KLHL25 (A-12): sc-131967



The Power to Question

BACKGROUND

KLHL25 (ectoderm-neural cortex protein 2, ENC2) is a cytoplasmic protein that contains six Kelch regions and a single BTB (POZ) domain. KLHL25 is highly homologus to another Kelch-like protein, ENC1, and it is believed to operate in a manner similar to other Kelch-domain containing proteins. Kelch-domain repeat containing proteins often act as modifiers of Actin fibers. Expressed early in embryogenesis, ENC1 helps to mediate neuronal process formation. It also appears to have a role in neural crest cell differentiation. KLHL25 likely functions as a substrate specific adapter for protein ubiquitinating complexes. KLHL25 is expressed in most tissues with highest expression in brain and liver.

REFERENCES

- Hernandez, M.C., et al. 1997. ENC-1: a novel mammalian Kelch-related gene specifically expressed in the nervous system encodes an Actin-binding protein. J. Neurosci. 17: 3038-3051.
- 2. Seng, S., et al. 2006. KLHL1/MRP2 mediates neurite outgrowth in a glycogen synthase kinase 3β -dependent manner. Mol. Cell. Biol. 26: 8371-8384.
- 3. Peeters, T., et al. 2006. Kelch-repeat proteins interacting with the ${\sf G}_{\alpha}$ protein Gpa2 bypass adenylate cyclase for direct regulation of protein kinase A in yeast. Proc. Natl. Acad. Sci. USA 103: 13034-13039.
- Angers, S., et al. 2006. The KLHL12-Cullin-3 ubiquitin ligase negatively regulates the Wnt-β-catenin pathway by targeting dishevelled for degradation. Nat. Cell Biol. 8: 348-357.
- 5. Peeters, T., et al. 2007. Directly from G_{α} to protein kinase A: the Kelch repeat protein bypass of adenylate cyclase. Trends Biochem. Sci. 32: 547-554.
- 6. Niranjan, T., et al. 2007. Kelch repeat protein interacts with the yeast ${\rm G}_{\alpha}$ subunit Gpa2p at a site that couples receptor binding to guanine nucleotide exchange. J. Biol. Chem. 282: 24231-24238.

CHROMOSOMAL LOCATION

Genetic locus: KLHL25 (human) mapping to 15q25.3; Klhl25 (mouse) mapping to 7 D2.

SOURCE

KLHL25 (A-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of KLHL25 of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-131967 P, (100 μ g 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

KLHL25 (A-12) is recommended for detection of KLHL25 of mouse, rat and human 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.

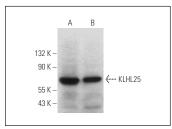
KLHL25 (A-12) is also recommended for detection of KLHL25 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for KLHL25 siRNA (h): sc-89948, KLHL25 siRNA (m): sc-146525, KLHL25 shRNA Plasmid (h): sc-89948-SH, KLHL25 shRNA Plasmid (m): sc-146525-SH, KLHL25 shRNA (h) Lentiviral Particles: sc-89948-V and KLHL25 shRNA (m) Lentiviral Particles: sc-146525-V.

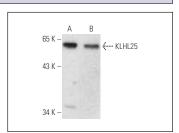
Molecular Weight of KLHL25: 66 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Jurkat whole cell lysate: sc-2204 or Hep G2 cell lysate: sc-2227.

DATA







KLHL25 (A-12): sc-131967. Western blot analysis of KLHL25 expression in HeLa (**A**) and Hep G2 (**B**) whole cell lysates.

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 **KLHL25 (K-20): sc-100774**, our highly recommended monoclonal alternative to KLHL25 (A-12).

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