

BRCAA1 (G-20): sc-68258

BACKGROUND

The breast cancer-associated antigen BRCAA1, also designated ARID domain-containing protein 4B (ARID4B), Sin3-associated polypeptide p180 (SAP180), or Retinoblastoma-binding protein 1-like 1 (RBBP1L1 or RBP1L1), shares 37% amino acid identity and an identical antigen epitope, SSKKQKRSHK, with Rb binding protein 1. High expression of BRCAA1 mRNA has been found in human breast, lung, colon, pancreatic and ovarian cancers, as well as in normal testis. This expression pattern indicates that BRCAA1 can be used as a molecular marker for a broad range of human malignancies. BRCAA1 also interacts with RBBP1/ARID4A and regulates genomic imprinting at the Prader-Willi syndrome (PWS)/Angelman syndrome (AS) domain.

REFERENCES

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- Cui, D., Jin, G., Gao, T., Sun, T., Tian, F., Estrada, G.G., Gao, H. and Sarai, A. 2004. Characterization of BRCAA1 and its novel antigen epitope identification. *Cancer Epidemiol. Biomarkers Prev.* 13: 1136-1145.
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CHROMOSOMAL LOCATION

Genetic locus: ARID4B (human) mapping to 1q42.3; Arid4b (mouse) mapping to 13 A1.

SOURCE

BRCAA1 (G-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of BRCAA1 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-68258 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

BRCAA1 (G-20) is recommended for detection of BRCAA1 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).

BRCAA1 (G-20) is also recommended for detection of BRCAA1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for BRCAA1 siRNA (h): sc-72661, BRCAA1 siRNA (m): sc-72662, BRCAA1 shRNA Plasmid (h): sc-72661-SH, BRCAA1 shRNA Plasmid (m): sc-72662-SH, BRCAA1 shRNA (h) Lentiviral Particles: sc-72661-V and BRCAA1 shRNA (m) Lentiviral Particles: sc-72662-V.

BRCAA1 (G-20) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

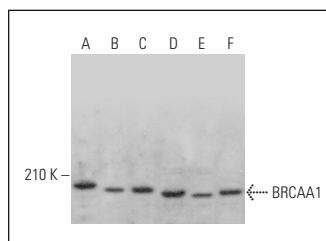
Molecular Weight of BRCAA: 148/138/130/91 kDa.

Positive Controls: SW480 cell lysate: sc-2219, A549 cell lysate: sc-2413 or ES-2 cell lysate: sc-24674.

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



BRCAA1 (G-20): sc-68258. Western blot analysis of BRCAA1 expression in SW480 (A), PC-3 (B), ES-2 (C), A549 (D), K-562 (E) and Jurkat (F) whole cell lysates.

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.