

ABTB1 (C-16): sc-83776

BACKGROUND

ABTB1 (ankyrin repeat and BTB/POZ domain-containing protein 1), also known as elongation factor 1A-binding protein or BPOZ, is a 478 amino acid protein localized to the cytoplasm. ABTB1 contains two ANK repeats and two BTB (POZ) domains. The BTB (POZ) domain is thought to be involved in protein-protein interactions, and may indicate a role of ABTB1 in developmental processes. It has also been suggested that ABTB1 may be a mediator of the PTEN growth-suppressive signaling pathway. ABTB1 is ubiquitously expressed in all fetal tissues, with lower levels of expression found in adult heart. ABTB1 exists as four isoforms produced by alternative splicing.

REFERENCES

- Dai, K.S., Wei, W. and Liew, C.C. 2000. Molecular cloning and characterization of a novel human gene containing ankyrin repeat and double BTB/POZ domain. *Biochem. Biophys. Res. Commun.* 273: 991-996.
- Nozaki, M. and Nakamura, Y. 2001. Growth-suppressive effects of BPOZ and EGR2, two genes involved in the PTEN signaling pathway. *Oncogene* 20: 4457-4465.
- Online Mendelian Inheritance in Man, OMIM™. 2003. Johns Hopkins University, Baltimore, MD. MIM Number: 608308. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
- Colland, F., Jacq, X., Trouplin, V., Mouglin, C., Groizeleau, C., Hamburger, A., Meil, A., Wojcik, J., Legrain, P. and Gauthier, J.M. 2004. Functional proteomics mapping of a human signaling pathway. *Genome Res.* 14: 1324-1332.
- Stead, M.A., Trinh, C.H., Garnett, J.A., Carr, S.B., Baron, A.J., Edwards, T.A. and Wright, S.C. 2007. A β -sheet interaction interface directs the tetramerisation of the Miz-1 POZ domain. *J. Mol. Biol.* 373: 820-826.
- Maezawa, S., Hayano, T., Koiwai, K., Fukushima, R., Kouda, K., Kubota, T. and Koiwai, O. 2008. Bood POZ containing gene type 2 is a human counterpart of yeast Btb3p and promotes the degradation of terminal deoxynucleotidyltransferase. *Genes Cells* 13: 439-457.
- Koiwai, K., Maezawa, S., Hayano, T., Iitsuka, M. and Koiwai, O. 2008. BPOZ-2 directly binds to eEF1A1 to promote eEF1A1 ubiquitylation and degradation and prevent translation. *Genes Cells* 13: 593-607.

CHROMOSOMAL LOCATION

Genetic locus: ABTB1 (human) mapping to 3q21.3; Abtb1 (mouse) mapping to 6 D1.

SOURCE

ABTB1 (C-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of ABTB1 of human origin.

STORAGE

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

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-83776 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-83776 X, 200 μ g/0.1 ml.

APPLICATIONS

ABTB1 (C-16) is recommended for detection of ABTB1 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 ABTB2.

ABTB1 (C-16) is also recommended for detection of ABTB1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for ABTB1 siRNA (h): sc-72420, ABTB1 siRNA (m): sc-72421, ABTB1 shRNA Plasmid (h): sc-72420-SH, ABTB1 shRNA Plasmid (m): sc-72421-SH, ABTB1 shRNA (h) Lentiviral Particles: sc-72420-V and ABTB1 shRNA (m) Lentiviral Particles: sc-72421-V.

ABTB1 (C-16) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of ABTB1: 54 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) 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.