

#### KLHL13 Antibody

Purified Mouse Monoclonal Antibody Catalog # AO1420a

#### Specification

# KLHL13 Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Calculated MW **Description**  WB, IHC, FC, ICC, E <u>Q9P2N7</u> Human Mouse Monoclonal IgG1 74kDa KDa

KLHL13 (kelch-like 13), also known as BKLHD2 (BTB and kelch domain-containing protein 2), is a 604 amino acid protein that contains six Kelch repeats and one BTB/POZ domain. Expressed predominantly in brain, KLHL13 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, KLHL13 interacts with KLHL9 and CUL-3, a member of the cullin family of mediators that participate in the selective targeting of proteins for ubiquitin-mediated proteolysis. Via its BTB and C-terminal Kelch (BACK) motif, KLHL13 is thought to play a role in spatially orientating substrates in the CUL-3 ligase.

Immunogen Purified recombinant fragment of human KLHL13 expressed in E. Coli. <br />

**Formulation** Ascitic fluid containing 0.03% sodium azide. <br />

# KLHL13 Antibody - Additional Information

Gene ID 90293

**Other Names** Kelch-like protein 13, BTB and kelch domain-containing protein 2, KLHL13, BKLHD2, KIAA1309

Dilution WB~~1/500 - 1/2000 IHC~~1/500 - 1/2000 FC~~1/200 - 1/400 ICC~~N/A E~~N/A

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions



KLHL13 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

### KLHL13 Antibody - Protein Information

Name KLHL13

Synonyms BKLHD2, KIAA1309

Function

Substrate-specific adapter of a BCR (BTB-CUL3-RBX1) E3 ubiquitin-protein ligase complex required for mitotic progression and cytokinesis. The BCR(KLHL9-KLHL13) E3 ubiquitin ligase complex mediates the ubiquitination of AURKB and controls the dynamic behavior of AURKB on mitotic chromosomes and thereby coordinates faithful mitotic progression and completion of cytokinesis.

### **KLHL13 Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

KLHL13 Antibody - Images

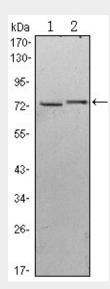


Figure 1: Western blot analysis using KLHL13 mouse mAb against Hela (1) and MCF-7 (2) cell lysate.



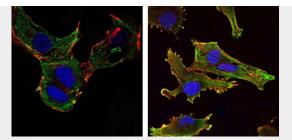


Figure 2: Immunofluorescence analysis of NTERA-2 cells (left) and U251 (right) cells using KLHL13 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.

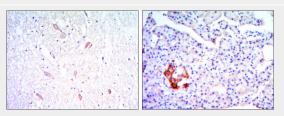


Figure 3: Immunohistochemical analysis of paraffin-embedded brain tissues (left) and pancreas tissues (right) using KLHL13 mouse mAb with DAB staining.

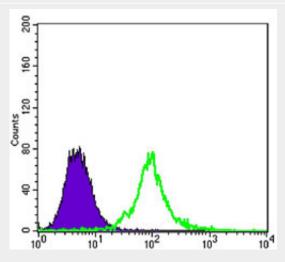


Figure 4: Flow cytometric analysis of 3T3/L1 cells using KLHL13 mouse mAb (green) and negative control (purple).

# KLHL13 Antibody - References

1. DNA Res. 2000 Feb 28;7(1):65-73. 2. Genome Res. 2004 Sep;14(9):1711-8. 3. Cell. 2009 Jul 23;138(2):389-403.