

# ARMC4 (H-273): sc-292157

## 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. ARMC4 (armadillo repeat-containing protein 4) is a 1044 amino acid protein that contains 10 ARM repeats and one HEAT repeat. ARMC4 may possibly function as a regulator of ciliogenesis in airway epithelial cells and testis. The gene encoding ARMC4 maps to human chromosome 10, which houses over 1,200 genes and comprises nearly 4.5% of the human genome.

## REFERENCES

1. Peifer, M., et al. 1992. The vertebrate adhesive junction proteins  $\beta$ -catenin and plakoglobin and the *Drosophila* segment polarity gene armadillo form a multigene family with similar properties. *J. Cell Biol.* 118: 681-691.
2. Oda, H., et al. 1993. Identification of a *Drosophila* homologue of  $\alpha$ -catenin and its association with the armadillo protein. *J. Cell Biol.* 121: 1133-1140.
3. Funayama, N., et al. 1995. Embryonic axis induction by the armadillo repeat domain of  $\beta$ -catenin: evidence for intracellular signaling. *J. Cell Biol.* 128: 959-968.
4. Aberle, H., et al. 1996. Single amino acid substitutions in proteins of the armadillo gene family abolish their binding to  $\alpha$ -catenin. *J. Biol. Chem.* 271: 1520-1526.
5. Pai, L.M., et al. 1996. *Drosophila*  $\alpha$ -catenin and E-cadherin bind to distinct regions of *Drosophila* Armadillo. *J. Biol. Chem.* 271: 32411-32420.
6. Geis, K., et al. 1998. Expression of the armadillo family member p120cas1B in *Xenopus* embryos affects head differentiation but not axis formation. *Dev. Genes Evol.* 207: 471-481.
7. Kurochkin, I.V., et al. 2001. ALEX1, a novel human armadillo repeat protein that is expressed differentially in normal tissues and carcinomas. *Biochem. Biophys. Res. Commun.* 280: 340-347.

## CHROMOSOMAL LOCATION

Genetic locus: ARMC4 (human) mapping to 10p12.1; Armc4 (mouse) mapping to 18 A1.

## SOURCE

ARMC4 (H-273) is a rabbit polyclonal antibody raised against amino acids 700-972 mapping within an internal region of ARMC4 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## STORAGE

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

## APPLICATIONS

ARMC4 (H-273) is recommended for detection of ARMC4 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ 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).

ARMC4 (H-273) is also recommended for detection of ARMC4 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for ARMC4 siRNA (h): sc-90406, ARMC4 siRNA (m): sc-141256, ARMC4 shRNA Plasmid (h): sc-90406-SH, ARMC4 shRNA Plasmid (m): sc-141256-SH, ARMC4 shRNA (h) Lentiviral Particles: sc-90406-V and ARMC4 shRNA (m) Lentiviral Particles: sc-141256-V.

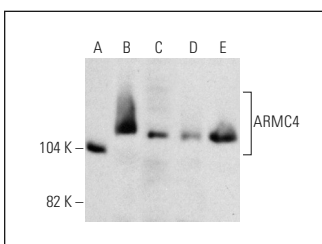
Molecular Weight of ARMC4: 116 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Caki-1 cell lysate: sc-2224 or CCRF-CEM cell lysate: sc-2225.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



ARMC4 (H-273): sc-292157. Western blot analysis of ARMC4 expression in HeLa (A), Caki-1 (B), CCRF-CEM (C), NCI-H1299 (D) and Hep G2 (E) whole cell lysates.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.