

Annexin VI (G-10): sc-166807

BACKGROUND

The Annexin family of calcium-binding proteins is composed of at least ten mammalian genes. It is characterized by a conserved core domain, which binds to phospholipids in a Ca^{2+} -dependent manner, and a unique amino terminal region, which may confer binding specificity. The Annexin family has been implicated as regulators of such diverse processes as ion-flux, endocytosis and exocytosis, and cellular adhesion. When overexpressed in A-431 cells, Annexin VI causes a partial reversal of the transformed phenotype. It has been hypothesized that growth-dependent posttranslational modifications of Annexin are required for proper subcellular localization. Annexin VII, also referred to as synexin, is located at the plasma membrane in normal muscle tissue. However, in muscle samples from patients suffering from Duchenne's muscular dystrophy, Annexin VII, along with Annexins IV and VI, is released into the cytoplasm and later, as the disease progresses, into the extracellular space. Two forms of Annexin XI, designated A and B, have been identified. Transfection of COS-7 cells with Annexin XI-A, but not Annexin XI-B, causes formation of Annexin XI-associated vesicles.

CHROMOSOMAL LOCATION

Genetic locus: ANXA6 (human) mapping to 5q33.1; Anxa6 (mouse) mapping to 11 B1.3.

SOURCE

Annexin VI (G-10) is a mouse monoclonal antibody raised against amino acids 497-610 of Annexin VI of human origin.

PRODUCT

Each vial contains 200 μg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

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

APPLICATIONS

Annexin VI (G-10) is recommended for detection of Annexin VI of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for Annexin VI siRNA (h): sc-29688, Annexin VI siRNA (m): sc-29689, Annexin VI shRNA Plasmid (h): sc-29688-SH, Annexin VI shRNA Plasmid (m): sc-29689-SH, Annexin VI shRNA (h) Lentiviral Particles: sc-29688-V and Annexin VI shRNA (m) Lentiviral Particles: sc-29689-V.

Molecular Weight of Annexin VI: 68 kDa.

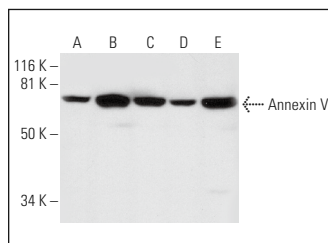
Positive Controls: HeLa whole cell lysate: sc-2200, JAR cell lysate: sc-2276 or MES-SA/Dx5 cell lysate: sc-2284.

RECOMMENDED SUPPORT REAGENTS

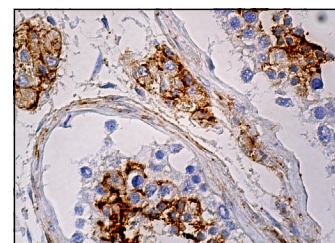
To ensure optimal results, the following support reagents are recommended:

- 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.
- 4) Immunohistochemistry: use m-IgG κ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



Annexin VI (G-10): sc-166807. Western blot analysis of Annexin VI expression in HeLa (A), L8 (B), JAR (C), JEG-3 (D) and MES-SA/Dx5 (E) whole cell lysates.



Annexin VI (G-10): sc-166807. Immunoperoxidase staining of formalin fixed, paraffin-embedded human testis tissue showing cytoplasmic and membrane staining of cells in seminiferous ducts and Leydig cells.

SELECT PRODUCT CITATIONS

1. Clement, C.C., et al. 2013. Protein expression profiles of human lymph and plasma mapped by 2D-DIGE and 1D SDS-PAGE coupled with nanoLC-ESI-MS/MS bottom-up proteomics. *J. Proteomics* 78: 172-187.
2. Dhaenens, L., et al. 2019. Endometrial stromal cell proteome mapping in repeated implantation failure and recurrent pregnancy loss cases and fertile women. *Reprod. Biomed. Online* 38: 442-454.
3. Sheng, Z., et al. 2023. SUMOylation of AnxA6 facilitates EGFR-PKC α complex formation to suppress epithelial cancer growth. *Cell Commun. Signal.* 21: 189.
4. Yang, Y., et al. 2024. SUMOylation of annexin A6 retards cell migration and tumor growth by suppressing RHOU/AKT1-involved EMT in hepatocellular carcinoma. *Cell Commun. Signal.* 22: 206.

RESEARCH USE

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

PROTOCOLS

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