

ARID3C (S-12): sc-136566

BACKGROUND

ARID3C (AT rich interactive domain 3C) is a 412 amino acid nuclear protein containing an ARID domain that is a member of the AT-rich interaction domain family of proteins. ARID family members are involved in embryonic patterning, cell lineage gene regulation, cell cycle control, transcriptional regulation and chromatin structure modification. The ARID domain is a helix-turn-helix motif-based DNA-binding domain. The gene encoding ARID3C is located on human chromosome 9, which houses over 900 genes and comprises nearly 4% of the human genome. Hereditary hemorrhagic telangiectasia, which is characterized by harmful vascular defects and familial dysautonomia, are both associated with chromosome 9. Notably, chromosome 9 encompasses the largest interferon family gene cluster.

REFERENCES

- Kortschak, R.D., et al. 1998. The human dead ringer/bright homolog, DRIL1: cDNA cloning, gene structure, and mapping to D19S886, a marker on 19p13.3 that is strictly linked to the Peutz-Jeghers syndrome. *Genomics* 51: 288-292.
- Numata, S., et al. 1999. BDP, a new member of a family of DNA-binding proteins, associates with the retinoblastoma gene product. *Cancer Res.* 59: 3741-3747.
- Kortschak, R.D., et al. 2000. ARID proteins come in from the desert. *Trends Biochem. Sci.* 25: 294-299.
- Humphray, S.J., et al. 2004. DNA sequence and analysis of human chromosome 9. *Nature* 429: 369-374.
- Kobayashi, K., et al. 2006. ARID3B induces malignant transformation of mouse embryonic fibroblasts and is strongly associated with malignant neuroblastoma. *Cancer Res.* 66: 8331-8336.
- Takebe, A., et al. 2006. Microarray analysis of PDGFR α^+ populations in ES cell differentiation culture identifies genes involved in differentiation of mesoderm and mesenchyme including ARID3B that is essential for development of embryonic mesenchymal cells. *Dev. Biol.* 293: 25-37.
- Kim, D., et al. 2006. A regulated nucleocytoplasmic shuttle contributes to Bright's function as a transcriptional activator of immunoglobulin genes. *Mol. Cell. Biol.* 26: 2187-2201.
- Wang, C.H., et al. 2007. A novel ARID/Bright-like protein involved in transcriptional activation of cyst wall protein 1 gene in *Giardia lamblia*. *J. Biol. Chem.* 282: 8905-8914.
- Kim, D., et al. 2007. REKLES is an ARID3-restricted multifunctional domain. *J. Biol. Chem.* 282: 15768-15777.

CHROMOSOMAL LOCATION

Genetic locus: ARID3C (human) mapping to 9p13.3; Arid3c (mouse) mapping to 4 A5.

SOURCE

ARID3C (S-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ARID3C 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-136566 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ARID3C (S-12) is recommended for detection of ARID3C 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); non cross-reactive with ARID3A or ARID3B.

ARID3C (S-12) is also recommended for detection of ARID3C in additional species, including equine, canine and porcine.

Suitable for use as control antibody for ARID3C siRNA (h): sc-92525, ARID3C siRNA (m): sc-141231, ARID3C shRNA Plasmid (h): sc-92525-SH, ARID3C shRNA Plasmid (m): sc-141231-SH, ARID3C shRNA (h) Lentiviral Particles: sc-92525-V and ARID3C shRNA (m) Lentiviral Particles: sc-141231-V.

Molecular Weight of ARID3C: 44 kDa.

Positive Controls: BJAB whole cell lysate: sc-2207, Ramos cell lysate: sc-2216 or NIH/3T3 whole cell lysate: sc-2210.

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) 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.

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.