

BTBD9 (H-210): sc-292148

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

1. Wong, C.W., et al. 1998. Components of the SMRT corepressor complex exhibit distinctive interactions with the POZ domain oncoproteins PLZF, PLZF-RAR α , and BCL-6. *J. Biol. Chem.* 273: 27695-27702.
2. Huynh, K.D., et al. 1998. The BCL-6 POZ domain and other POZ domains interact with the co-repressors N-CoR and SMRT. *Oncogene* 17: 2473-2484.
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 γ FDP-B. *Proc. Natl. Acad. Sci. USA* 96: 14831-14836.
5. Kimura, K., et al. 2006. Diversification of transcriptional modulation: large-scale identification and characterization of putative alternative promoters of human genes. *Genome Res.* 16: 55-65.
6. Kelly, K.F., et al. 2006. POZ for effect-POZ-ZF transcription factors in cancer and development. *Trends Cell Biol.* 16: 578-587.

CHROMOSOMAL LOCATION

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

SOURCE

BTBD9 (H-210) is a rabbit polyclonal antibody raised against amino acids 1-210 mapping at the N-terminus of BTBD9 of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-292148 X, 200 μ g/0.1 ml.

APPLICATIONS

BTBD9 (H-210) 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), immunoprecipitation [1-2 μ g per 100-500 μ g 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); non cross-reactive with other BTBD family members.

BTBD9 (H-210) is also recommended for detection of BTBD9 in additional species, including equine, canine, bovine, porcine and avian.

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.

BTBD9 (H-210) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

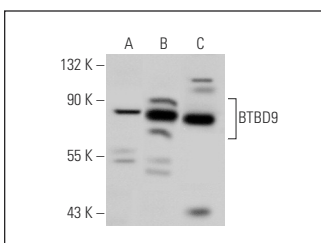
Molecular Weight of BTBD9: 69 kDa.

Positive Controls: mouse kidney extract: sc-2255 or human brain tissue extracts.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



BTBD9 (H-210): sc-292148. Western blot analysis of BTBD9 expression in COS whole cell lysate (A) and mouse kidney (B) and human brain (C) tissue extracts.

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.