SANTA CRUZ BIOTECHNOLOGY, INC.

Annexin A13 (C-12): sc-47791

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The annexins constitute a family of structurally-related, relatively abundant proteins that exhibit Ca^{2+}-dependent binding to phospholipids. Annexins function in multiple aspects of cell biology including regulation of membrane trafficking, transmembrane channel activity, inhibition of phospholipase A_2, inhibition of coagulation and mediation of cell-matrix interactions. Annexin A13 is considered the original progenitor of the 12 members of vertebrate annexins. The expression of Annexin A13 is highly tissue-specific, being expressed only in intestinal and kidney epithelial cells. This expression is associated with a highly differentiated intracellular transport function. Two alternative splicing isoforms of Annexin A13 exist, both of which bind to rafts.

REFERENCES

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2. 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.
3. Waisman, D.M. 1996. Annexin II tetramer: structure and function. Mol. Cell. Biochem. 149-150: 301-322.
4. Iglesias, J.M., Morgan, R.O., Jenkins, N.A., Copeland, N.G., Gilbert, D.J. and Fernandez, M.P. 2002. Comparative genetics and evolution of Annexin A13 as the founder gene of vertebrate annexins. Mol. Biol. Evol. 19: 608-618.
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CHROMOSOMAL LOCATION

Genetic locus: ANXA13 (human) mapping to 8q24.13; Anxa13 (mouse) mapping to 15 D1.

SOURCE

Annexin A13 (C-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Annexin A13 of mouse origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-47791 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

Annexin A13 (C-12) is recommended for detection of Annexin A13 of mouse 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 A13 (C-12) is also recommended for detection of Annexin A13 in additional species, including equine.

Suitable for use as control antibody for Annexin A13 siRNA (h): sc-60172 and Annexin A13 siRNA (m): sc-60173.

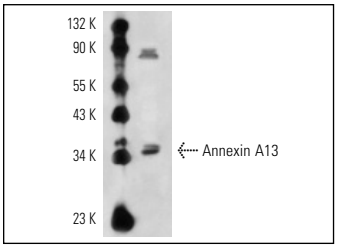
Molecular Weight of Annexin A13: 36-40 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204.

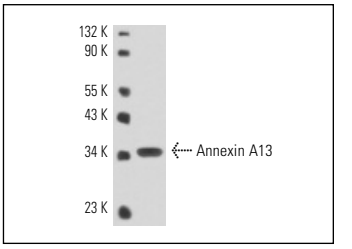
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



Annexin A13 (C-12): sc-47791. Western blot analysis of Annexin A13 expression in Jurkat whole cell lysate.



Annexin A13 (C-12): sc-47791. Western blot analysis of Annexin A13 expression in KNRK whole cell lysate.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.