SANTA CRUZ BIOTECHNOLOGY, INC.

ARMCX1 (P-12): sc-131110

BACKGROUND

The armadillo (ARM) repeat family of proteins are related to the *Drosophila melanogaster* armadillo protein, a protein essential for wingless signal transduction. ARM proteins are involved in a variety of processes such as cell migration, cell proliferation, tissue maintenance and tumorigenesis. They are intracellular proteins that function in signal transduction and cell structure. ARMCX1 (armadillo repeat containing, X-linked 1), also known as ALEX1 (arm protein lost in epithelial cancers, X chromosome, 1), is a 453 amino acid single-pass membrane protein expressed at high levels ovary, heart, testis, prostate, brain, spleen and colon and expressed at very low levels in liver and thymus. Containing three ARM repeats, ARMCX1 may play a role in tumor suppression. ARMCX1 is significantly downregulated in human lung, prostate, colon, pancreas and ovarian carcinomas.

REFERENCES

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2. Hatzfeld, M. 1999. The armadillo family of structural proteins. Int. Rev. Cytol. 186: 179-224.
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4. Hsia, N. and Cornwall, G.A. 2004. DNA microarray analysis of region-specific gene expression in the mouse epididymis. Biol. Reprod. 70: 448-457.
5. Smith, C.A., McClive, P.J. and Sinclair, A.H. 2005. Temporal and spatial expression profile of the novel armadillo-related gene, Alex2, during testicular differentiation in the mouse embryo. Dev. Dyn. 233: 188-193.
6. Olsen, J.V., Blagoev, B., Gnad, F., Macek, B., Kumar, C., Mortensen, P. and Mann, M. 2006. Global, *in vivo*, and site-specific phosphorylation dynamics in signaling networks. Cell 127: 635-648.
7. Rohrbeck, A. and Borlak, J. 2009. Cancer genomics identifies regulatory gene networks associated with the transition from dysplasia to advanced lung adenocarcinomas induced by c-Raf-1. PLoS ONE 4: e7315.

CHROMOSOMAL LOCATION

Genetic locus: ARMCX1 (human) mapping to Xq22.1; Armcx1 (mouse) mapping to X E3.

SOURCE

ARMCX1 (P-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ARMCX1 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-131110 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ARMCX1 (P-12) is recommended for detection of ARMCX1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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); non cross-reactive with other ARMC family members.

ARMCX1 (P-12) is also recommended for detection of ARMCX1 in additional species, including canine.

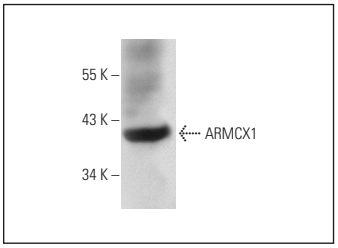
Suitable for use as control antibody for ARMCX1 siRNA (h): sc-90942, ARMCX1 siRNA (m): sc-141262, ARMCX1 shRNA Plasmid (h): sc-90942-SH, ARMCX1 shRNA Plasmid (m): sc-141262-SH, ARMCX1 shRNA (h) Lentiviral Particles: sc-90942-V and ARMCX1 shRNA (m) Lentiviral Particles: sc-141262-V.

Molecular Weight (predicted) of ARMCX1: 49 kDa.

Molecular Weight (observed) of ARMCX1: 42 kDa.

Positive Controls: mouse heart extract: sc-2254.

DATA



ARMCX1 (I-12): sc-131109. Western blot analysis of ARMCX1 expression in mouse heart tissue extract.

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.