

# BAF53 (m2): 293T Lysate: sc-118665

## BACKGROUND

The SWI/SNF complex regulates gene expression via ATP-dependent chromatin remodeling. Brm (SNF2- $\alpha$ ), Brg-1 (SNF2- $\beta$ ), Ini1 (integrase interactor 1, SNF5), BAF53 (ARPN $\beta$ ), BAF57, BAF155 (SRG3) and BAF170 make up the functional core. BAF53 homologues from yeast to humans contain a conserved N-terminal motif, which contains residues at Serine 2 and Tyrosine 6, which play important roles in BAF53 activity. The BAF53 protein shuttles between the nucleus and cytoplasm. BAF53 also forms a complex with TIP49 and TIP48, which mediates c-Myc oncogenic activity.

## REFERENCES

1. 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.
2. 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.
3. Ohfuchi, E., Nishimori, K. and Harata, M. 2002. Alternative splicing products of the gene for a protein, hArpN $\beta$ /BAF53, that encode a protein isoform, hArpN $\beta$ S, in the cytoplasm. *Biosci. Biotechnol. Biochem.* 66: 1740-1743.
4. Park, J., Wood, M.A. and Cole, M.D. 2002. BAF53 forms distinct nuclear complexes and functions as a critical c-Myc-interacting nuclear cofactor for oncogenic transformation. *Mol. Cell. Biol.* 22: 1307-1316.
5. Lee, J.H., Chang, S.H., Shim, J.H., Lee, J.Y., Yoshida, M. and Kwon, H. 2003. Cytoplasmic localization and nucleo-cytoplasmic shuttling of BAF53, a component of chromatin-modifying complexes. *Mol. Cells* 16: 78-83.
6. Lee, J.H., Lee, J.Y., Chang, S.H., Kang, M.J. and Kwon, H. 2005. Effects of Ser2 and Tyr6 mutants of BAF53 on cell growth and p53-dependent transcription. *Mol. Cells* 19: 289-293.

## CHROMOSOMAL LOCATION

Genetic locus: Actl6a (mouse) mapping to 3 A3.

## PRODUCT

BAF53 (m2): 293T Lysate represents a lysate of mouse BAF53 transfected 293T cells and is provided as 100  $\mu$ g protein in 200  $\mu$ l SDS-PAGE buffer.

## RESEARCH USE

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

## APPLICATIONS

BAF53 (m2): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive BAF53 antibodies. Recommended use: 10-20  $\mu$ l per lane.

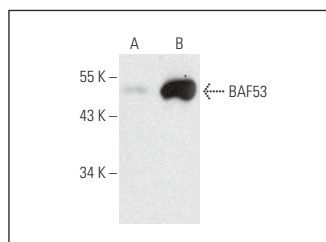
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

BAF53 (D-3): sc-271226 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse BAF53 expression in BAF53 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

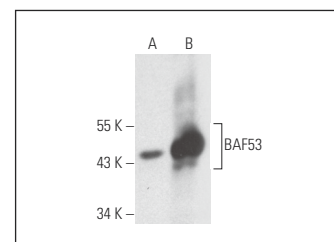
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:  
1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  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.

## DATA



BAF53 (D-3): sc-271226. Western blot analysis of BAF53 expression in non-transfected: sc-117752 (A) and mouse BAF53 transfected: sc-118665 (B) 293T whole cell lysates.



BAF53 (C-7): sc-271011. Western blot analysis of BAF53 expression in non-transfected: sc-117752 (A) and mouse BAF53 transfected: sc-118665 (B) 293T whole cell lysates.

## STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.