SANTA CRUZ BIOTECHNOLOGY, INC.

# BAF57 (6G11): sc-293309

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. In higher eukaryotes, BAF57 is also a critical component of the SWI/SNF complex. BAF57 contains a high-mobility-group (HMG) domain adjacent to a kinesin-like region and is a DNA-binding subunit of the SWI/SNF complex. The human BAF57 gene maps within the q12-25 region of chromosome 17, a gene-rich area implicated in breast and ovarian cancers.

## REFERENCES


1. 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.
2. Khavari, P.A., Peterson, C.L., Tamkun, J.W., Mendel, D.B. and Crabtree, G.R. 1993. BRG1 contains a conserved domain of the SWI2/SNF2 family necessary for normal mitotic growth and transcription. Nature 366: 170-174.
3. Imbalzano, A.N., Schnitzler, G.R. and Kingston, R.E. 1996. Nucleosome disruption by human SWI/SNF is maintained in the absence of continued ATP hydrolysis. J. Biol. Chem. 271: 20726-20733.
4. Wang, W., Chi, T., Xue, Y., Zhou, S., Kuo, A. and Crabtree, G.R. 1998. Architectural DNA binding by a high-mobility-group/kinesin-like subunit in mammalian SWI/SNF-related complexes. Proc. Natl. Acad. Sci. USA 95: 492-498.
5. Phelan, M.L., Sif, S., Narlikar, G.J. and Kingston, R.E. 1999. Reconstitution of a core chromatin remodeling complex from SWI/SNF subunits. Mol. Cell 3: 247-253.
6. Decristofaro, M.F., Betz, B.L., Rorie, C.J., Reisman, D.N., Wang, W. and Weissman, B.E. 2001. Characterization of SWI/SNF protein expression in human breast cancer cell lines and other malignancies. J. Cell. Physiol. 186: 136-145.


## CHROMOSOMAL LOCATION

Genetic locus: SMARCE1 (human) mapping to 17q21.2; Smarce1 (mouse) mapping to 11 D.

## SOURCE

BAF57 (6G11) is a mouse monoclonal antibody raised against amino acids 75-142 of BAF57 of human origin.

## PRODUCT

Each vial contains 100 µg $IgG_1$ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## RESEARCH USE

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

## APPLICATIONS

BAF57 (6G11) is recommended for detection of BAF57 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

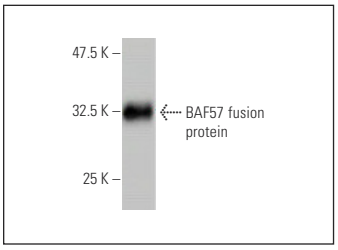
Suitable for use as control antibody for BAF57 siRNA (h): sc-45940, BAF57 siRNA (m): sc-45941, BAF57 shRNA Plasmid (h): sc-45940-SH, BAF57 shRNA Plasmid (m): sc-45941-SH, BAF57 shRNA (h) Lentiviral Particles: sc-45940-V and BAF57 shRNA (m) Lentiviral Particles: sc-45941-V.

Molecular Weight of BAF57: 57 kDa.

## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

## DATA




BAF57 (6G11): sc-293309. Western blot analysis of human recombinant BAF57 fusion protein.

## STORAGE

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

## PROTOCOLS

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