

# ARMC7 (N-13): sc-131871

## BACKGROUND

ARMC7 (armadillo repeat containing 7) is a 198 amino acid protein that contains 2 ARM repeats and participates in binding activity. Conserved in chimpanzee, canine, bovine, mouse, rat, chicken, zebrafish, *Arabidopsis thaliana* and rice, ARMC7 exhibits cancer-specific methylation, although a biological role remains to be determined. ARMC7 is encoded by a gene that maps to human chromosome 17q25.1. Chromosome 17 makes up over 2.5% of the human genome, with approximately 81 million bases encoding more than 1,200 genes. Chromosome 17 is linked to neurofibromatosis, a condition characterized by neural and epidermal lesions and dysregulated Schwann cell growth. Alexander disease, Birt-Hogg-Dube syndrome and Canavan disease are also associated with chromosome 17.

## REFERENCES

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3. Suela, J., et al. 2007. Neurofibromatosis 1, and Not TP53, seems to be the main target of chromosome 17 deletions in *de novo* acute myeloid leukemia. *J. Clin. Oncol.* 25: 1151-1152.
4. Al-Dirbashi, O.Y., et al. 2007. Quantification of N-acetylaspartic acid in urine by LC-MS/MS for the diagnosis of Canavan disease. *J. Inher. Metab. Dis.* 30: 612.
5. Farrell, C.J., et al. 2007. Genetic causes of brain tumors: neurofibromatosis, tuberous sclerosis, von Hippel-Lindau, and other syndromes. *Neurol. Clin.* 25: 925-946, viii.
6. Hoque, M.O., et al. 2008. Genome-wide promoter analysis uncovers portions of the cancer methylome. *Cancer Res.* 68: 2661-2670.
7. Murakami, N., et al. 2008. Novel deletion mutation in GFAP gene in an infantile form of Alexander disease. *Pediatr. Neurol.* 38: 50-52.
8. Yang, N., et al. 2009. Methylation markers for CCNA1 and C13ORF18 are strongly associated with high-grade cervical intraepithelial neoplasia and cervical cancer in cervical scrapings. *Cancer Epidemiol. Biomarkers Prev.* 18: 3000-3007.

## CHROMOSOMAL LOCATION

Genetic locus: ARMC7 (human) mapping to 17q25.1; *Armc7* (mouse) mapping to 11 E2.

## SOURCE

ARMC7 (N-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of ARMC7 of human origin.

## STORAGE

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

## 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-131871 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

ARMC7 (N-13) is recommended for detection of ARMC7 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.

ARMC7 (N-13) is also recommended for detection of ARMC7 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for ARMC7 siRNA (h): sc-93568, ARMC7 siRNA (m): sc-141259, ARMC7 shRNA Plasmid (h): sc-93568-SH, ARMC7 shRNA Plasmid (m): sc-141259-SH, ARMC7 shRNA (h) Lentiviral Particles: sc-93568-V and ARMC7 shRNA (m) Lentiviral Particles: sc-141259-V.

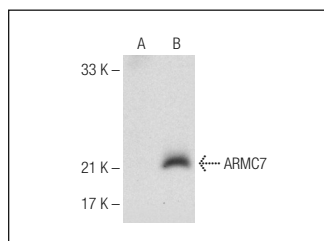
Molecular Weight of ARMC7: 22 kDa.

Positive Controls: ARMC7 (h): 293T Lysate: sc-124996.

## 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



ARMC7 (N-13): sc-131871. Western blot analysis of ARMC7 expression in non-transfected: sc-117752 (A) and mouse ARMC7 transfected: sc-124996 (B) 293T whole cell lysates.

## RESEARCH USE

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