

# KLHL14 (N-20): sc-84871

## BACKGROUND

KLHL14 (kelch-like protein 14) is a 628 amino acid protein that is related to the *Drosophila* kelch protein, which is required to maintain actin organization in ovarian ring canals. Mutations affecting kelch function result in failure of kelch to associate with the ring canals and subsequent female sterility. Human KLHL14 protein 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<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.

## 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: KLHL14 (human) mapping to 18q12.1; Klhl14 (mouse) mapping to 18 A2.

## SOURCE

KLHL14 (N-20) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the N-terminus of KLHL14 of human origin.

## STORAGE

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

## PRODUCT

Each vial contains 100  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-84871 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

KLHL14 (N-20) is recommended for detection of KLHL14 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 KLHL1.

KLHL14 (N-20) is also recommended for detection of KLHL14 in additional species, including canine, bovine, porcine and avian.

Suitable for use as control antibody for KLHL14 siRNA (h): sc-75395, KLHL14 siRNA (m): sc-146515, KLHL14 shRNA Plasmid (h): sc-75395-SH, KLHL14 shRNA Plasmid (m): sc-146515-SH, KLHL14 shRNA (h) Lentiviral Particles: sc-75395-V and KLHL14 shRNA (m) Lentiviral Particles: sc-146515-V.

Molecular Weight of KLHL14: 71 kDa.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (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](http://www.scbt.com) or our catalog for detailed protocols and support products.