



KCTD4 (NN-07): sc-100998

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. KCTD4 (potassium channel tetramerisation domain containing 4) is a 259 amino acid protein that contains one BTB domain, suggesting a possible role as a transcriptional regulator.

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. Rual, J.F., Venkatesan, K., Hao, T., Hirozane-Kishikawa, T., Dricot, A., Li, N., Berriz, G.F., Gibbons, F.D., Dreze, M., Ayivi-Guedehoussou, N., Klitgord, N., Simon, C., Boxem, M., Milstein, S., Rosenberg, J., Goldberg, D.S., et al. 2005. Towards a proteome-scale map of the human protein-protein interaction network. *Nature* 437: 1173-1178.
5. Kimura, K., Wakamatsu, A., Suzuki, Y., Ota, T., Nishikawa, T., Yamashita, R., Yamamoto, J., Sekine, M., Tsuritani, K., Wakaguri, H., Ishii, S., Sugiyama, T., Saito, K., Isono, Y., Irie, R., Kushida, N., Yoneyama, T., Otsuka, R., et al. 2006. Diversification of transcriptional modulation: large-scale identification and characterization of putative alternative promoters of human genes. *Genome Res.* 16: 55-65.

CHROMOSOMAL LOCATION

Genetic locus: KCTD4 (human) mapping to 13q14.12; Kctd4 (mouse) mapping to 14 D3.

SOURCE

KCTD4 (NN-07) is a mouse monoclonal antibody raised against recombinant KCTD4 of human origin.

PRODUCT

Each vial contains 50 µg IgG_{2b} kappa light chain in 0.5 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

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

KCTD4 (NN-07) is recommended for detection of KCTD4 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for KCTD4 siRNA (h): sc-75378, KCTD4 siRNA (m): sc-146395, KCTD4 shRNA Plasmid (h): sc-75378-SH, KCTD4 shRNA Plasmid (m): sc-146395-SH, KCTD4 shRNA (h) Lentiviral Particles: sc-75378-V and KCTD4 shRNA (m) Lentiviral Particles: sc-146395-V.

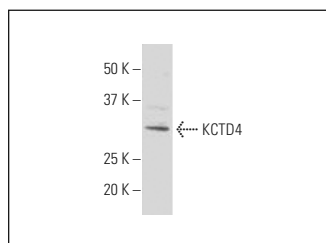
Molecular Weight of KCTD4: 30 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



KCTD4 (NN-07): sc-100998. Western blot analysis of KCTD4 expression in HeLa whole cell lysate.

PROTOCOLS

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