

# ARMC4 (N-14): sc-104822

## 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 1,044 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

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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.
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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.
8. Coates, J.C. 2003. Armadillo repeat proteins: beyond the animal kingdom. *Trends Cell Biol.* 13: 463-471.
9. Lonergan, K.M., et al. 2006. Identification of novel lung genes in bronchial epithelium by serial analysis of gene expression. *Am. J. Respir. Cell Mol. Biol.* 35: 651-661.

## CHROMOSOMAL LOCATION

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

## SOURCE

ARMC4 (N-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of ARMC4 of human origin.

## RESEARCH USE

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

## PRODUCT

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

Blocking peptide available for competition studies, sc-104822 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

ARMC4 (N-14) 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), 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 (N-14) is also recommended for detection of ARMC4 in additional species, including equine, canine 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.

## 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<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) 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<sup>™</sup> Mounting Medium: sc-24941.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.