

# BAF53 (H-125): sc-134542

## 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.

## CHROMOSOMAL LOCATION

Genetic locus: ACTL6A (human) mapping to 3q26.33; Actl6a (mouse) mapping to 3 A3.

## SOURCE

BAF53 (H-125) is a rabbit polyclonal antibody raised against amino acids 47-171 mapping near the N-terminus of BAF53 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g 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-134542 X, 200  $\mu$ g/0.1 ml.

## APPLICATIONS

BAF53 (H-125) is recommended for detection of BAF53 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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).

BAF53 (H-125) is also recommended for detection of BAF53 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for BAF53 siRNA (h): sc-60239, BAF53 siRNA (m): sc-60240, BAF53 shRNA Plasmid (h): sc-60239-SH, BAF53 shRNA Plasmid (m): sc-60240-SH, BAF53 shRNA (h) Lentiviral Particles: sc-60239-V and BAF53 shRNA (m) Lentiviral Particles: sc-60240-V.

BAF53 (H-125) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

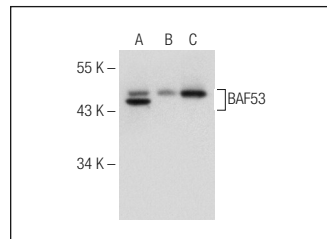
Molecular Weight of BAF53: 45 kDa.

Positive Controls: BAF53 (m): 293T Lysate: sc-118665, IMR-32 nuclear extract: sc-2148 or HeLa nuclear extract: sc-2120.

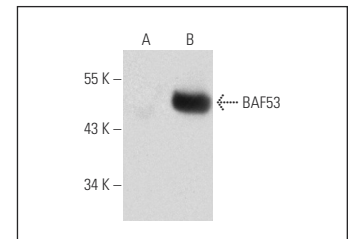
## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



BAF53 (H-125): sc-134542. Western blot analysis of BAF53 expression in IMR-32 (A), HeLa (B) and SH-SY5Y (C) nuclear extracts.



BAF53 (H-125): sc-134542. 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 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.

## PROTOCOLS

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

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Try **BAF53 (E-3): sc-137062** or **BAF53 (G-2): sc-137081**, our highly recommended monoclonal alternatives to BAF53 (H-125).