SANTA CRUZ BIOTECHNOLOGY, INC.

BAHD1 (D-17): sc-160160

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The Power to Question

BACKGROUND

BAHD1 (bromo adjacent homology domain containing 1) is a 780 amino acid nuclear protein that contains a BAH domain. BAHD1 is considered a heterochromatin protein that acts as a transcription repressor and has the ability to promote the formation of large heterochromatic domains. BAHD1 may act by recruiting heterochromatin proteins such as HP1, HDAC5 and MBD1. BAHD1 exists as three alternatively spliced isoforms and is encoded by a gene located on human chromosome 15q15.1. Chromosome 15 contains more than 700 genes and is made up of approximately 106 million base pairs. Making up about 3% of the human genome, chromosome 15 is linked with diseases such as Angelman and Prader-Willi syndromes, which are associated with loss of function or deletion of genes in the 15q11-q13 region. In the case of Angelman syndrome, this loss is due to inactivity of the maternal 15q11-q13 encoded UBE3A gene in the brain by either chromosomal deletion or mutation. In cases of Prader-Willi syndrome, there is a partial or complete deletion of this region from the paternal copy of chromosome 15.

REFERENCES

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2. Zody, M.C., et al. 2006. Analysis of the DNA sequence and duplication history of human chromosome 15. Nature 440: 671-675.
3. Diene, G., et al. 2007. The Prader-Willi syndrome. Ann. Endocrinol. 68: 129-137.
4. Lalande, M. and Calciano, M.A. 2007. Molecular epigenetics of Angelman syndrome. Cell. Mol. Life Sci. 64: 947-960.
5. Maegawa, G.H., et al. 2007. Pyrimethamine as a potential pharmacological chaperone for late-onset forms of GM2 gangliosidosis. J. Biol. Chem. 282: 9150-9161.
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CHROMOSOMAL LOCATION

Genetic locus: BAHD1 (human) mapping to 15q15.1; Bahd1 (mouse) mapping to 2 E5.

SOURCE

BAHD1 (D-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of BAHD1 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-160160 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

BAHD1 (D-17) is recommended for detection of BAHD1 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).

BAHD1 (D-17) is also recommended for detection of BAHD1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for BAHD1 siRNA (h): sc-90189, BAHD1 siRNA (m): sc-141466, BAHD1 shRNA Plasmid (h): sc-90189-SH, BAHD1 shRNA Plasmid (m): sc-141466-SH, BAHD1 shRNA (h) Lentiviral Particles: sc-90189-V and BAHD1 shRNA (m) Lentiviral Particles: sc-141466-V.

Molecular Weight of BAHD1: 85 kDa.

Positive Controls: IMR-32 cell lysate: sc-2409 or OV-90 whole cell lysate: sc-364191.

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.

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.