

Annexin II (H-50): sc-9061

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 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.

CHROMOSOMAL LOCATION

Genetic locus: ANXA2 (human) mapping to 15q22.2; Anxa2 (mouse) mapping to 9 C.

SOURCE

Annexin II (H-50) is a rabbit polyclonal antibody raised against amino acids 1-50 mapping epitope corresponding to amino acids 1-50 of Annexin II 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 II (H-50) is recommended for detection of Annexin II 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), 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).

Annexin II (H-50) is also recommended for detection of Annexin II in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Annexin II siRNA (h2): sc-270151, Annexin II siRNA (m): sc-29683, Annexin II shRNA Plasmid (h2): sc-270151-SH, Annexin II shRNA Plasmid (m): sc-29683-SH, Annexin II shRNA (h2) Lentiviral Particles: sc-270151-V and Annexin II shRNA (m) Lentiviral Particles: sc-29683-V.

Molecular Weight of Annexin II monomer: 36 kDa.

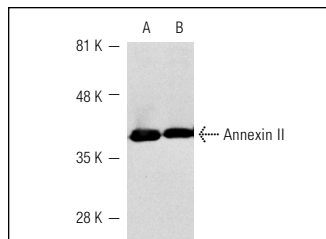
Molecular Weight of Annexin II heterotetramer: 90 kDa.

Positive Controls: MDCK cell lysate: sc-2252, NIH/3T3 whole cell lysate: sc-2210 or K-562 whole cell lysate: sc-2203.

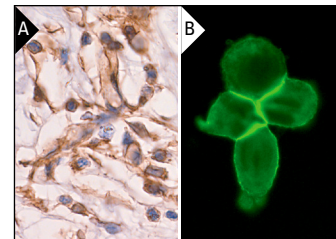
STORAGE

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

DATA



Annexin II (H-50): sc-9061. Western blot analysis of Annexin II expression in MDCK (A) and NIH/3T3 (B) whole cell lysates.



Annexin II (H-50): sc-9061. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human skin (A) and immunofluorescence staining of methanol-fixed NIH/3T3 cells (B) showing membrane localization.

SELECT PRODUCT CITATIONS

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- Zhai, J., et al. 2009. Proteomic characterization of lipid raft proteins in amyotrophic lateral sclerosis mouse spinal cord. *FEBS J.* 276: 3308-3323.
- Backes, P., et al. 2010. Role of annexin A2 in the production of infectious hepatitis C virus particles. *J. Virol.* 84: 5775-5789.
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- Gong, X.G., et al. 2010. Gemcitabine resistance induced by interaction between alternatively spliced segment of tenascin-C and annexin A2 in pancreatic cancer cells. *Biol. Pharm. Bull.* 33: 1261-1267.
- Yakovlev, V.A., et al. 2010. Proteomic analysis of radiation-induced changes in rat lung: Modulation by the superoxide dismutase mimetic MnTE-2-PyP⁵⁺. *Int. J. Radiat. Oncol. Biol. Phys.* 78: 547-554.
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- Mádi, A., et al. 2011. Altered sialylation on the cell-surface proteins of dexamethasone-treated human macrophages contributes to augmented uptake of apoptotic neutrophils. *Immunol. Lett.* 135: 88-95.

RESEARCH USE

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