

ARID2 (E-3): sc-166117

BACKGROUND

BAF200 (AT-rich interactive domain-containing protein 2, BRG1-associated factor 200) is a 1,835 amino acid protein encoded by the human gene ARID2. BAF200 is a nuclear protein that belongs to the SWI/SNF family of chromatin-remodeling complexes and contains one ARID domain. It is involved in transcriptional activation and repression of select genes by chromatin remodeling (alteration of DNA-nucleosome topology). BAF200 is required for the stability of the BAF (SWI/SNF-A) and PBAF (SWI/SNF-B) chromatin remodeling complexes. It also may be involved in targeting the SWI/SNF complex to different genes.

CHROMOSOMAL LOCATION

Genetic locus: ARID2 (human) mapping to 12q12.

SOURCE

ARID2 (E-3) is a mouse monoclonal antibody raised against amino acids 1134-1316 mapping within an internal region of BAF200 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. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-166117 X, 200 µg/0.1 ml.

ARID2 (E-3) is available conjugated to agarose (sc-166117 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-166117 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-166117 PE), fluorescein (sc-166117 FITC), Alexa Fluor[®] 488 (sc-166117 AF488), Alexa Fluor[®] 546 (sc-166117 AF546), Alexa Fluor[®] 594 (sc-166117 AF594) or Alexa Fluor[®] 647 (sc-166117 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-166117 AF680) or Alexa Fluor[®] 790 (sc-166117 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

ARID2 (E-3) is recommended for detection of ARID2 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), immunohistochemistry (including paraffin-embedded sections) (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 ARID2 siRNA (h): sc-96225, ARID2 shRNA Plasmid (h): sc-96225-SH and ARID2 shRNA (h) Lentiviral Particles: sc-96225-V.

ARID2 (E-3) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight (predicted) of ARID2: 197 kDa.

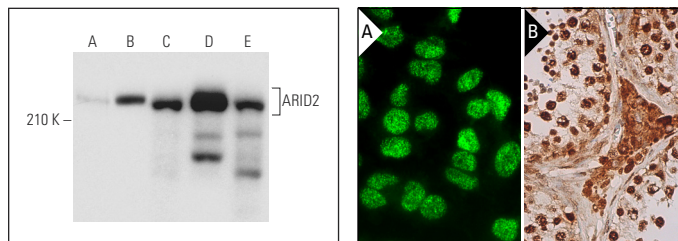
Molecular Weight (observed) of ARID2: 217 kDa.

Positive Controls: ARID2 (h): 293T Lysate: sc-175552, HeLa nuclear extract: sc-2120 or Jurkat nuclear extract: sc-2132.

STORAGE

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

DATA



ARID2 (E-3): sc-166117. Western blot analysis of ARID2 expression in non-transfected: sc-117752 (A) and human ARID2 transfected: sc-175552 (B) 293T whole cell lysates and HeLa (C), Jurkat (D) and MCF7 (E) nuclear extracts.

ARID2 (E-3): sc-166117. Immunofluorescence staining of formalin-fixed Hep G2 cells showing nuclear localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human testis tissue showing nuclear staining of cells in seminiferous ducts and nuclear and cytoplasmic staining of Leydig cells (B).

SELECT PRODUCT CITATIONS

- Kang, D., et al. 2015. EBV BART microRNAs target multiple pro-apoptotic cellular genes to promote epithelial cell survival. *PLoS Pathog.* 11: e1004979.
- Gurard-Levin, Z.A., et al. 2016. Chromatin regulators as a guide for cancer treatment choice. *Mol. Cancer Ther.* 15: 1768-1777.
- Meisenberg, C., et al. 2018. Repression of transcription at DNA breaks requires cohesin throughout interphase and prevents genome instability. *Mol. Cell* 73: 212-223.
- Pan, J., et al. 2019. The ATPase module of mammalian SWI/SNF family complexes mediates subcomplex identity and catalytic activity-independent genomic targeting. *Nat. Genet.* 51: 618-626.
- Schick, S., et al. 2019. Systematic characterization of BAF mutations provides insights into intracomplex synthetic lethality in human cancers. *Nat. Genet.* 51: 1399-1410.
- Inoue, D., et al. 2019. Spliceosomal disruption of the non-canonical BAF complex in cancer. *Nature* 574: 432-436.
- Wu, M., et al. 2020. MiR-155-5p promotes oral cancer progression by targeting chromatin remodeling gene ARID2. *Biomed. Pharmacother.* 122: 109696.
- Minderjahn, J., et al. 2020. Mechanisms governing the pioneering and redistribution capabilities of the non-classical pioneer PU.1. *Nat. Commun.* 11: 402.
- Shi, H., et al. 2020. ARID1A loss in neuroblastoma promotes the adrenergic-to-mesenchymal transition by regulating enhancer-mediated gene expression. *Sci. Adv.* 6: eaaz3440.

RESEARCH USE

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