

# KLHDC7B (T-18): sc-86508

## 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<sub>2</sub>H<sub>2</sub>-type zinc fingers. Proteins that contain BTB domains are thought to be involved in transcriptional regulation via control of chromatin structure and function. The kelch domain-containing protein 7B (KLHDC7B) contains five kelch repeats suggesting a role in transcription regulation. The gene encoding KLHDC6 maps to chromosome 22, which contains over 500 genes. As the second smallest human chromosome, 22 contains a surprising variety of interesting genes, including Phelan-McDermid syndrome, neurofibromatosis type 2 and autism.

## REFERENCES

1. Bardwell, V.J., et al. 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. Gilbert, F. 1998. Disease genes and chromosomes: disease maps of the human genome. *Chromosome 22. Genet. Test.* 2: 89-97.
5. Tsilchorozidou, T., et al. 2004. Constitutional rearrangements of chromosome 22 as a cause of neurofibromatosis 2. *J. Med. Genet.* 41: 529-534.
6. Rual, J.F., et al. 2005. Towards a proteome-scale map of the human protein-protein interaction network. *Nature* 437: 1173-1178.
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.

## CHROMOSOMAL LOCATION

Genetic locus: KLHDC7B (human) mapping to 22q13.33; Klhdc7b (mouse) mapping to 15 E3.

## SOURCE

KLHDC7B (T-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of KLHDC7B of human origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-86508 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## RESEARCH USE

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

## APPLICATIONS

KLHDC7B (T-18) is recommended for detection of KLHDC7B of mouse 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)], 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); non cross-reactive with family members KLHDC6 and KLHDC8B.

KLHDC7B (T-18) is also recommended for detection of KLHDC7B in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for KLHDC7B siRNA (h): sc-75392, KLHDC7B siRNA (m): sc-146507, KLHDC7B shRNA Plasmid (h): sc-75392-SH, KLHDC7B shRNA Plasmid (m): sc-146507-SH, KLHDC7B shRNA (h) Lentiviral Particles: sc-75392-V and KLHDC7B shRNA (m) Lentiviral Particles: sc-146507-V.

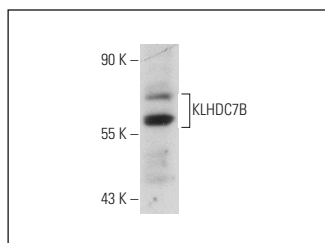
Molecular Weight of KLHDC7B: 63 kDa.

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 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



KLHDC7B (T-18): sc-86508. Western blot analysis of KLHDC7B expression in Jurkat 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.