SANTA CRUZ BIOTECHNOLOGY, INC.

BRMS1L (D-20): sc-241932

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The Power to Question

BACKGROUND

BRMS1L (breast cancer metastasis-suppressor 1-like) is a 323 amino acid protein that localizes to the nucleus and exists as a component of the mSin3A/HDAC1 (histone deacetylase) complex. Sharing similarity with BRMS1, BRMS1L is involved in HDAC1-dependent transcriptional repression and, in lung cancer tissue, functions to inhibit cell growth, suggesting a role in tumor suppression. The gene encoding BRMS1L maps to human chromosome 14, which houses over 700 genes and comprises nearly 3.5% of the human genome. Chromosome 14 encodes the presinilin 1 (PSEN1) gene, which is one of the three key genes associated with the development of Alzheimer's disease (AD). The SERPINA1 gene is also located on chromosome 14 and, when defective, leads to the genetic disorder α1-antitrypsin deficiency, which is characterized by severe lung complications and liver dysfunction.

REFERENCES

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3. Meehan, W.J., et al. 2004. Breast cancer metastasis suppressor 1 (BRMS1) forms complexes with retinoblastoma-binding protein 1 (RBP1) and the mSin3 histone deacetylase complex and represses transcription. J. Biol. Chem. 279: 1562-1569.
4. Albani, D., et al. 2007. Presenilin-1 mutation E318G and familial Alzheimer's disease in the Italian population. Neurobiol. Aging 28: 1682-1688.
5. Cruz, P.E., et al. 2007. The promise of gene therapy for the treatment of α-1 antitrypsin deficiency. Pharmacogenomics 8: 1191-1198.
6. Filley, C.M., et al. 2007. The genetics of very early onset Alzheimer disease. Cogn. Behav. Neurol. 20: 149-156.
7. Martín-Subero, J.I., et al. 2007. A comprehensive genetic and histopathologic analysis identifies two subgroups of B-cell malignancies carrying a t(14;19)(q32;q13) or variant BCL3-translocation. Leukemia 21: 1532-1544.
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CHROMOSOMAL LOCATION

Genetic locus: BRMS1L (human) mapping to 14q13.2; Brms1l (mouse) mapping to 12 C1.

SOURCE

BRMS1L (D-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of BRMS1L of human origin.

RESEARCH USE

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

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-241932 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

BRMS1L (D-20) is recommended for detection of BRMS1L 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); non cross-reactive with BRMS1.

BRMS1L (D-20) is also recommended for detection of BRMS1L in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for BRMS1L siRNA (h): sc-92226, BRMS1L siRNA (m): sc-141748, BRMS1L shRNA Plasmid (h): sc-92226-SH, BRMS1L shRNA Plasmid (m): sc-141748-SH, BRMS1L shRNA (h) Lentiviral Particles: sc-92226-V and BRMS1L shRNA (m) Lentiviral Particles: sc-141748-V.

Molecular Weight of BRMS1L: 38 kDa.

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) 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.

STORAGE

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

PROTOCOLS

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