

ARID3B (C-6): sc-514741

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., 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.
2. 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.
3. Kortschak, R.D., et al. 2000. ARID proteins come in from the desert. *Trends Biochem. Sci.* 25: 294-299.
4. 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.

CHROMOSOMAL LOCATION

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

SOURCE

ARID3B (C-6) is a mouse monoclonal antibody raised against amino acids 25-211 mapping near the N-terminus of ARID3B of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

ARID3B (C-6) is available conjugated to agarose (sc-514741 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-514741 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514741 PE), fluorescein (sc-514741 FITC), Alexa Fluor® 488 (sc-514741 AF488), Alexa Fluor® 546 (sc-514741 AF546), Alexa Fluor® 594 (sc-514741 AF594) or Alexa Fluor® 647 (sc-514741 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-514741 AF680) or Alexa Fluor® 790 (sc-514741 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA

APPLICATIONS

ARID3B (C-6) is recommended for detection of ARID3B isoforms 1, 3 and 4 of human origin by Western Blotting (starting dilution 1:100, 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).

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.

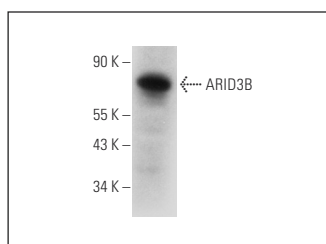
Molecular Weight of ARID3B: 61 kDa.

Positive Controls: NTERA-2 cl.D1 whole cell lysate: sc-364181.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



ARID3B (C-6): sc-514741. Western blot analysis of ARID3B expression in NTERA-2 cl.D1 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.

PROTOCOLS

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