

KCTD6 (J-22): sc-133707

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. KCTD6 (potassium channel tetramerisation domain containing 6) is a 237 amino acid protein that contains one BTB domain, suggesting a possible role as a transcriptional regulator. The gene encoding KCTD6 maps to chromosome 3, which contains over 1,100 genes. Notably, a chemokine receptor gene cluster and a variety of human cancer related loci reside on chromosome 3. Particular regions of the chromosome 3 short arm are deleted in many types of cancer cells as well.

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., et al. 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., et al. 1998. Crystal structure of the BTB domain from PLZF. *Proc. Natl. Acad. Sci. USA* 95: 12123-12128.
4. Braga, E.A., et al. 2003. New tumor suppressor genes in hot spots of human chromosome 3: new methods of identification. *Mol. Biol.* 37: 194-211.
5. Darai, E., et al. 2005. Evolutionarily plastic regions at human 3p21.3 coincide with tumor breakpoints identified by the "elimination test". *Genomics* 86: 1-12.
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7. Kimura, K., et al. 2006. Diversification of transcriptional modulation: large-scale identification and characterization of putative alternative promoters of human genes. *Genome Res.* 16: 55-65.
8. Muzny, D.M., et al. 2006. The DNA sequence, annotation and analysis of human chromosome 3. *Nature* 440: 1194-1198.

CHROMOSOMAL LOCATION

Genetic locus: KCTD6 (human) mapping to 3p14.3; Kctd6 (mouse) mapping to 14 A1.

SOURCE

KCTD6 (J-22) is a Protein A purified rabbit polyclonal antibody raised against synthetic KCTD6 peptide of human origin.

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

KCTD6 (J-22) is recommended for detection of KCTD6 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 KCTD6 siRNA (h): sc-78307, KCTD6 siRNA (m): sc-146397, KCTD6 shRNA Plasmid (h): sc-78307-SH, KCTD6 shRNA Plasmid (m): sc-146397-SH, KCTD6 shRNA (h) Lentiviral Particles: sc-78307-V and KCTD6 shRNA (m) Lentiviral Particles: sc-146397-V.

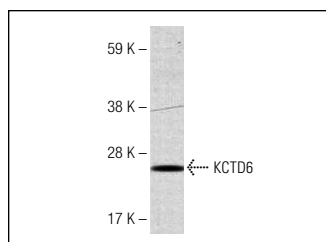
Molecular Weight of KCTD6: 28 kDa.

Positive Controls: human fetal lung tissue extract or HeLa whole cell lysate: sc-2200.

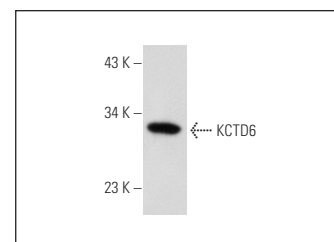
RECOMMENDED SECONDARY REAGENTS

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



KCTD6 (J-22): sc-133707. Western blot analysis of KCTD6 expression in human fetal lung tissue extract.



KCTD6 (J-22): sc-133707. Western blot analysis of KCTD6 expression in HeLa whole cell lysate.

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 or our catalog for detailed protocols and support products.