

ZBTB1/2/25 (L-16): sc-109481

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. ZBTB1 (zinc finger and BTB domain containing 1), also known as KIAA0997, is a 713 amino acid nuclear protein that contains one BTB (POZ) domain and 8 C₂H₂-type zinc fingers. ZBTB2 is a 514 amino acid nuclear protein that contains one BTB (POZ) domain and 4 C₂H₂-type zinc fingers. ZBTB25, also known as ZNF46 or KUP, is a 435 amino acid nuclear protein that is expressed mainly in hematopoietic cells and testis and contains one BTB (POZ) domain and 2 C₂H₂-type zinc fingers.

REFERENCES

1. Chardin, P., et al. 1991. The KUP gene, located on human chromosome 14, encodes a protein with two distant zinc fingers. *Nucleic Acids Res.* 19: 1431-1436.
2. Bardwell, V.J. and Treisman, R. 1994. The POZ domain: a conserved protein-protein interaction motif. *Genes Dev.* 8: 1664-1677.
3. 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.
4. Ahmad, K.F., et al. 1998. Crystal structure of the BTB domain from PLZF. *Proc. Natl. Acad. Sci. USA* 95: 12123-12128.
5. Rual, J.F., et al. 2005. Towards a proteome-scale map of the human protein-protein interaction network. *Nature* 437: 1173-1178.
6. Kimura, K., et al. 2006. Diversification of transcriptional modulation: large-scale identification and characterization of putative alternative promoters of human genes. *Genome Res.* 16: 55-65.

SOURCE

ZBTB1/2/25 (L-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of ZBTB1 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-109481 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.

RESEARCH USE

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

APPLICATIONS

ZBTB1/2/25 (L-16) is recommended for detection of ZBTB1, ZBTB2 and ZBTB25 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).

ZBTB1/2/25 (L-16) is also recommended for detection of ZBTB1, ZBTB2 and ZBTB25 in additional species, including equine, canine, bovine, porcine and avian.

Molecular Weight of ZBTB1: 82 kDa.

Molecular Weight of ZBTB2: 57 kDa.

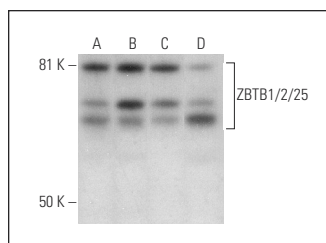
Molecular Weight of ZBTB25: 50 kDa.

Positive Controls: HeLa nuclear extract: sc-2120, Jurkat nuclear extract: sc-2132 or MCF7 nuclear extract: sc-2149.

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



ZBTB1/2/25 (L-16): sc-109481. Western blot analysis of ZBTB1/2/25 expression in HeLa (A), Jurkat (B), A-431 (C) and MCF7 (D) nuclear extracts.

PROTOCOLS

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