

## KLHL30 (E-14): sc-138801

### BACKGROUND

KLHL30 (kelch-like protein 30) is a 578 amino acid protein containing one BACK (BTB/kelch associated) domain, one BTB (POZ) domain and 6 kelch repeats. The BTB (broad-complex, tramtrack and bric a brac) domain, also known as the POZ (poxvirus and Zinc finger) domain, is an N-terminal homo-dimerization 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. Mutations affecting kelch function result in failure of kelch to associate with the ring canals. The gene encoding KLHL30 maps to human chromosome 2q37.3 and mouse chromosome 1 D.

### REFERENCES

- 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.
- Robinson, D.N. and Cooley, L. 1997. *Drosophila* kelch is an oligomeric ring canal actin organizer. *J. Cell Biol.* 138: 799-810.
- Lai, F., Orelli, B.J., Till, B.G., Godley, L.A., Fernald, A.A., Pamintuan, L. and Le Beau, M.M. 2000. Molecular characterization of KLHL3, a human homologue of the *Drosophila* kelch gene. *Genomics* 66: 65-75.
- Adams, J., Kelso, R. and Cooley, L. 2000. The kelch repeat superfamily of proteins: propellers of cell function. *Trends Cell Biol.* 10: 17-24.
- 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.
- Stogios, P.J. and Prive, G.G. 2004. The BACK domain in BTB-kelch proteins. *Trends Biochem. Sci.* 29: 634-637.
- Gorjánác, M., Török, I., Pomozi, I., Garab, G., Szlanka, T., Kiss, I. and Mechler, B.M. 2006. Domains of Importin- $\alpha$ 2 required for ring canal assembly during *Drosophila* oogenesis. *J. Struct. Biol.* 154: 27-41.

### CHROMOSOMAL LOCATION

Genetic locus: KLHL30 (human) mapping to 2q37.3; Khl30 (mouse) mapping to 1 D.

### SOURCE

KLHL30 (E-14) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of KLHL30 of human origin.

### 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-138801 P, (100  $\mu$ g 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

KLHL30 (E-14) is recommended for detection of KLHL30 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other KLHL family members.

KLHL30 (E-14) is also recommended for detection of KLHL30 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for KLHL30 siRNA (h): sc-94484, KLHL30 siRNA (m): sc-146529, KLHL30 shRNA Plasmid (h): sc-94484-SH, KLHL30 shRNA Plasmid (m): sc-146529-SH, KLHL30 shRNA (h) Lentiviral Particles: sc-94484-V and KLHL30 shRNA (m) Lentiviral Particles: sc-146529-V.

Molecular Weight of KLHL30: 64 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.

### 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.