



## ABTB2 (S-13): sc-109489

### BACKGROUND

ABTB2 (ankyrin repeat and BTB/POZ domain-containing protein 2) is a 839 amino acid protein that contains 4 ANK repeats and one BTB (POZ) domain. The BTB (broad-complex, tramtrack and bric a brac) domain, also known as the POZ (pox virus and zinc finger) domain, is an N-terminal homodimerization domain that contains multiple copies of kelch repeats and/or C<sub>2</sub>H<sub>2</sub>-type zinc fingers. Proteins that contain BTB domains are thought to be involved in transcriptional regulation via control of chromatin structure and function. ANK repeats are among the most common structural motifs in known proteins and are involved in protein-protein interactions in a diverse set of cellular functions. It is suggested that ABTB2 may be involved in the initiation of hepatocyte growth.

### REFERENCES

- Huynh, K.D. and Bardwell, V.J. 1998. The Bcl-6 POZ domain and other POZ domains interact with the co-repressors N-CoR and SMRT. *Oncogene* 17: 2473-2484.
- Deltour, S., Guerardel, C. and Leprince, D. 1999. Recruitment of SMRT/N-CoR-mSin3A-HDAC-repressing complexes is not a general mechanism for BTB/POZ transcriptional repressors: the case of HIC-1 and  $\gamma$ FBP-B. *Proc. Natl. Acad. Sci. USA* 96: 14831-14836.
- 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.
- Melnick, A., Ahmad, K.F., Arai, S., Polinger, A., Ball, H., Borden, K.L., Carlile, G.W., Prive, G.G. and Licht, J.D. 2000. In-depth mutational analysis of the promyelocytic leukemia zinc finger BTB/POZ domain reveals motifs and residues required for biological and transcriptional functions. *Mol. Cell. Biol.* 20: 6550-6567.
- Melnick, A., Carlile, G., Ahmad, K.F., Kiang, C.L., Corcoran, C., Bardwell, V., Prive, G.G. and Licht, J.D. 2002. Critical residues within the BTB domain of PLZF and Bcl-6 modulate interaction with corepressors. *Mol. Cell. Biol.* 22: 1804-1818.
- Geyer, R., Wee, S., Anderson, S., Yates, J. and Wolf, D.A. 2003. BTB/POZ domain proteins are putative substrate adaptors for cullin 3 ubiquitin ligases. *Mol. Cell* 12: 783-790.
- Mosavi, L.K., Cammett, T.J., Desrosiers, D.C. and Peng, Z.Y. 2004. The ankyrin repeat as molecular architecture for protein recognition. *Protein Sci.* 13: 1435-1448.
- Li, J., Mahajan, A. and Tsai, M.D. 2006. Ankyrin repeat: a unique motif mediating protein-protein interactions. *Biochemistry* 45: 15168-15178.
- Kelly, K.F. and Daniel, J.M. 2006. POZ for effect—POZ-ZF transcription factors in cancer and development. *Trends Cell Biol.* 16: 578-587.

### CHROMOSOMAL LOCATION

Genetic locus: ABTB2 (human) mapping to 11p13; Abtb2 (mouse) mapping to 2 E2.

### SOURCE

ABTB2 (S-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ABTB2 of human origin.

### PRODUCT

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

Blocking peptide available for competition studies, sc-109489 P, (100  $\mu$ 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-109489 X, 200  $\mu$ g/0.1 ml.

### APPLICATIONS

ABTB2 (S-13) is recommended for detection of ABTB2 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 family member ABTB1.

ABTB2 (S-13) is also recommended for detection of ABTB2 in additional species, including canine and porcine.

Suitable for use as control antibody for ABTB2 siRNA (h): sc-96681, ABTB2 siRNA (m): sc-140786, ABTB2 shRNA Plasmid (h): sc-96681-SH, ABTB2 shRNA Plasmid (m): sc-140786-SH, ABTB2 shRNA (h) Lentiviral Particles: sc-96681-V and ABTB2 shRNA (m) Lentiviral Particles: sc-140786-V.

ABTB2 (S-13) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of ABTB2: 93 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.

### 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.

### PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.