SANTA CRUZ BIOTECHNOLOGY, INC.

ARID1A (C-13): sc-103404



BACKGROUND

The SWI-SNF complex is involved in the activation of transcription via the remodeling of nucleosome structure in an ATP-dependent manner. Brm (also designated Snf2 α) and Brg-1 (also designated Snf2 β) are the ATPase subunits of the mammalian Swi-Snf complex. Brm, Brg-1, Ini1 (integrase interactor 1, also designated Snf5), BAF155 (also designated SRG3) and BAF170 are thought to comprise the functional core of the SWI-SNF complex. Addition of Ini1, BAF155 and BAF170 to Brg-1 appears to increase remodeling activity. Other complex subunits, such as BAF250a (p270 or ARID1A) and BAF250b (ARID1B), are thought to play regulatory roles.

REFERENCES

- Muchardt, C. and Yaniv, M. 1993. A human homologue of *Saccharomyces cerevisiae* Snf2/Swi2 and *Drosophila* Brm genes potentiates transcriptional activation by the glucocorticoid receptor. EMBO J. 12: 4279-4290.
- Khavari, P.A., et al. 1993. Brg-1 contains a conserved domain of the SWI2/SNF2 family necessary for normal mitotic growth and transcription. Nature 366: 170-174.
- Imbalzano, A.N., et al. 1996. Nucleosome disruption by human SWI/SNF is maintained in the absence of continued ATP hydrolysis. J. Biol. Chem. 271: 20726-20733.
- Dallas, P.B., et al. 1998. p300/CREB binding protein-related protein p270 is a component of mammalian SWI/SNF complexes. Mol. Cell. Biol. 18: 3596-3603.
- Phelan, M.L., et al. 1999. Reconstitution of a core chromatin remodeling complex from SWI/SNF subunits. Mol. Cell 3: 247-253.
- Dallas, P.B., et al. 2000. The human SWI/SNF complex protein p270 is an ARID family member with non-sequence-specific DNA binding activity. Mol. Cell. Biol. 20: 3137-3146.
- 7. Wang, X., et al. 2004. Two related ARID family proteins are alternative subunits of human SWI/SNF complexes. Biochem. J. 383: 319-325.
- Wang, X., et al. 2004. Expression of p270 (ARID1A), a component of human SWI/SNF complexes, in human tumors. Int. J. Cancer 112: 636.

CHROMOSOMAL LOCATION

Genetic locus: ARID1A (human) mapping to 1p36.11; Arid1a (mouse) mapping to 4 D3.

SOURCE

ARID1A (C-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping representing full length of ARID1A of human origin.

STORAGE

Store at 4° C, **D0 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.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-103404 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-103404 X, 200 μ g/0.1 ml.

APPLICATIONS

ARID1A (C-13) is recommended for detection of ARID1A 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).

ARID1A (C-13) is also recommended for detection of ARID1A in additional species, including canine, bovine and avian.

Suitable for use as control antibody for ARID1A siRNA (h): sc-43628, ARID1A siRNA (m): sc-45942, ARID1A shRNA Plasmid (h): sc-43628-SH, ARID1A shRNA Plasmid (m): sc-45942-SH, ARID1A shRNA (h) Lentiviral Particles: sc-43628-V and ARID1A shRNA (m) Lentiviral Particles: sc-45942-V.

ARID1A (C-13) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of ARID1A: 165-320 kDa.

Positive Controls: SH-SY5Y cell lysate: sc-3812 or Y79 cell lysate: sc-2240.

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) Immunofluo-rescence: use donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

PROTOCOLS

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

MONOS Satisfation Guaranteed

Try ARID1A (PSG3): sc-32761 or ARID1A (C-7): sc-373784, our highly recommended monoclonal aternatives to ARID1A (C-13). Also, for AC, HRP, FITC,

aternatives to ARID1A (C-13). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **ARID1A (PSG3): sc-32761**.