

ARID3B (E-12): sc-131866

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

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- 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.
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- 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.
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CHROMOSOMAL LOCATION

Genetic locus: ARID3B (human) mapping to 15q24.1; Arid3b (mouse) mapping to 9 B.

SOURCE

ARID3B (E-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ARID3B 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. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-131866 X, 200 μ g/0.1 ml.

Blocking peptide available for competition studies, sc-131866 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ARID3B (E-12) is recommended for detection of ARID3B isoforms 1, 2 and 3 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 family members ARID3A or ARID3C.

ARID3B (E-12) is also recommended for detection of ARID3B isoforms 1, 2 and 3 in additional species, including equine and canine.

Suitable for use as control antibody for ARID3B siRNA (h): sc-90156, ARID3B siRNA (m): sc-141230, ARID3B shRNA Plasmid (h): sc-90156-SH, ARID3B shRNA Plasmid (m): sc-141230-SH, ARID3B shRNA (h) Lentiviral Particles: sc-90156-V and ARID3B shRNA (m) Lentiviral Particles: sc-141230-V.

ARID3B (E-12) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of ARID3B: 61 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203.

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.



Try **ARID3B (C-6): sc-514741**, our highly recommended monoclonal alternative to ARID3B (E-12).