

KCTD18 (I-24): sc-101992



BACKGROUND

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 C₂H₂-type zinc fingers. Proteins that contain BTB domains are thought to be involved in transcriptional regulation via control of chromatin structure and function. KCTD18 (potassium channel tetramerisation domain containing 18) is a 426 amino acid protein that contains one BTB (POZ) domain, possibly indicating a role in transcription regulation. KCTD18 is expressed as three isoforms produced by alternative splicing.

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.
6. Bayón, Y., Trinidad, A.G., de la Puerta, M.L., Del Carmen Rodríguez, M., Bogetz, J., Rojas, A., De Pereda, J.M., Rahmouni, S., Williams, S., Matsuzawa, S.I., Reed, J.C., Crespo, M.S., Mustelin, T. and Alonso, A. 2008. KCTD5, a putative substrate adaptor for Cullin-3 ubiquitin ligases. *FEBS J.* 275: 3900-3910.

CHROMOSOMAL LOCATION

Genetic locus: KCTD18 (human) mapping to 2q33.1.

SOURCE

KCTD18 (I-24) is a purified rabbit polyclonal antibody raised against KCTD18 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 100 µg IgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

APPLICATIONS

KCTD18 (I-24) is recommended for detection of KCTD18 of 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 KCTD18 siRNA (h): sc-94447, KCTD18 shRNA Plasmid (h): sc-94447-SH and KCTD18 shRNA (h) Lentiviral Particles: sc-94447-V.

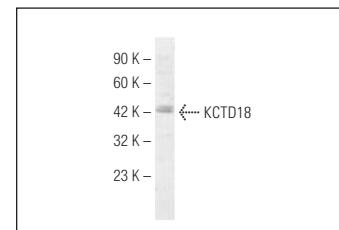
Molecular Weight of KCTD18: 47 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



KCTD18 (I-24): sc-101992. Western blot analysis of KCTD18 expression in Jurkat whole cell lysate.

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.