

Annexin A13 (N-19): sc-47795

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 A2, 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

1. Smith, P.D. and Moss, S.E. 1994. Structural evolution of the Annexin supergene family. *Trends Genet.* 10: 241-246.
2. Mailliar, W.S., et al. 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., et al. 2002. Comparative genetics and evolution of Annexin A13 as the founder gene of vertebrate Annexins. *Mol. Biol. Evol.* 19: 608-618.
5. Morgan, R.O., et al. 2004. Evolutionary perspective on Annexin calcium-binding domains. *Biochim. Biophys. Acta* 1742: 133-140.
6. Turnay, J., et al. 2005. Structure-function relationship in Annexin A13, the founder member of the vertebrate family of Annexins. *Biochem. J.* 389: 899-911.

CHROMOSOMAL LOCATION

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

SOURCE

Annexin A13 (N-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of Annexin A13 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.

Blocking peptide available for competition studies, sc-47795 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.

RESEARCH USE

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

APPLICATIONS

Annexin A13 (N-19) is recommended for detection of Annexin A13 isoform A of human and, to a lesser extent, mouse origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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); may cross-react with a broad range of Annexins.

Suitable for use as control antibody for Annexin A13 siRNA (h): sc-60172, Annexin A13 siRNA (m): sc-60173, Annexin A13 shRNA Plasmid (h): sc-60172-SH, Annexin A13 shRNA Plasmid (m): sc-60173-SH, Annexin A13 shRNA (h) Lentiviral Particles: sc-60172-V and Annexin A13 shRNA (m) Lentiviral Particles: sc-60173-V.

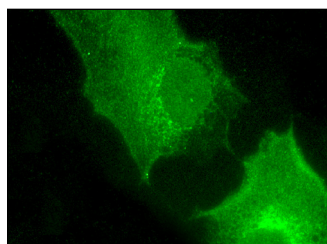
Molecular Weight of Annexin A13: 36-40 kDa.

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

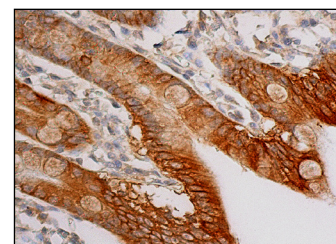
RECOMMENDED SECONDARY REAGENTS

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) 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. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



Annexin A13 (N-19): sc-47795. Immunofluorescence staining of formalin-fixed Hep G2 cells showing cytoplasmic and membrane localization.



Annexin A13 (N-19): sc-47795. Immunoperoxidase staining of formalin fixed, paraffin-embedded human duodenum tissue showing membrane and cytoplasmic staining of glandular cells.

PROTOCOLS

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