SANTA CRUZ BIOTECHNOLOGY, INC.

BAF170 (H-116): sc-10757

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).

CHROMOSOMAL LOCATION

Genetic locus: SMARCC2 (human) mapping to 12q13.2.

SOURCE

BAF170 (H-116) is a rabbit polyclonal antibody raised against amino acids 1093-1208 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-10757 X, 200 µg/0.1 ml.

APPLICATIONS

BAF170 (H-116) is recommended for detection of BAF170 of human and *Xenopus laevis* 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), 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).

BAF170 (H-116) is also recommended for detection of BAF170 in additional species, including porcine.

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

BAF170 (H-116) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of BAF170: 170 kDa.

Positive Controls: A-431 nuclear extract: sc-2122, K-562 nuclear extract: sc-2130 or HeLa whole cell lysate: sc-2200.

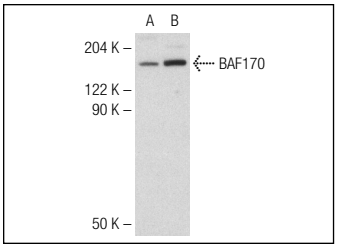
STORAGE

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

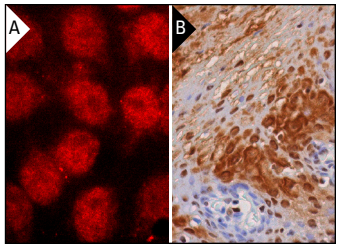
RESEARCH USE

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

DATA



BAF170 (H-116): sc-10757. Western blot analysis of BAF170 expression in A-431 (**A**) and K-562 (**B**) nuclear extracts.



BAF170 (H-116): sc-10757. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear localization (**A**). Immunoperoxidase staining of formalin fixed, paraffin-embedded human esophagus tissue showing nuclear and cytoplasmic staining of squamous epithelial cells (**B**).

SELECT PRODUCT CITATIONS

1. Metivier, R., et al. 2003. Estrogen receptor-α directs ordered, cyclical, and combinatorial recruitment of cofactors on a natural target promoter. Cell 115: 751-763.
2. Foster, K.S., et al. 2006. Members of the hSWI/SNF chromatin remodeling complex associate with and are phosphorylated by protein kinase B/Akt. Oncogene 25: 4605-4612.
3. Cho, Y.W., et al. 2007. PTIP associates with MLL3- and MLL4-containing histone H3 lysine 4 methyltransferase complex. J. Biol. Chem. 282: 20395-20406.
4. Tyagi, A., et al. 2009. SWI/SNF associates with nascent pre-mRNPs and regulates alternative pre-mRNA processing. PLoS Genet. 5: e1000470.
5. Ryme, J., et al. 2009. Variations in the composition of mammalian SWI/SNF chromatin remodelling complexes. J. Cell. Biochem. 108: 565-576.
6. Vachtenheim, J., et al. 2010. SWI/SNF chromatin remodeling complex is critical for the expression of microphthalmia-associated transcription factor in melanoma cells. Biochem. Biophys. Res. Commun. 392: 454-459.
7. Euskirchen, G.M., et al. 2011. Diverse roles and interactions of the SWI/SNF chromatin remodeling complex revealed using global approaches. PLoS Genet. 7: e1002008.
8. Van Duyne, R., et al. 2011. Varying modulation of HIV-1 LTR activity by Baf complexes. J. Mol. Biol. 411: 581-596.