

Annexin A10 (E-11): sc-398736

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 Ca^{2+} -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 A10, also known as ANX14 or ANXA10, is a 324 amino acid protein that contains four Annexin domains and may be involved in the regulation of cellular growth and signal transduction pathways throughout the cell. The gene encoding Annexin A10 maps to human chromosome 4, which encodes nearly 6% of the human genome and has the largest gene deserts (regions of the genome with no protein encoding genes) of all of the human chromosomes.

REFERENCES

1. Smith, P.D. and Moss, S.E. 1994. Structural evolution of the Annexin supergene family. *Trends Genet.* 10: 241-246.
2. Morgan, R.O. and Fernández, M.P. 1997. Annexin gene structures and molecular evolutionary genetics. *Cell. Mol. Life Sci.* 53: 508-515.
3. Morgan, R.O., et al. 1999. Novel human and mouse Annexin A10 are linked to the genome duplications during early chordate evolution. *Genomics* 60: 40-49.

CHROMOSOMAL LOCATION

Genetic locus: ANXA10 (human) mapping to 4q32.3; Anxa10 (mouse) mapping to 8 B3.1.

SOURCE

Annexin A10 (E-11) is a mouse monoclonal antibody raised against amino acids 147-204 mapping within an internal region of Annexin A10 of human origin.

PRODUCT

Each vial contains 200 μg IgG κ light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Annexin A10 (E-11) is available conjugated to agarose (sc-398736 AC), 500 μg /0.25 ml agarose in 1 ml, for IP; to HRP (sc-398736 HRP), 200 μg /ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-398736 PE), fluorescein (sc-398736 FITC), Alexa Fluor® 488 (sc-398736 AF488), Alexa Fluor® 546 (sc-398736 AF546), Alexa Fluor® 594 (sc-398736 AF594) or Alexa Fluor® 647 (sc-398736 AF647), 200 μg /ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-398736 AF680) or Alexa Fluor® 790 (sc-398736 AF790), 200 μg /ml, for Near-Infrared (NIR) WB, IF and FCM.

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STORAGE

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

APPLICATIONS

Annexin A10 (E-11) is recommended for detection of Annexin A10 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Annexin A10 siRNA (h): sc-72503, Annexin A10 siRNA (m): sc-72504, Annexin A10 shRNA Plasmid (h): sc-72503-SH, Annexin A10 shRNA Plasmid (m): sc-72504-SH, Annexin A10 shRNA (h) Lentiviral Particles: sc-72503-V and Annexin A10 shRNA (m) Lentiviral Particles: sc-72504-V.

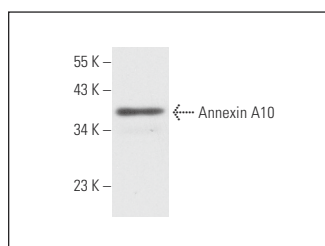
Molecular Weight of Annexin A10: 37 kDa.

Positive Controls: RT-4 whole cell lysate: sc-364257 or T24 cell lysate: sc-2292.

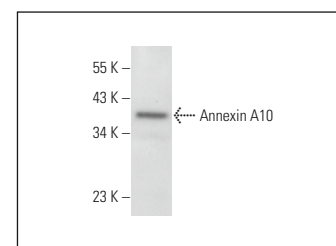
RECOMMENDED SUPPORT REAGENTS

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.

DATA



Annexin A10 (E-11): sc-398736. Western blot analysis of Annexin A10 expression in RT-4 whole cell lysate.



Annexin A10 (E-11): sc-398736. Western blot analysis of Annexin A10 expression in T24 whole cell lysate.

SELECT PRODUCT CITATIONS

1. Kinoshita, H., et al. 2024. Epithelial aPKC deficiency leads to stem cell loss preceding metaplasia in colorectal cancer initiation. *Dev. Cell* 59: 1972-1987.e8.
2. Sun, Y., et al. 2025. ANXA10 sensitizes microsatellite instability-high colorectal cancer to anti-PD-1 immunotherapy via assembly of HLA-DR dimers by regulating CD74. *Cell Biol. Toxicol.* 41: 25.

RESEARCH USE

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