# SANTA CRUZ BIOTECHNOLOGY, INC.

# ZBTB43 (P-18): sc-102165



The Power to Question

# BACKGROUND

Zinc-finger proteins contain DNA-binding domains and have a wide variety of functions, most of which encompass some form of transcriptional activation or repression. The majority of zinc-finger proteins contain a Kruppel-type DNA binding domain and a KRAB domain, which is thought to interact with KAP1, thereby recruiting histone modifying proteins. Zinc finger and BTB domain-containing protein 43 (ZBTB43), also known as ZNF297B or ZBTB22B, is a 467 amino acid member of the Krüppel  $C_2H_2$ -type zinc-finger protein family. Localized to the nucleus, ZBTB43 contains a BTB domain, also known as a POZ domain, which inhibits DNA binding and mediates homotypic and heterotypic dimerization. Characteristics of the BTB domain and the interaction of ZBTB43 with BDP1 suggest that ZBTB43 functions as a transcription regulator.

## REFERENCES

- 1. Thiesen, H.J. 1990. Multiple genes encoding zinc finger domains are expressed in human T cells. New Biol. 2: 363-374.
- Abrink, M., Aveskogh, M. and Hellman, L. 1995. Isolation of cDNA clones for 42 different Kruppel-related zinc finger proteins expressed in the human monoblast cell line U-937. DNA Cell Biol. 14: 125-136.
- Ishiguro, A., Kassavetis, G.A. and Geiduschek, E.P. 2002. Essential roles of Bdp1, a subunit of RNA polymerase III initiation factor TFIIIB, in transcription and tRNA processing. Mol. Cell. Biol. 22: 3264-3275.
- 4. Schoenen, F. and Wirth, B. 2006. The zinc finger protein ZNF297B interacts with BDP1, a subunit of TFIIIB. Biol. Chem. 387: 277-284.
- 5. Smith, T.H., Stedronsky, K., Morgan, B. and McGowan, R.A. 2006. Identification and isolation of a BTB-POZ-containing gene expressed in oocytes and early embryos of the zebrafish Danio rerio. Genome 49: 808-814.
- 6. Liu, J. and Stormo, G.D. 2008. Context-dependent DNA recognition code for C<sub>2</sub>H<sub>2</sub> zinc-finger transcription factors. Bioinformatics 24: 1850-1857.

#### CHROMOSOMAL LOCATION

Genetic locus: ZBTB43 (human) mapping to 9q33.3.

#### SOURCE

ZBTB43 (P-18) is a purified rabbit polyclonal antibody raised against ZBTB43 of human origin.

# PRODUCT

Each vial contains 50  $\mu g$  IgG in 500  $\mu I$  PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

#### **STORAGE**

Store at 4° C, \*\*D0 NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

# PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

#### **APPLICATIONS**

ZBTB43 (P-18) is recommended for detection of ZBTB43 of human and dog origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for ZBTB43 siRNA (h): sc-92965, ZBTB43 shRNA Plasmid (h): sc-92965-SH and ZBTB43 shRNA (h) Lentiviral Particles: sc-92965-V.

Molecular Weight of ZBTB43: 53 kDa.

# **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).

#### DATA

ZBTB43 (P-18): sc-102165. Western blot analysis of ZBTB43 expression in fetal thymus tissue extract

## **RESEARCH USE**

For research use only, not for use in diagnostic procedures.