

ARID3B (E-20): sc-101888

BACKGROUND

ARID3B (AT rich interactive domain 3B), also known as DRIL2 or BDP (bright and dead ringer protein) in humans and bright-like (for B cell regulator of IgH transcription-like) in mice, is one of the mammalian homologs of the *Drosophila* Dri (dead ringer) protein. ARID3B also shares homology with RBP1 and RBP2 (retinoblastoma binding proteins 1 and 2). ARID3B represents a member of a unique family of DNA-binding proteins that have roles in cell lineage gene regulation, cell cycle control, embryonic patterning and transcriptional regulation. ARID3B localizes to the nucleus and contains an A/T-rich DNA-binding (ARID) domain. Functioning as a transcription factor, ARID3B associates in a heterodimer with the related protein ARID3A and is believed to play an important role in neural crest survival during embryogenesis. In addition, ARID3B may participate in malignant transformation and neuroblastoma growth, suggesting a possible use of ARID3B as a tumor marker for neuroblastoma.

REFERENCES

1. Kortschak, R.D., Reimann, H., Zimmer, M., Eyre, H.J., Saint, R. and Jenne, D.E. 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.
2. Numata, S., Claudio, P.P., Dean, C., Giordano, A. and Croce, C.M. 1999. BDP, a new member of a family of DNA-binding proteins, associates with the retinoblastoma gene product. *Cancer Res.* 59: 3741-3747.
3. Kortschak, R.D., Tucker, P.W. and Saint, R. 2000. ARID proteins come in from the desert. *Trends Biochem. Sci.* 25: 294-299.
4. Kobayashi, K., Era, T., Takebe, A., Jakt, L.M. and Nishikawa, S. 2006. ARID3B induces malignant transformation of mouse embryonic fibroblasts and is strongly associated with malignant neuroblastoma. *Cancer Res.* 66: 8331-8336.
5. Takebe, A., Era, T., Okada, M., Martin Jakt, L., Kuroda, Y. and Nishikawa, S. 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.
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CHROMOSOMAL LOCATION

Genetic locus: ARID3B (human) mapping to 15q24.1.

SOURCE

ARID3B (E-20) is a purified rabbit polyclonal antibody raised against ARID3B of human origin.

PRODUCT

Each vial contains 100 μ g IgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

APPLICATIONS

ARID3B (E-20) is recommended for detection of ARID3B of human and canine 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for ARID3B siRNA (h): sc-90156, ARID3B shRNA Plasmid (h): sc-90156-SH and ARID3B shRNA (h) Lentiviral Particles: sc-90156-V.

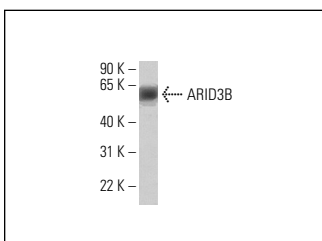
Molecular Weight of ARID3B: 61 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203 or human fetal thymus tissue extract.

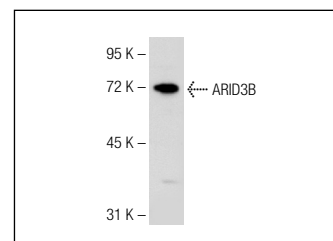
RECOMMENDED SECONDARY REAGENTS

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).

DATA



ARID3B (E-20): sc-101888. Western blot analysis of ARID3B expression in human fetal thymus tissue extract.



ARID3B (E-20): sc-101888. Western blot analysis of ARID3B expression in K-562 whole cell lysate.

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.



Try **ARID3B (C-6): sc-514741**, our highly recommended monoclonal alternative to ARID3B (E-20).