SANTA CRUZ BIOTECHNOLOGY, INC.

BAF155 (G-7): sc-365543

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. 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., et al. 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., et al. 1993. Brg-1 contains a conserved domain of the SWI2/SNF2 family necessary for normal mitotic growth and transcription. Nature 366: 170-174.
3. Tsukiyama, T., et al. 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., et al. 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., et al. 1998. Cloning and mapping of SMARCA5 encoding hSNF2H, a novel human homologue of *Drosophila* ISWI. Cytogenet. Cell Genet. 81: 191-193.

CHROMOSOMAL LOCATION

Genetic locus: SMARCC1 (human) mapping to 3p21.31; Smarcc1 (mouse) mapping to 9 F2.

SOURCE

BAF155 (G-7) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 1027-1055 within an internal region of BAF155 of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain 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-365543 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-365543 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

RESEARCH USE

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

APPLICATIONS

BAF155 (G-7) is recommended for detection of BAF155 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).

Suitable for use as control antibody for BAF155 siRNA (h): sc-29780, BAF155 siRNA (m): sc-29781, BAF155 shRNA Plasmid (h): sc-29780-SH, BAF155 shRNA Plasmid (m): sc-29781-SH, BAF155 shRNA (h) Lentiviral Particles: sc-29780-V and BAF155 shRNA (m) Lentiviral Particles: sc-29781-V.

BAF155 (G-7) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

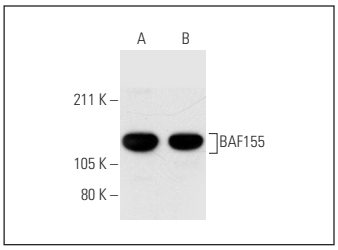
Molecular Weight of BAF155: 150 kDa.

Positive Controls: HeLa nuclear extract: sc-2120, Jurkat nuclear extract: sc-2132 or K-562 nuclear extract: sc-2130.

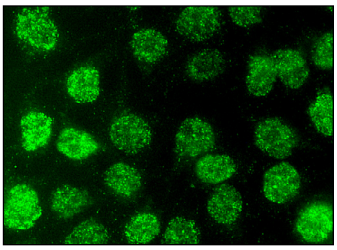
RECOMMENDED SUPPORT REAGENTS

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). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



BAF155 (G-7): sc-365543. Western blot analysis of BAF155 expression in Jurkat (**A**) and K-562 (**B**) nuclear extracts.



BAF155 (G-7): sc-365543. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear localization.

SELECT PRODUCT CITATIONS

1. Li, N., et al. 2022. ARID1A loss induces polymorphonuclear myeloid-derived suppressor cell chemotaxis and promotes prostate cancer progression. Nat. Commun. 13: 7281.

STORAGE

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