

KLHL36 (E-2): sc-390052



The Power to Question

BACKGROUND

KLHL36 is a 616 amino acid protein that contains six Kelch repeats, one BTB/POZ domain and one BTB/Kelch associated (BACK) domain. KLHL36 is believed to play a role in protein ubiquitination and may function as a substrate-specific adapter of an E3 ubiquitin-protein ligase complex. E3 ligases accept a ubiquitin residue from an E2 ubiquitin-conjugating enzyme and immediately transfer that residue to a protein that is targeted for degradation. Specifically, KLHL36 interacts with CUL-3, a member of the cullin family of mediators that participate in the selective targeting of proteins for ubiquitin-mediated proteolysis. Due to alternative splicing events, two isoforms of KLHL36 are expressed.

REFERENCES

1. Tyers, M., et al. 1999. One ring to rule a superfamily of E3 ubiquitin ligases. *Science* 284: 601, 603-604.
2. Singer, J.D., et al. 1999. Cullin-3 targets cyclin E for ubiquitination and controls S phase in mammalian cells. *Genes Dev.* 13: 2375-2387.
3. Iwai, K., et al. 1999. Identification of the von Hippel-Lindau tumor-suppressor protein as part of an active E3 ubiquitin ligase complex. *Proc. Natl. Acad. Sci. USA* 96: 12436-12441.
4. Carneiro, L.A., et al. 2007. Nod-like receptors in innate immunity and inflammatory diseases. *Ann. Med.* 39: 581-593.

CHROMOSOMAL LOCATION

Genetic locus: KLHL36 (human) mapping to 16q24.1; Klhl36 (mouse) mapping to 8 E1.

SOURCE

KLHL36 (E-2) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 3-29 near the N-terminus of KLHL36 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

KLHL36 (E-2) is available conjugated to agarose (sc-390052 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-390052 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-390052 PE), fluorescein (sc-390052 FITC), Alexa Fluor® 488 (sc-390052 AF488), Alexa Fluor® 546 (sc-390052 AF546), Alexa Fluor® 594 (sc-390052 AF594) or Alexa Fluor® 647 (sc-390052 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-390052 AF680) or Alexa Fluor® 790 (sc-390052 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-390052 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

KLHL36 (E-2) is recommended for detection of KLHL36 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

KLHL36 (E-2) is also recommended for detection of KLHL36 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for KLHL36 siRNA (h): sc-93153, KLHL36 siRNA (m): sc-141541, KLHL36 shRNA Plasmid (h): sc-93153-SH, KLHL36 shRNA Plasmid (m): sc-141541-SH, KLHL36 shRNA (h) Lentiviral Particles: sc-93153-V and KLHL36 shRNA (m) Lentiviral Particles: sc-141541-V.

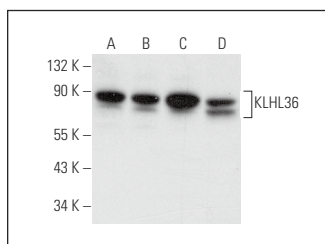
Molecular Weight of KLHL36: 70 kDa.

Positive Controls: BT-20 cell lysate: sc-2223, MCF7 whole cell lysate: sc-2206 or Hep G2 cell lysate: sc-2227.

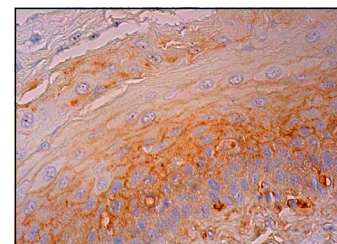
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



KLHL36 (E-2): sc-390052. Western blot analysis of KLHL36 expression in BT-20 (A), MCF7 (B), HeLa (C) and Hep G2 (D) whole cell lysates.



KLHL36 (E-2): sc-390052. Immunoperoxidase staining of formalin fixed, paraffin-embedded human esophagus tissue showing membrane and cytoplasmic staining of squamous epithelial cells.

STORAGE

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