

ZBTB3 (S-12): sc-169834

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. ZBTB3 (zinc finger and BTB domain containing 3) is a 574 amino acid protein that contains one BTB (POZ) domain and 2 C₂H₂-type zinc fingers. Localized to the nucleus, ZBTB3 is thought to play a role in transcriptional regulation events. The gene encoding ZBTB3 maps to human chromosome 11, which houses over 1,400 genes and comprises nearly 4% of the human genome.

REFERENCES

1. Bardwell, V.J., et al. 1994. The POZ domain: a conserved protein-protein interaction motif. *Genes Dev.* 8: 1664-1677.
2. 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.
3. Ahmad, K.F., et al. 1998. Crystal structure of the BTB domain from PLZF. *Proc. Natl. Acad. Sci. USA* 95: 12123-12128.
4. Colland, F., et al. 2004. Functional proteomics mapping of a human signaling pathway. *Genome Res.* 14: 1324-1332.
5. Taylor, T.D., et al. 2006. Human chromosome 11 DNA sequence and analysis including novel gene identification. *Nature* 440: 497-500.

CHROMOSOMAL LOCATION

Genetic locus: ZBTB3 (human) mapping to 11q12.3; Zbtb3 (mouse) mapping to 19 A.

SOURCE

ZBTB3 (S-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of ZBTB3 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-169834 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.

PROTOCOLS

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

APPLICATIONS

ZBTB3 (S-12) is recommended for detection of ZBTB3 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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 ZBTB family members.

ZBTB3 (S-12) is also recommended for detection of ZBTB3 in additional species, including canine and porcine.

Suitable for use as control antibody for ZBTB3 siRNA (h): sc-96793, ZBTB3 siRNA (m): sc-155443, ZBTB3 shRNA Plasmid (h): sc-96793-SH, ZBTB3 shRNA Plasmid (m): sc-155443-SH, ZBTB3 shRNA (h) Lentiviral Particles: sc-96793-V and ZBTB3 shRNA (m) Lentiviral Particles: sc-155443-V.

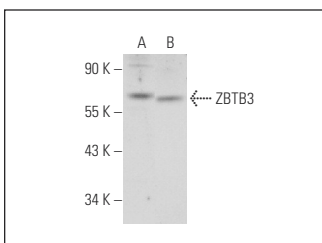
Molecular Weight of ZBTB3: 62 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or U-251-MG whole cell lysate: sc-364176.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



ZBTB3 (S-12): sc-169834. Western blot analysis of ZBTB3 expression in HeLa (A) and U-251-MG (B) whole cell lysates.

RESEARCH USE

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