SANTA CRUZ BIOTECHNOLOGY, INC.

KLHL4 (D-15): sc-138379

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The Power to Question

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. KLHL4 (kelch-like 4), also known as DKELCHL, is a 718 amino acid cytoplasmic protein that is expressed in adult fibroblasts and in a range of fetal tissues including tongue, palate and mandible. KLHL4 contains one BTB (POZ) domain and six Kelch repeats. KLHL4 is exists as four alternatively spliced isoforms and is encoded by a gene located on human chromosome Xq21.31.

REFERENCES

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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.
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CHROMOSOMAL LOCATION

Genetic locus: KLHL4 (human) mapping to Xq21.31.

SOURCE

KLHL4 (D-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of KLHL4 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-138379 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

KLHL4 (D-15) is recommended for detection of KLHL4 of human and rat 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 other KLHL family members.

Suitable for use as control antibody for KLHL4 siRNA (h): sc-90873, KLHL4 shRNA Plasmid (h): sc-90873-SH and KLHL4 shRNA (h) Lentiviral Particles: sc-90873-V.

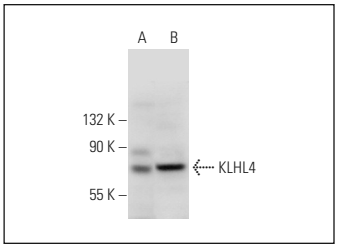
Molecular Weight of KLHL4 isoforms: 80/81 kDa.

Positive Controls: WI-38 whole cell lysate: sc-364260 or IMR-32 cell lysate: sc-2409.

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



KLHL4 (D-15): sc-138379. Western blot analysis of KLHL4 expression in WI-38 (**A**) and IMR-32 (**B**) whole cell lysates.

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.