

KCTD13 (P-17): sc-82211

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. KCTD13 (potassium channel tetramerisation domain containing 13), also known as polymerase δ -interacting protein 1 (PDIP1 or POLDIP1), is a 329 amino acid protein that contains one BTB domain and is expressed in a wide variety of tissues. KCTD13 interacts with proliferating cell nuclear antigen (PCNA) and the small subunit of polymerase δ and plays a role in DNA repair, DNA replication and cell-cycle control. KCTD13 is induced by tumor necrosis factor α (TNF α) and by IL-6 suggesting KCTD13 provides a link between cytokine activation and DNA replication.

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., Prive, 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 Prive, G.G. 1998. Crystal structure of the BTB domain from PLZF. *Proc. Natl. Acad. Sci. USA* 95: 12123-12128.
4. He, H., Tan, C.K., Downey, K.M. and So, A.G. 2001. A tumor necrosis factor α - and interleukin 6-inducible protein that interacts with the small subunit of DNA polymerase δ and proliferating cell nuclear antigen. *Proc. Natl. Acad. Sci. USA* 98: 11979-11984.

CHROMOSOMAL LOCATION

Genetic locus: KCTD13 (human) mapping to 16p11.2; Kctd13 (mouse) mapping to 7 F3.

SOURCE

KCTD13 (P-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of KCTD13 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-82211 P, (100 μ 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-82211 X, 200 μ g/0.1 ml.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

KCTD13 (P-17) is recommended for detection of KCTD13 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], 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).

KCTD13 (P-17) is also recommended for detection of KCTD13 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for KCTD13 siRNA (h): sc-75375, KCTD13 siRNA (m): sc-75376, KCTD13 shRNA Plasmid (h): sc-75375-SH, KCTD13 shRNA Plasmid (m): sc-75376-SH, KCTD13 shRNA (h) Lentiviral Particles: sc-75375-V and KCTD13 shRNA (m) Lentiviral Particles: sc-75376-V.

KCTD13 (P-17) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

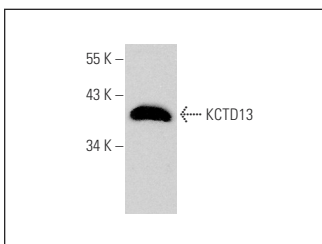
Molecular Weight of KCTD13: 36 kDa.

Positive Controls: KNRK whole cell lysate: sc-2214 or KCTD13 (h): 293T Lysate: sc-174344.

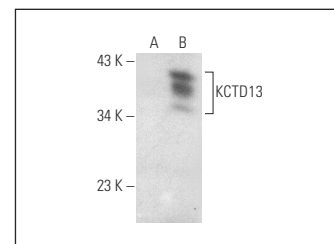
RECOMMENDED SECONDARY REAGENTS

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



KCTD13 (P-17): sc-82211. Western blot analysis of KCTD13 expression in KNRK whole cell lysate.



KCTD13 (P-17): sc-82211. Western blot analysis of KCTD13 expression in non-transfected: sc-117752 (A) and human KCTD13 transfected: sc-174344 (B) 293T whole cell lysates.

RESEARCH USE

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