SANTA CRUZ BIOTECHNOLOGY, INC.

KLHL29 (L-14): sc-240598

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The Power to Question

BACKGROUND

KLHL29 (Kelch-like protein 29), also known as KBTBD9, is a 655 amino acid protein that is related to the *Drosophila* Kelch protein. Mutations affecting Kelch function result in failure of Kelch to associate with the ring canals and subsequent female sterility. Human KLHL29 contains six kelch repeats and one BTB (POZ) domain. 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. KLHL29 exists as two alternatively spliced isoforms which are encoded by a gene that maps to human chromosome 2p24.1.

REFERENCES

1. Albagli, O., et al. 1995. The BTB/POZ domain: a new protein-protein interaction motif common to DNA- and actin-binding proteins. Cell Growth Differ. 6: 1193-1198.
2. Robinson, D.N., et al. 1997. *Drosophila* kelch is an oligomeric ring canal Actin organizer. J. Cell Biol. 138: 799-810.
3. Lai, F., et al. 2000. Molecular characterization of KLHL3, a human homologue of the *Drosophila* kelch gene. Genomics 66: 65-75.
4. Adams, J., et al. 2000. The kelch repeat superfamily of proteins: propellers of cell function. Trends Cell Biol. 10: 17-24.
5. Prag, S., et al. 2003. Molecular phylogeny of the kelch-repeat superfamily reveals an expansion of BTB/kelch proteins in animals. BMC Bioinformatics. 4: 42.
6. Stogios, P.J., et al. 2004. The BACK domain in BTB-kelch proteins. Trends Biochem. Sci. 29: 634-637.
7. Gorjánácz, M., et al. 2006. Domains of Importin-α2 required for ring canal assembly during *Drosophila* oogenesis. J. Struct. Biol. 154: 27-41.

CHROMOSOMAL LOCATION

Genetic locus: KLHL29 (human) mapping to 2p24.1; Klhl29 (mouse) mapping to 12 A1.1.

SOURCE

KLHL29 (L-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of KLHL29 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-240598 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

KLHL29 (L-14) is recommended for detection of KLHL29 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.

Suitable for use as control antibody for KLHL29 siRNA (h): sc-94753, KLHL29 siRNA (m): sc-146528, KLHL29 shRNA Plasmid (h): sc-94753-SH, KLHL29 shRNA Plasmid (m): sc-146528-SH, KLHL29 shRNA (h) Lentiviral Particles: sc-94753-V and KLHL29 shRNA (m) Lentiviral Particles: sc-146528-V.

Molecular Weight of KLHL29: 71 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) 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.

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.