SANTA CRUZ BIOTECHNOLOGY, INC.

BAF57 (C-20): sc-25140

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.

CHROMOSOMAL LOCATION

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

SOURCE

BAF57 (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of BAF57 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.

Blocking peptide available for competition studies, sc-25140 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

BAF57 (C-20) 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)], 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).

BAF57 (C-20) is also recommended for detection of BAF57 in additional species, including canine, bovine and porcine.

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.

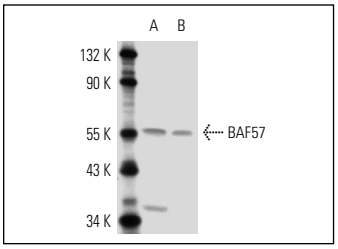
Molecular Weight of BAF57: 57 kDa.

Positive Controls: HeLa nuclear extract: sc-2120, HeLa whole cell lysate: sc-2200 or Jurkat nuclear extract: sc-2132.

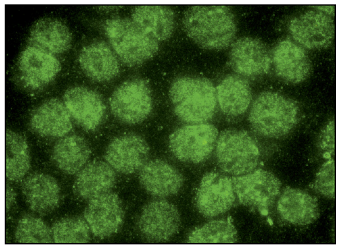
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



BAF57 (C-20): sc-25140. Western blot analysis of BAF57 expression in HeLa (**A**) and Jurkat (**B**) nuclear extracts.



BAF57 (C-20): sc-25140. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear localization.

SELECT PRODUCT CITATIONS

1. Kenneth, N.S., et al. 2009. SWI/SNF regulates the cellular response to hypoxia. J. Biol. Chem. 284: 4123-4131.
2. Harte, M.T., et al. 2010. BRD7, a subunit of SWI/SNF complexes, binds directly to BRCA1 and regulates BRCA1-dependent transcription. Cancer Res. 70: 2538-2547.
3. Van Duyne, R., et al. 2011. Varying modulation of HIV-1 LTR activity by Baf complexes. J. Mol. Biol. 411: 581-596.

RESEARCH USE

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

PROTOCOLS

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