SANTA CRUZ BIOTECHNOLOGY, INC.

BTBD9 (V-13): sc-107468

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The Power to Question

BACKGROUND

BTBD9 (BTB/POZ domain-containing protein 9) is a 612 amino acid protein that contains one BTB/POZ domain and one BACK (BTB/Kelch associated) domain. The BTB/POZ domain mediates homomeric and heteromeric POZ-POZ interactions and is common to transcriptional regulators involved in chromatin modeling. In several BTB/POZ containing proteins, including BCL-6 and the promyelocytic leukemia zinc-finger (PLZF) oncoprotein, this domain interacts with the SMRT/N-CoR-mSin3A HDAC complex and is directly involved in repressing and silencing gene transcription. When this domain is deleted, as with the oncogenic PLZF-RAR chimera of promyelocytic leukemias, this transcriptional repression is attenuated. This suggests that BTBD9 may play a role in transcription regulation. Genetic variations in the gene that encodes BTBD9 have been associated with susceptibility to restless legs syndrome type 6 (RLS6), a condition characterized by an uncontrollable urge to move the legs while resting.

REFERENCES

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3. Ahmad, K.F., et al. 1998. Crystal structure of the BTB domain from PLZF. Proc. Natl. Acad. Sci. USA 95: 12123-12128.
4. Deltour, S., et al. 1999. Recruitment of SMRT/ N-CoR-mSin3A-HDAC-repressing complexes is not a general mechanism for BTB/POZ transcriptional repressors: the case of HIC-1 and γFBP-B. Proc. Natl. Acad. Sci. USA 96: 14831-14836.
5. Kimura, K., et al. 2006. Diversification of transcriptional modulation: large-scale identifica-tion and characterization of putative alternative promoters of human genes. Genome Res. 16: 55-65.
6. Kelly, K.F. and Daniel, J.M. 2006. POZ for effect-POZ-ZF transcription factors in cancer and development. Trends Cell Biol. 16: 578-587.
7. Winkelmann, J., et al. 2007. Genome-wide association study of restless legs syndrome identifies common variants in three genomic regions. Nat. Genet. 39: 1000-1006.
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CHROMOSOMAL LOCATION

Genetic locus: BTBD9 (human) mapping to 6p21.2; Btbd9 (mouse) mapping to 17 A3.3.

SOURCE

BTBD9 (V-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of BTBD9 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-107468 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

BTBD9 (V-13) is recommended for detection of BTBD9 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 other BTBD family members.

BTBD9 (V-13) is also recommended for detection of BTBD9 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for BTBD9 siRNA (h): sc-95568, BTBD9 siRNA (m): sc-141779, BTBD9 shRNA Plasmid (h): sc-95568-SH, BTBD9 shRNA Plasmid (m): sc-141779-SH, BTBD9 shRNA (h) Lentiviral Particles: sc-95568-V and BTBD9 shRNA (m) Lentiviral Particles: sc-141779-V.

Molecular Weight of BTBD9: 69 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.

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.