

ARMC3 (F-13): sc-104818

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. ARMC3 (armadillo repeat-containing protein 3), also known as β -catenin-like protein, KU-CT-1 or cancer/testis antigen 81 (CT81), is a 872 amino acid protein that contains 12 ARM domains. Expressed in a wide variety of tissues, such as lung, brain, kidney, skeletal muscle, prostate, testis, spleen and thymus, ARMC3 has been identified in many cancer tissues and is thought to play a role in tumor initiation. Five named isoforms of ARMC3 exist as a result of alternative splicing events.

REFERENCES

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2. Kurochkin, I.V., Yonemitsu, N., Funahashi, S.I. and Nomura, H. 2001. ALEX1, a novel human armadillo repeat protein that is expressed differentially in normal tissues and carcinomas. *Biochem. Biophys. Res. Commun.* 280: 340-347.
3. Coates, J.C. 2003. Armadillo repeat proteins: beyond the animal kingdom. *Trends Cell Biol.* 13: 463-471.
4. 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.
5. Park, J.H., Lin, M.L., Nishidate, T., Nakamura, Y. and Katagiri, T. 2006. PDZ-binding kinase/T-LAK cell-originated protein kinase, a putative cancer/testis antigen with an oncogenic activity in breast cancer. *Cancer Res.* 66: 9186-9195.

CHROMOSOMAL LOCATION

Genetic locus: ARMC3 (human) mapping to 10p12.2; Armc3 (mouse) mapping to 2 A3.

SOURCE

ARMC3 (F-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ARMC3 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-104818 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

ARMC3 (F-13) is recommended for detection of ARMC3 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ 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).

ARMC3 (F-13) is also recommended for detection of ARMC3 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for ARMC3 siRNA (h): sc-90830, ARMC3 siRNA (m): sc-141255, ARMC3 shRNA Plasmid (h): sc-90830-SH, ARMC3 shRNA Plasmid (m): sc-141255-SH, ARMC3 shRNA (h) Lentiviral Particles: sc-90830-V and ARMC3 shRNA (m) Lentiviral Particles: sc-141255-V.

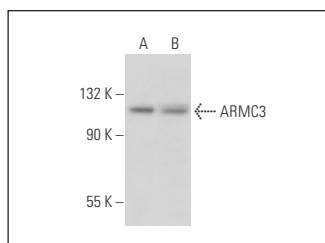
Molecular Weight of ARMC3: 96 kDa.

Positive Controls: PANC-1 whole cell lysate: sc-364380 or BxPC-3 whole cell lysate.

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



ARMC3 (F-13): sc-104818. Western blot analysis of ARMC3 expression in PANC-1 (A) and BxPC-3 (B) whole cell lysates.

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.