SANTA CRUZ BIOTECHNOLOGY, INC.

# BAF170 (C-19): sc-9744

SANTA CRUZ BIOTECHNOLOGY

*The Power to Question*

## 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 SNF1 or SNF2α) and Brg-1 (also designated SNF2 or SNF2β) 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* ISWI, a Brm related ATPase that is present in chromatin remodeling complexes other than SWI/SNF, including the NURF (nucleosome remodeling factor).

## REFERENCES


1. Muchardt, C., et al. 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.
2. 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.
3. Tsukiyama, T., et al. 1995. ISWI, a member of the SWI2/SNF2 ATPase family, encodes the 140 kDa subunit of the nucleosome remodeling factor. Cell 83: 1021-1026.
4. 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.


## CHROMOSOMAL LOCATION

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

## SOURCE

BAF170 (C-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of BAF170 of human origin.

## PRODUCT

Each vial contains 200 µg 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-9744 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-9744 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## 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.

## APPLICATIONS

BAF170 (C-19) is recommended for detection of BAF170 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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). BAF170 (C-19) is also recommended for detection of BAF170 in additional species, including equine, canine, bovine and porcine.

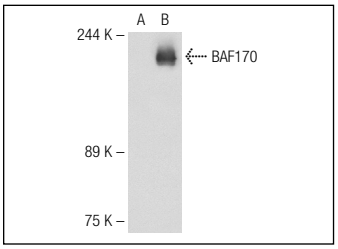
Suitable for use as control antibody for BAF170 siRNA (h): sc-29782, BAF170 siRNA (m): sc-29783, BAF170 shRNA Plasmid (h): sc-29782-SH, BAF170 shRNA Plasmid (m): sc-29783-SH, BAF170 shRNA (h) Lentiviral Particles: sc-29782-V and BAF170 shRNA (m) Lentiviral Particles: sc-29783-V.

BAF170 (C-19) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

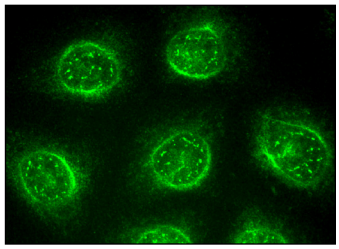
Molecular Weight of BAF170: 170 kDa.

Positive Controls: BAF170 (h): 293 Lysate: sc-175518, A-431 nuclear extract: sc-2122 or K-562 nuclear extract: sc-2130.

## DATA




BAF170 (C-19): sc-9744. Western blot analysis of BAF170 expression in non-transfected: sc-117752 (**A**) and human BAF170 transfected: sc-175518 (**B**) 293T whole cell lysates.



BAF170 (C-19): sc-9744. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear localization.

## SELECT PRODUCT CITATIONS


1. Nye, A., et al. 2002. Alteration of large-scale chromatin structure by estrogen receptor. Mol. Cell. Biol. 22: 3437-3449.
2. Memedula, S., et al. 2003. Sequential recruitment of HAT and SWI/SNF components to condensed chromatin by VP16. Curr. Biol. 13: 241-246.
3. Kemper, J.K., et al. 2004. Role of an mSin3A-SWI/SNF chromatin remodeling complex in the feedback repression of bile acid biosynthesis by SHP. Mol. Cell. Biol. 24: 7707-7719.
4. Medjkane, S., et al. 2004. The tumor suppressor hSNF5/INI1 modulates cell growth and actin cytoskeleton organization. Cancer Res. 64: 3406-3413.