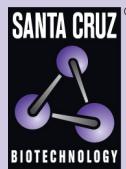


SAF-B2 (C-5): sc-514963



BACKGROUND

Heterogeneous nuclear ribonucleoproteins (hnRNPs) constitute a set of polypeptides that contribute to pre-mRNA processing and transport. hnRNPs also bind heterogeneous nuclear RNA (hnRNA), the transcripts produced by RNA polymerase II. SAF-B2 (scaffold attachment factor B2) is a nuclear matrix-associated protein that binds to matrix- or scaffold-associating regions (MARs or SARs) on DNA and interacts with RNA polymerase II and serine-/arginine-rich RNA processing factors (SR proteins). SAF-B2, and the related SAF-B, bind to the estrogen receptor (ER) and are expressed in several breast cancer cell lines at varying levels. Subsequently, SAF-B and SAF-B2 may play a role in breast cancer by mediating cellular proliferation and division. Unlike SAF-B, which is exclusively nuclear, SAF-B2 is found in the cytoplasm as well as the nucleus.

REFERENCES

1. Badolato, J., et al. 1995. Identification and characterization of a novel human RNA-binding protein. *Gene* 166: 323-327.
2. Oesterreich, S., et al. 1997. Novel nuclear matrix protein HET binds to and influences activity of the HSP27 promoter in human breast cancer cells. *J. Cell. Biochem.* 67: 275-286.
3. Nayler, O., et al. 1998. SAF-B protein couples transcription and pre-mRNA splicing to SAR/MAR elements. *Nucleic Acids Res.* 26: 3542-359.
4. Weighardt, F., et al. 1999. A novel hnRNP protein (HAP/SAF-B) enters a subset of hnRNP complexes and relocates in nuclear granules in response to heat shock. *J. Cell Sci.* 112: 1465-1476.

CHROMOSOMAL LOCATION

Genetic locus: SAFB2 (human) mapping to 19p13.3; Safb2 (mouse) mapping to 17 D.

SOURCE

SAF-B2 (C-5) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 898-922 near the C-terminus of SAF-B2 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

SAF-B2 (C-5) is available conjugated to agarose (sc-514963 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-514963 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514963 PE), fluorescein (sc-514963 FITC), Alexa Fluor® 488 (sc-514963 AF488), Alexa Fluor® 546 (sc-514963 AF546), Alexa Fluor® 594 (sc-514963 AF594) or Alexa Fluor® 647 (sc-514963 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-514963 AF680) or Alexa Fluor® 790 (sc-514963 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-514963 P, (100 µg peptide in 0.5 ml PBS containing <0.1% sodium azide and 0.2% stabilizer protein).

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APPLICATIONS

SAF-B2 (C-5) is recommended for detection of SAF-B2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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 SAF-B2 siRNA (h): sc-44645, SAF-B2 siRNA (m): sc-44646, SAF-B2 shRNA Plasmid (h): sc-44645-SH, SAF-B2 shRNA Plasmid (m): sc-44646-SH, SAF-B2 shRNA (h) Lentiviral Particles: sc-44645-V and SAF-B2 shRNA (m) Lentiviral Particles: sc-44646-V.

Molecular Weight of SAF-B2: 150 kDa.

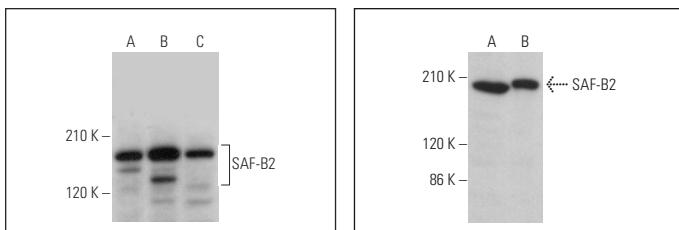
Positive Controls: MCF7 nuclear extract: sc-2149, HeLa nuclear extract: sc-2120 or CCRF-CEM cell lysate: sc-2225.

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



SAF-B2 (C-5): sc-514963. Western blot analysis of SAF-B2 expression in MCF7 (**A**) and HeLa (**B**) nuclear extracts and CCRF-CEM whole cell lysate (**C**).

SAF-B2 (C-5): sc-514963. Western blot analysis of SAF-B2 expression in CCRF-CEM (**A**) and NIH/3T3 (**B**) 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 for detailed protocols and support products.