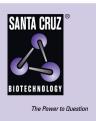
SANTA CRUZ BIOTECHNOLOGY, INC.

KLHL17 (D-14): sc-162995



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_2H_2 -type zinc fingers. Proteins that contain BTB domains are thought to be involved in transcriptional regulation via control of chromatin structure and function. KLHL17 (kelch-like protein 17) is a 642 amino acid protein containing a BACK (BTB/ kelch associated) domain, a BTB (POZ) domain, and 6 kelch repeats. Expressed in brain, KLHL17 interacts with F-actin, and may function in actin-based neuronal function. KLHL17 interacts with PDZK1, which is essential for the integrity of actin cytoskeletons, as well as SYNGAP1, KLHL17 and NMDA receptors. The gene encoding KLHL17 maps to human chromosome 1p36.33 and mouse chromosome 4 E2.

REFERENCES

- 1. Albagli, O., Dhordain, P., Deweindt, C., Lecocq, G. and Leprince, D. 1995. The BTB/POZ domain: a new protein-protein interaction motif common to DNA- and actin-binding proteins. Cell Growth Differ. 6: 1193-1198.
- Adams, J., Kelso, R. and Cooley, L. 2000. The kelch repeat superfamily of proteins: propellers of cell function. Trends Cell Biol. 10: 17-24.
- Braybrook, C., Warry, G., Howell, G., Arnason, A., Bjornsson, A., Moore, G.E., Ross, M.T. and Stanier, P. 2001. Identification and characterization of KLHL4, a novel human homologue of the *Drosophila* Kelch gene that maps within the X-linked cleft palate and Ankyloglossia (CPX) critical region. Genomics 72: 128-136.
- Braybrook, C., Warry, G., Howell, G., Mandryko, V., Arnason, A., Bjornsson, A., Ross, M.T., Moore, G.E. and Stanier, P. 2001. Physical and transcriptional mapping of the X-linked cleft palate and ankyloglossia (CPX) critical region. Hum. Genet. 108: 537-545.
- 6. Prag, S. and Adams, J.C. 2003. Molecular phylogeny of the kelch-repeat superfamily reveals an expansion of BTB/kelch proteins in animals. BMC Bioinformatics 4: 42.
- 7. Stogios, P.J. and Privé, G.G. 2004. The BACK domain in BTB-kelch proteins. Trends Biochem. Sci. 29: 634-637.

CHROMOSOMAL LOCATION

Genetic locus: KLHL17 (human) mapping to 1p36.33; Klhl17 (mouse) mapping to 4 E2.

SOURCE

KLHL17 (D-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of KLHL17 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-162995 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

KLHL17 (D-14) is recommended for detection of KLHL17 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 other KLHL family members.

KLHL17 (D-14) is also recommended for detection of KLHL17 in additional species, including equine, canine, bovine and avian.

Suitable for use as control antibody for KLHL17 siRNA (h): sc-88478, KLHL17 siRNA (m): sc-146517, KLHL17 shRNA Plasmid (h): sc-88478-SH, KLHL17 shRNA Plasmid (m): sc-146517-SH, KLHL17 shRNA (h) Lentiviral Particles: sc-88478-V and KLHL17 shRNA (m) Lentiviral Particles: sc-146517-V.

Molecular Weight of KLHL17: 70 kDa.

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) Immunofluo-rescence: 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.

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.



Try **KLHL17 (H-7): sc-514593**, our highly recommended monoclonal alternative to KLHL17 (D-14).