

KLHL13 Antibody

Purified Mouse Monoclonal Antibody

Catalog # AO1420a

Product Information

Application	WB, IHC, FC, ICC, E
Primary Accession	Q9P2N7
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	8D1
Isotype	IgG1
Calculated MW	73868
Description	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.
Formulation	Ascitic fluid containing 0.03% sodium azide.

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.

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.

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.

Images

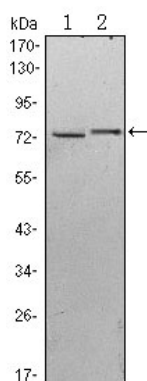


Figure 1: Western blot analysis using KLHL13 mouse mAb against Hela (1) and MCF-7 (2) cell lysate.

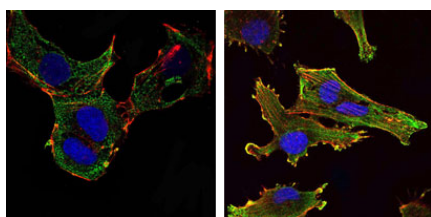


Figure 2: Immunofluorescence analysis of NTERA-2 cells (left) and U251 (right) cells using KLHL13 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.

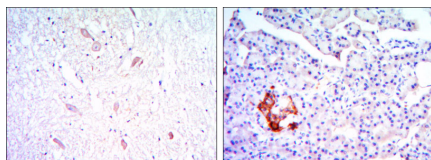
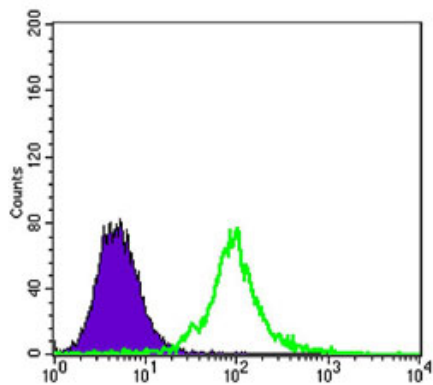


Figure 3: Immunohistochemical analysis of paraffin-embedded brain tissues (left) and pancreas tissues (right) using KLHL13 mouse mAb with DAB staining.

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



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.