Annexin A9 (P-20): sc-104051



The Power to Question

BACKGROUND

The Annexin family of calcium-binding proteins contains several family members that are 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 diverse processes, such as ion flux, endocytosis, exocytosis and cellular adhesion. Annexin A9 (ANXA9), also known as Annexin-31 (ANX31) or Pemphaxin, is a 345 amino acid protein that contains 4 annexin domains and may act as a low affinity receptor for acetylcholine. It is an atypical member of the annexin family because its intracellular activity is not subject to Ca²⁺ regulation as a result of sequence mutations. Annexin A9 is one of the target proteins that is recognized by autoantibodies in patients with pemphigus vulgaris, a rare autoimmune skin condition in which blisters occur in the epidermis due to loss of cell-cell adhesion.

REFERENCES

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- Chlystun, M., et al. 2004. Structural and functional characterisation of the mouse Annexin A9 promoter. Biochim. Biophys. Acta 1742: 141-149.
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CHROMOSOMAL LOCATION

Genetic locus: ANXA9 (human) mapping to 1q21.3; Anxa9 (mouse) mapping to 3 F2.1.

SOURCE

Annexin A9 (P-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Annexin A9 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-104051 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Annexin A9 (P-20) is recommended for detection of Annexin A9 of mouse, rat and 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other Annexin family members.

Suitable for use as control antibody for Annexin A9 siRNA (h): sc-88790, Annexin A9 siRNA (m): sc-105071, Annexin A9 shRNA Plasmid (h): sc-88790-SH, Annexin A9 shRNA Plasmid (m): sc-105071-SH, Annexin A9 shRNA (h) Lentiviral Particles: sc-88790-V and Annexin A9 shRNA (m) Lentiviral Particles: sc-105071-V.

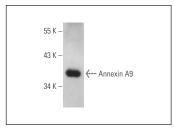
Molecular Weight of Annexin A9: 38 kDa.

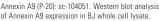
Positive Controls: BJ whole cell lysate: sc-364359.

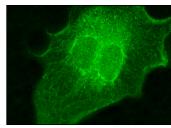
RECOMMENDED SECONDARY REAGENTS

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 A9 (P-20): sc-104051. Immunofluorescence staining of formalin-fixed Hep G2 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.

PROTOCOLS

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