

BTBD11 (S-14): sc-245046

BACKGROUND

The BTB (broad-complex, Tramtrack and Bric a brac) domain, also known as the POZ (Poxvirus and zinc finger) domain, is an N-terminal homodimerization domain that contains multiple copies of kelch repeats and/or C₂H₂-type zinc fingers. Proteins that contain BTB domains are thought to be involved in transcriptional regulation via control of chromatin structure and function. BTBD11 (BTB/POZ domain-containing protein 11) is a 1,104 amino acid single-pass membrane protein that contains five ANK repeats and one BTB (POZ) domain. BTBD11 exists as four alternatively spliced isoforms and is induced by all-trans retinoic acid (ATRA). The gene encoding BTBD11 maps to human chromosome 12, which encodes over 1,100 genes and comprises approximately 4.5% of the human genome. Chromosome 12 is associated with a variety of diseases and afflictions, including hypochondrogenesis, achondrogenesis, Kniest dysplasia, Noonan syndrome and trisomy 12p, which causes facial developmental defects and seizure disorders.

REFERENCES

1. Bardwell, V.J., et al. 1994. The POZ domain: a conserved protein-protein interaction motif. *Genes Dev.* 8: 1664-1677.
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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. Delgado Carrasco, J., et al. 2001. Achondrogenesis type II-hypochondrogenesis: radiological features. Case report. *An. Esp. Pediatr.* 55: 553-557.
5. Yokoyama, T., et al. 2003. A case of Kniest dysplasia with retinal detachment and the mutation analysis. *Am. J. Ophthalmol.* 136: 1186-1188.
6. Forzano, F., et al. 2007. A familial case of achondrogenesis type II caused by a dominant COL2A1 mutation and "patchy" expression in the mosaic father. *Am. J. Med. Genet. A.* 143A: 2815-2820.
7. Wainwright, H., et al. 2008. Visceral manifestations of hypochondrogenesis. *Virchows Arch.* 453: 203-207.

CHROMOSOMAL LOCATION

Genetic locus: BTBD11 (human) mapping to 12q23.3; Btdb11 (mouse) mapping to 10 C1.

SOURCE

BTBD11 (S-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of BTBD11 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-245046 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

BTBD11 (S-14) is recommended for detection of BTBD11 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.

BTBD11 (S-14) is also recommended for detection of BTBD11 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for BTBD11 siRNA (h): sc-95988, BTBD11 siRNA (m): sc-141770, BTBD11 shRNA Plasmid (h): sc-95988-SH, BTBD11 shRNA Plasmid (m): sc-141770-SH, BTBD11 shRNA (h) Lentiviral Particles: sc-95988-V and BTBD11 shRNA (m) Lentiviral Particles: sc-141770-V.

Molecular Weight of BTBD11: 121 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.