SANTA CRUZ BIOTECHNOLOGY, INC.

BRAF35 (E-20): sc-19503



BACKGROUND

The breast cancer susceptibility gene (BRCA1) localizes to chromosome 17q. Mutations within this gene account for approximately 45% of families with high incidence of breast cancer and at least 80% of families with increased incidence of both early-onset breast cancer and ovarian cancer. A second breast cancer susceptibility gene, BRCA2, located on chromosome 13q12-13, also confers a high incidence of breast cancer, but unlike BRCA1, BRCA2 does not confer a substantially elevated risk of ovarian cancer. The BRCA2-associated factor 35 (BRAF35) protein forms a complex with BRCA2, which associates with condensed chromatin during Histone H3 phosphorylation. BRAF35 expression levels are highest in proliferating tissues and parallel BRCA2 expression patterns. The structure of BRAF35 includes a kinesin-like coiled-coil domain and a nonspecific DNA binding HMG domain. The chromatin localization of BRAF35 and antibody microinjection studies indicate a role for the BRAF35/BRCA2 complex in cell cycle regulation.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: HMG20B (human) mapping to 19p13.3; Hmg20b (mouse) mapping to 10 C1.

SOURCE

BRAF35 (E-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of BRAF35 of human origin.

RESEARCH USE

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

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-19503 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

BRAF35 (E-20) is recommended for detection of BRAF35 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

BRAF35 (E-20) is also recommended for detection of BRAF35 in additional species, including canine and bovine.

Suitable for use as control antibody for BRAF35 siRNA (h): sc-37536, BRAF35 siRNA (m): sc-61844, BRAF35 shRNA Plasmid (h): sc-37536-SH, BRAF35 shRNA Plasmid (m): sc-61844-SH, BRAF35 shRNA (h) Lentiviral Particles: sc-37536-V and BRAF35 shRNA (m) Lentiviral Particles: sc-61844-V.

Molecular Weight of BRAF35: 36 kDa.

Positive Controls: BRAF35 (m): 293T Lysate: sc-118838, HeLa whole cell lysate: sc-2200 or HeLa nuclear extract: sc-2120.

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) Immunofluo-rescence: use donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



BRAF35 (E-20): sc-19503. Western blot analysis of BRAF35 expression in non-transfected: sc-117752 (**A**) and mouse BRAF35 transfected: sc-118838 (**B**) 293T whole cell lysates.

STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.