SANTA CRUZ BIOTECHNOLOGY, INC.

ARMC1 (N-15): sc-86977

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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, and they also function in signal transduction and the maintenance of overall cell structure. ARMC1 (armadillo repeat-containing protein 1), also known as ARCP, is a 282 amino acid protein that contains one ARM repeat, suggesting a role in signal transduction pathways throughout the cell. The gene encoding ARMC1 maps to human chromosome 8, which consists of nearly 146 million base pairs, houses more than 800 genes and is associated with a variety of diseases and malignancies. Schizophrenia, bipolar disorder, trisomy 8, Pfeiffer syndrome, congenital hypothyroidism, Waardenburg syndrome and some leukemias and lymphomas are thought to occur as a result of defects in specific genes that maps to chromosome 8.

REFERENCES

1. Wildenauer, D.B. and Schwab, S.G. 1999. Chromosomes 8 and 10 workshop. Am. J. Med. Genet. 88: 239-243.
2. Kashino, G., et al. 2001. Preferential expression of an intact WRN gene in Werner syndrome cell lines in which a normal chromosome 8 has been introduced. Biochem. Biophys. Res. Commun. 289: 111-115.
3. Selicorni, A., et al. 2002. Cytogenetic mapping of a novel locus for type II Waardenburg syndrome. Hum. Genet. 110: 64-67.
4. McQueen, M.B., et al. 2005. Combined analysis from eleven linkage studies of bipolar disorder provides strong evidence of susceptibility loci on chromosomes 6q and 8q. Am. J. Hum. Genet. 77: 582-595.

CHROMOSOMAL LOCATION

Genetic locus: ARMC1 (human) mapping to 8q13.1; Armc1 (mouse) mapping to 3 A2.

SOURCE

ARMC1 (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of ARMC1 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-86977 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

PROTOCOLS

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

APPLICATIONS

ARMC1 (N-15) is recommended for detection of ARMC1 of mouse 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).

ARMC1 (N-15) is also recommended for detection of ARMC1 in additional species, including canine and avian.

Suitable for use as control antibody for ARMC1 siRNA (h): sc-77435, ARMC1 siRNA (m): sc-141252, ARMC1 shRNA Plasmid (h): sc-77435-SH, ARMC1 shRNA Plasmid (m): sc-141252-SH, ARMC1 shRNA (h) Lentiviral Particles: sc-77435-V and ARMC1 shRNA (m) Lentiviral Particles: sc-141252-V.

Molecular Weight (predicted) of ARMC1: 31 kDa.

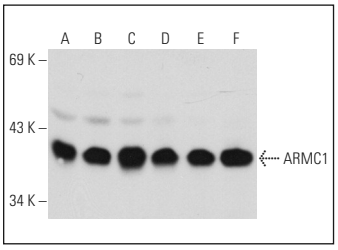
Molecular Weight (observed) of ARMC1: 38 kDa.

Positive Controls: HEL 92.1.7 cell lysate: sc-2270, PC-3 cell lysate: sc-2220 or ES-2 cell lysate: sc-24674.

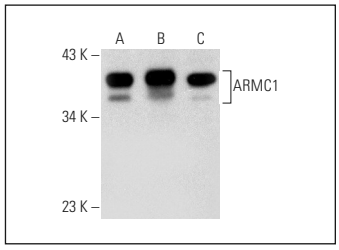
RECOMMENDED SECONDARY REAGENTS

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



ARMC1 (N-15): sc-86977. Western blot analysis of ARMC1 expression in T24 (**A**), U-87 MG (**B**), ES-2 (**C**), PC-3 (**D**), HEL 92.1.7 (**E**) and T-47D (**F**) whole cell lysates.



ARMC1 (N-15): sc-86977. Western blot analysis of ARMC1 expression in HeLa (**A**), Caki-1 (**B**) and Mia Paca-2 (**C**) whole cell lysates.

RESEARCH USE

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