

ZBTB44 (S-12): sc-132879

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 Krüppel-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 44 (ZBTB44), also known as BTBD15, is a 570 amino acid member of the Krüppel C₂H₂-type zinc-finger protein family. Localized to the nucleus, ZBTB44 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 suggest that ZBTB44 functions as a transcription regulator. Four isoforms of ZBTB44 have been identified.

REFERENCES

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2. Abrink, M., Aveskogh, M. and Hellman, L. 1995. Isolation of cDNA clones for 42 different Krüppel-related zinc finger proteins expressed in the human monoblast cell line U-937. *DNA Cell Biol.* 14: 125-136.
3. Walter, L. and Günther, E. 2000. Physical mapping and evolution of the centromeric class I gene-containing region of the rat MHC. *Immunogenetics* 51: 829-837.
4. Durand, S., Abadie, P., Angeletti, S. and Genti-Raimondi, S. 2003. Identification of multiple differentially expressed messenger RNAs in normal and pathological trophoblast. *Placenta* 24: 209-218.
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 C₂H₂ zinc-finger transcription factors. *Bioinformatics* 24: 1850-1857.

CHROMOSOMAL LOCATION

Genetic locus: ZBTB44 (human) mapping to 11q24.3; Zbtb44 (mouse) mapping to 9 A4.

SOURCE

ZBTB44 (S-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ZBTB44 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-132879 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

ZBTB44 (S-12) is recommended for detection of ZBTB44 isoforms 1-4 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 ZBTB family members.

ZBTB44 (S-12) is also recommended for detection of ZBTB44 isoforms 1-4 in additional species, including equine.

Suitable for use as control antibody for ZBTB44 siRNA (h): sc-96802, ZBTB44 siRNA (m): sc-155450, ZBTB44 shRNA Plasmid (h): sc-96802-SH, ZBTB44 shRNA Plasmid (m): sc-155450-SH, ZBTB44 shRNA (h) Lentiviral Particles: sc-96802-V and ZBTB44 shRNA (m) Lentiviral Particles: sc-155450-V.

Molecular Weight of ZBTB44: 64 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227.

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.

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.