

BAF170 (h): 293 Lysate: sc-111021

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* 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. 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. Tsukiyama, T., Daniel, C., Tamkun, J. and Wu, C. 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., 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.
5. Aihara, T., Miyoshi, Y., Koyama, K., Suzuki, M., Takahashi, E., Monden, M. and Nakamura, Y. 1998. Cloning and mapping of SMARCA5 encoding hSNF2H, a novel human homologue of *Drosophila* ISWI. *Cytogenet. Cell Genet.* 81: 191-193.
6. 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.

CHROMOSOMAL LOCATION

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

PRODUCT

BAF170 (h): 293 Lysate represents a lysate of human BAF170 transfected 293 cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

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 for detailed protocols and support products.

APPLICATIONS

BAF170 (h): 293 Lysate is suitable as a Western Blotting positive control for human reactive BAF170 antibodies. Recommended use: 10-20 μ l per lane.

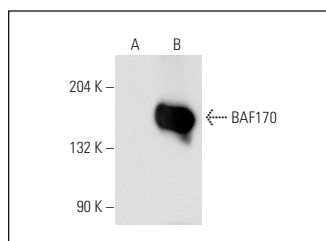
Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-transfected 293 cells.

BAF170 (G-12): sc-166237 is recommended as a positive control antibody for Western Blot analysis of enhanced human BAF170 expression in BAF170 transfected 293 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 κ BP-HRP: sc-516102 or m-IgG κ 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



BAF170 (G-12): sc-166237. Western blot analysis of BAF170 expression in non-transfected: sc-110760 (A) and human BAF170 transfected: sc-111021 (B) 293 whole cell lysates.

RESEARCH USE

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