

ARMC8 (H-300): sc-98534

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. ARMC8 (armadillo repeat containing 8), also known as S863-2, is a 673 amino acid protein that contains 14 ARM repeats, suggesting a role in signal transduction events throughout the cell. Six isoforms of ARMC8 are expressed due to alternative splicing events. The gene encoding ARMC8 maps to human chromosome 3, which houses over 1,100 genes, including a chemo-kine receptor (CKR) gene cluster and a variety of human cancer-related gene loci.

REFERENCES

- Zhang, Q.H., et al. 2000. Cloning and functional analysis of cDNAs with open reading frames for 300 previously undefined genes expressed in CD34⁺ hematopoietic stem/progenitor cells. *Genome Res.* 10: 1546-1560.
- Braga, E.A., et al. 2003. New tumor suppressor genes in hot spots of human chromosome 3: new methods of identification. *Mol. Biol.* 37: 194-211.
- Tsend-Ayush, E., et al. 2004. Plasticity of human chromosome 3 during primate evolution. *Genomics* 83: 193-202.
- Yue, Y., et al. 2005. Comparative cytogenetics of human chromosome 3q21.3 reveals a hot spot for ectopic recombination in hominoid evolution. *Genomics* 85: 36-47.
- Darai, E., et al. 2005. Evolutionarily plastic regions at human 3p21.3 coincide with tumor breakpoints identified by the "elimination test". *Genomics* 86: 1-12.
- Yue, Y., et al. 2005. Genomic structure and paralogous regions of the inversion breakpoint occurring between human chromosome 3p12.3 and orangutan chromosome 2. *Cytogenet. Genome Res.* 108: 98-105.
- Muzny, D.M., et al. 2006. The DNA sequence, annotation and analysis of human chromosome 3. *Nature* 440: 1194-1198.
- Kobayashi, N., et al. 2007. RanBPM, Muskelein, p48EMLP, p44CTLH, and the armadillo-repeat proteins ARMC8 α and ARMC8 β are components of the CTLH complex. *Gene* 396: 236-247.
- Suzuki, T., et al. 2008. Proteasome-dependent degradation of α -catenin is regulated by interaction with ARMC8 α . *Biochem. J.* 411: 581-591.

CHROMOSOMAL LOCATION

Genetic locus: ARMC8 (human) mapping to 3q22.3; Armc8 (mouse) mapping to 9 E3.3.

SOURCE

ARMC8 (H-300) is a rabbit polyclonal antibody raised against amino acids 311-610 mapping within an internal region of ARMC8 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.

APPLICATIONS

ARMC8 (H-300) is recommended for detection of ARMC8 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); non cross-reactive with other ARMC family members.

ARMC8 (H-300) is also recommended for detection of ARMC8 in additional species, including equine, canine, bovine and avian.

Suitable for use as control antibody for ARMC8 siRNA (h): sc-78104, ARMC8 siRNA (m): sc-141260, ARMC8 shRNA Plasmid (h): sc-78104-SH, ARMC8 shRNA Plasmid (m): sc-141260-SH, ARMC8 shRNA (h) Lentiviral Particles: sc-78104-V and ARMC8 shRNA (m) Lentiviral Particles: sc-141260-V.

Molecular Weight of ARMC8 isoforms 1/2/3/6: 76/74/71/43 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Hep G2 cell lysate: sc-2227 or MCF7 whole cell lysate: sc-2206.

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.

STORAGE

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

RESEARCH USE

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

PROTOCOLS

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



Try **ARMC8 (E-1): sc-365307**, our highly recommended monoclonal alternative to ARMC8 (H-300).