322.
- 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.
- McLeod, J.D. and Bolton, C. 1995. Dexamethasone induces an increase in intracellular and membrane-associated lipocortin-1 (annexin-1) in rat astrocyte primary cultures. Cell. Mol. Neuro. 15: 193-205.
- 5. 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. Comm. 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.
- 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.
- 8. Puisieux, A., Ji, J., and Ozturk, M. 1996. Annexin II up-regulates cellular levels of p11 protein by a post- translational mechanisms. Biochem. J. 313: 51-55.

SOURCE

Annexin I (235-299) is expressed in *E. coli* as a 34 kDa tagged fusion protein corresponding to amino acids 235-299 of Annexin I of human origin.

PRODUCT

Annexin I (235-299) is purified from bacterial lysates (>98%) by column chromatography; supplied as 10 μg protein in 0.1 ml SDS-PAGE loading buffer.

APPLICATIONS

Annexin I (235-299) is suitable as a Western blotting control for sc-11387.

STORAGE

Store at -20° C; stable for one year from the date of shipment.

RESEARCH USE

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

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