SANTA CRUZ BIOTECHNOLOGY, INC.

BAF170 (E-6): sc-17838



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 are thought to play regulatory roles. hSNF2L and hSNF2H both appear to be homologs of *Drosophila* Isw1, a BRM related ATPase that is present in chromatin remodeling complexes other than SWI/ SNF, including the NURF (nucleosome remodeling factor).

CHROMOSOMAL LOCATION

Genetic locus: SMARCC2 (human) mapping to 12q13.2; Smarcc2 (mouse) mapping to 10 D3.

SOURCE

BAF170 (E-6) is a mouse monoclonal antibody raised against amino acids 1093-1208 mapping near the C-terminus of BAF170 of human origin.

PRODUCT

Each vial contains 200 μ g lgG₁ 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-17838 X, 200 μ g/0.1 ml.

BAF170 (E-6) is available conjugated to agarose (sc-17838 AC), 500 μg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-17838 HRP), 200 μg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-17838 PE), fluorescein (sc-17838 FITC), Alexa Fluor[®] 488 (sc-17838 AF488), Alexa Fluor[®] 546 (sc-17838 AF546), Alexa Fluor[®] 594 (sc-17838 AF594) or Alexa Fluor[®] 647 (sc-17838 AF647), 200 μg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-17838 AF680) or Alexa Fluor[®] 790 (sc-17838 AF790), 200 μg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

BAF170 (E-6) is recommended for detection of BAF170 of mouse, rat and human origin by Western Blotting (starting dilution 1:500, dilution range 1:500-1:2,000), immunoprecipitation [1-2 μ g per 100-500 μ g 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 BAF170 siRNA (h): sc-29782, BAF170 siRNA (m): sc-29783, BAF170 shRNA Plasmid (h): sc-29782-SH, BAF170 shRNA Plasmid (m): sc-29783-SH, BAF170 shRNA (h) Lentiviral Particles: sc-29782-V and BAF170 shRNA (m) Lentiviral Particles: sc-29783-V.

BAF170 (E-6) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of BAF170: 170 kDa.

Positive Controls: K-562 nuclear extract: sc-2130.

STORAGE

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

DATA





BAF170 (E-6): sc-17838. Western blot analysis of BAF170 expression in A-431 (\mathbf{A}) and K-562 (\mathbf{B}) nuclear extracts and MM-142 (\mathbf{C}), SW480 (\mathbf{D}), Raji (\mathbf{E}) and SK-N-SH (\mathbf{F}) whole cell lysates. Detection reagent used: m-1qGx BP-HRP: sc-516102.

BAF170 (E-6): sc-17838. Immunofluorescence staining of formalin-fixed SW480 cells showing nuclear localization (**A**). Immunoperoxidase staining of formalin fixed, paraffin-embedded human small intestine tissue showing nuclear staining of glandular cells (**B**).

SELECT PRODUCT CITATIONS

- Kenneth, N.S., et al. 2009. SWI/SNF regulates the cellular response to hypoxia. J. Biol. Chem. 284: 4123-4131.
- Pavlov, P.F., et al. 2011. Mitochondrial γ-secretase participates in the metabolism of mitochondria-associated amyloid precursor protein. FASEB J. 25: 78-88.
- 3. Nishimoto, N., et al. 2012. Heterocomplex formation by Arp4 and β -Actin is involved in the integrity of the Brg1 chromatin remodeling complex. J. Cell Sci. 125: 3870-3882.
- 4. Singh, A.P. and Archer, T.K. 2014. Analysis of the SWI/SNF chromatinremodeling complex during early heart development and BAF250a repression cardiac gene transcription during P19 cell differentiation. Nucleic Acids Res. 42: 2958-2975.
- Ceballos-Chávez, M., et al. 2015. The chromatin Remodeler CHD8 is required for activation of progesterone receptor-dependent enhancers. PLoS Genet. 11: e1005174.
- Kuwamoto, S., et al. 2017. SMARCA4-deficient thoracic sarcoma: report of a case and insights into how to reach the diagnosis using limited samples and resources. Hum. Pathol. 70: 92-97.
- Alpsoy, A. and Dykhuizen, E.C. 2018. Glioma tumor suppressor candidate region gene 1 (GLTSCR1) and its paralog GLTSCR1-like form SWI/SNF chromatin remodeling subcomplexes. J. Biol. Chem. 293: 3892-3903.
- 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.

RESEARCH USE

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

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