## SANTA CRUZ BIOTECHNOLOGY, INC.

# BTBD8 (D-16): sc-241940



The Power to Question

### 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  $C_2H_2$ -type zinc fingers. Proteins that contain BTB domains are thought to be involved in transcriptional regulation via control of chromatin structure and function. BTBD8 (BTB/POZ domain-containing protein 8) is a 378 amino acid nuclear protein that contains 2 BTB (POZ) domains and is expressed primarily in fetal tissues. Existing as two alternatively spliced isoforms, BTBD8 is encoded by a gene that maps to human chromosome 1, which spans 260 million base pairs, contains over 3,000 genes and comprises nearly 8% of the human genome. Chromosome 1 houses a large number of disease-associated genes, including those that are involved in familial adenomatous polyposis, Stickler syndrome, Parkinson's disease, Gaucher disease, schizophrenia and Usher syndrome.

#### REFERENCES

- Bardwell, V.J., et al. 1994. The POZ domain: a conserved protein-protein interaction motif. Genes Dev. 8: 1664-1677.
- Zollman, S., et al. 1994. The BTB domain, found primarily in zinc finger proteins, defines an evolutionarily conserved family that includes several developmentally regulated genes in *Drosophila*. Proc. Natl. Acad. Sci. USA 91: 10717-10721.
- Eudy, J.D., et al. 1998. Isolation of a gene encoding a novel member of the nuclear receptor superfamily from the critical region of Usher syndrome type IIa at 1q41. Genomics 50: 382-384.
- Lau, E.K., et al. 1999. Two novel polymorphic sequences in the glucocerebrosidase gene region enhance mutational screening and founder effect studies of patients with Gaucher disease. Hum. Genet. 104: 293-300.
- 5. Tayebi, N., et al. 2001. Gaucher disease and parkinsonism: a phenotypic and genotypic characterization. Mol. Genet. Metab. 73: 313-321.
- Plasilova, M., et al. 2004. Exclusion of an extracolonic disease modifier locus on chromosome 1p33-36 in a large Swiss familial adenomatous polyposis kindred. Eur. J. Hum. Genet. 12: 365-371.
- Xu, J., et al. 2004. Molecular cloning and characterization of a novel human BTBD8 gene containing double BTB/POZ domains. Int. J. Mol. Med. 13: 193-197.
- Balcárková, J., et al. 2009. Gain of chromosome arm 1q in patients in relapse and progression of multiple myeloma. Cancer Genet. Cytogenet. 192: 68-72.
- 9. Yokoi, T., et al. 2009. Analysis of the vitreous membrane in a case of type 1 Stickler syndrome. Graefes Arch. Clin. Exp. Ophthalmol. 247: 715-718.

#### CHROMOSOMAL LOCATION

Genetic locus: BTBD8 (human) mapping to 1p22.1.

## SOURCE

BTBD8 (D-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of BTBD8 of human origin.

### PRODUCT

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-241940 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## **APPLICATIONS**

BTBD8 (D-16) is recommended for detection of BTBD8 of human and rat 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).

BTBD8 (D-16) is also recommended for detection of BTBD8 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for BTBD8 siRNA (h): sc-88345, BTBD8 shRNA Plasmid (h): sc-88345-SH and BTBD8 shRNA (h) Lentiviral Particles: sc-88345-V.

Molecular Weight of BTBD8: 43 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) Immunofluo-rescence: 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, \*\*D0 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.