SANTA CRUZ BIOTECHNOLOGY, INC.

Annexin III (T-18): sc-101885



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. Annexin family members have been implicated as regulators of such diverse processes as ion flux, endocytosis, exocytosis and cellular adhesion. Annexin III, also known as ANXA3, Annexin A3, Lipocortin III, PAP-III (placental anticoagulant protein III), 35- α calcimedin or ANX3, belongs to the Annexin family and contains four Annexin repeats. Annexin III exhibits a variety of functions, including anti-coagulent properties, an inhibitory role towards phospholipase A2 (PLA2) and an enzymatic function, cleaving the cyclic bond of inositol 1,2-cyclic phosphate to produce inositol 1-phosphate.

REFERENCES

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- 2. Tait, J.F., et al. 1993. Structure and polymorphisms of the human Annexin III (ANX3) gene. Genomics 18: 79-86.
- Bödeker, H., et al. 1999. PAP I interacts with itself, PAP II, PAP III, and lithostathine/reglα. Mol. Cell Biol. Res. Commun. 2: 150-154.
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- 5. Park, J.E., et al. 2005. Annexin A3 is a potential angiogenic mediator. Biochem. Biophys. Res. Commun. 337: 1283-1287.
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- 7. Köllermann, J., et al. 2008. Expression and prognostic relevance of Annexin A3 in prostate cancer. Eur. Urol. E-published.
- 8. Kessler, C.H., et al. 2008. Annexin A3 expression after stroke in the aged rat brain. Rom. J. Morphol. Embryol. 49: 27-35.

CHROMOSOMAL LOCATION

Genetic locus: ANXA3 (human) mapping to 4q21.21.

SOURCE

Annexin III (T-18) is a purified rabbit polyclonal antibody raised against Annexin III of human origin.

PRODUCT

Each vial contains 100 μg IgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

STORAGE

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

APPLICATIONS

Annexin III (T-18) is recommended for detection of Annexin III of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

Suitable for use as control antibody for Annexin III siRNA (h): sc-89288, Annexin III shRNA Plasmid (h): sc-89288-SH and Annexin III shRNA (h) Lentiviral Particles: sc-89288-V.

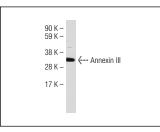
Molecular Weight of Annexin III: 36 kDa.

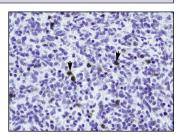
Positive Controls: human placenta extract: sc-363772.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941. 4) Immuno-histochemistry: use ImmunoCruz[™]: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA





Annexin III (T-18): sc-101885. Western blot analysis of Annexin III expression in placenta tissue extract. Annexin III (T-18): sc-101885. Immunoperoxidase staining of formalin fixed, paraffin-embedded human spleen tissue showing nuclear and cytoplasmic staining.

RESEARCH USE

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

MONOS Satisfation Guaranteed

Try Annexin III (G-1): sc-390700 or Annexin III (E-11): sc-390502, our highly recommended monoclonal alternatives to Annexin III (T-18).