

Annexin VII (5): sc-135832

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 annexins are required for proper sub-cellular 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.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: ANXA7 (human) mapping to 10q22.2.

SOURCE

Annexin VII (5) is a mouse monoclonal antibody raised against amino acids 34-159 of Annexin VII of human origin.

PRODUCT

Each vial contains 50 μ g IgG₁ in 0.5 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Annexin VII (5) is recommended for detection of Annexin VII 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)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

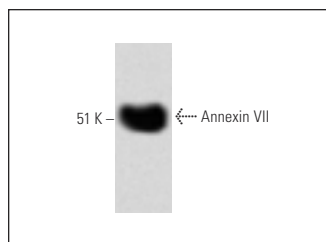
Suitable for use as control antibody for Annexin VII siRNA (h): sc-29690, Annexin VII shRNA Plasmid (h): sc-29690-SH and Annexin VII shRNA (h) Lentiviral Particles: sc-29690-V.

Molecular Weight of Annexin VII muscle atypic isoform: 47 kDa.

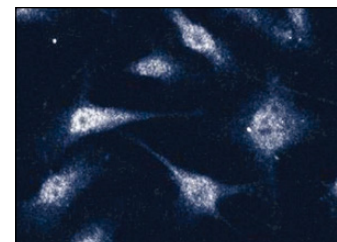
Molecular Weight of Annexin VII normal skeletal muscle isoform: 51 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, A549 cell lysate: sc-2413 or WI-38 whole cell lysate: sc-364260.

DATA



Annexin VII (5): sc-135832. Western blot analysis of Annexin VII expression in human endothelial whole cell lysate.



Annexin VII (5): sc-135832. Immunofluorescence staining of human endothelial cells showing nuclear and cytoplasmic localization.

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. Not for resale.

PROTOCOLS

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