SANTA CRUZ BIOTECHNOLOGY, INC.

Kctd12b (M-16): sc-139257

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The Power to Question

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 C_2H_2-type zinc fingers. Proteins that contain BTB domains are thought to be involved in transcriptional regulation via control of chromatin structure and function. Kctd12b (potassium channel tetramerisation domain containing 12b) is a 292 amino acid protein that contains a potassium channel tetramerisation domain and a BTB/POZ domain, which suggests a possible role as a transcriptional regulator. The gene encoding Kctd12b maps to mouse chromosome X F3.

REFERENCES

1. Bardwell, V.J. and Treisman, R. 1994. The POZ domain: a conserved protein-protein interaction motif. Genes Dev. 8: 1664-1677.
2. Zollman, S., Godt, D., Privé, G.G., Couderc, J.L. and Laski, F.A. 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., Engel, C.K. and Privé, G.G. 1998. Crystal structure of the BTB domain from PLZF. Proc. Natl. Acad. Sci. USA 95: 12123-12128.
4. Ding, X.F., Luo, C., Ren, K.Q., Zhang, J., Zhou, J.L., Hu, X., Liu, R.S., Wang, Y., Gao, X. and Zhang, J. 2008. Characterization and expression of a human KCTD1 gene containing the BTB domain, which mediates transcriptional repression and homomeric interactions. DNA Cell Biol. 27: 257-265.
5. Siggs, O.M. and Beutler, B. 2012. The BTB-ZF transcription factors. Cell Cycle 11: 3358-3369.

CHROMOSOMAL LOCATION

Genetic locus: Kctd12b (mouse) mapping to X F3.

SOURCE

Kctd12b (M-16) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the C-terminus of Kctd12b of mouse origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-139257 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

Kctd12b (M-16) is recommended for detection of Kctd12b of mouse origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other KCTD family members.

Suitable for use as control antibody for Kctd12b siRNA (m): sc-146384, Kctd12b shRNA Plasmid (m): sc-146384-SH and Kctd12b shRNA (m) Lentiviral Particles: sc-146384-V.

Molecular Weight of Kctd12b: 37 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

RESEARCH USE

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