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KLHL15 Antibody

Catalog # ASC10925

Product Information

Application	WB, IF, ICC, E
Primary Accession	Q96M94
Other Accession	NP_085127, 226442729
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	69775
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	KLHL15 antibody can be used for detection of KLHL15 by Western blot at 1 - 2 g/mL. Antibody can also be used for immunocytochemistry starting at 5 g/mL. For immunofluorescence start at 20 g/mL.

Additional Information

Gene ID	80311
Other Names	Kelch-like protein 15, KLHL15, KIAA1677
Target/Specificity	KLHL15;
Reconstitution & Storage	KLHL15 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	KLHL15 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	KLHL15
Synonyms	KIAA1677
Function	Substrate-specific adapter for CUL3 E3 ubiquitin-protein ligase complex (PubMed:14528312, PubMed:27561354, PubMed:35219381). Acts as an adapter for CUL3 to target the serine/threonine-protein phosphatase 2A (PP2A) subunit PPP2R5B for ubiquitination and subsequent proteasomal degradation, thus promoting exchange with other regulatory subunits (PubMed:23135275). Acts as an adapter for CUL3 to target the DNA-end resection factor RBBP8/CtIP for ubiquitination and subsequent proteasomal degradation (PubMed:27561354, PubMed:35219381). Through the regulation

of RBBP8/CtIP protein turnover, plays a key role in DNA damage response, favoring DNA double-strand repair through error-prone non-homologous end joining (NHEJ) over error-free, RBBP8-mediated homologous recombination (HR) (PubMed:27561354, PubMed:35219381).

Cellular Location Nucleus.

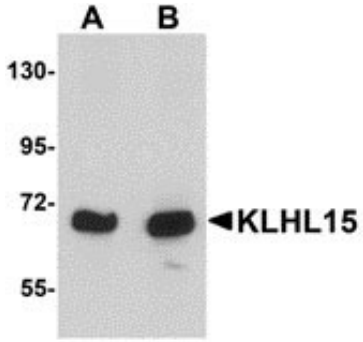
Background

KLHL15 Antibody: KLHL15 is a member of a growing superfamily of kelch repeat-containing proteins. The kelch motif was discovered in the sequence of the Drosophila kelch ORF1 protein and forms a conserved beta-propeller tertiary structure. These kelch-like proteins have been implicated in embryogenesis and carcinogenesis through cytoskeleton organization. KLHL15 mRNA is widely expressed in many tissues and is thought to be involved in protein ubiquination and cytoskeleton organization.

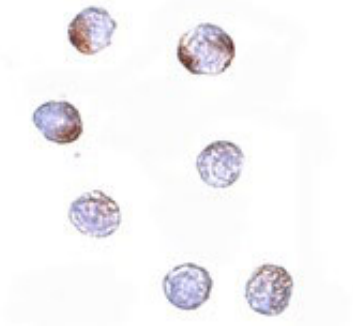
References

Yoshida K. Identification and characterization of a novel kelch-like gene KLHL15 in silico. Oncol. Rep.2005; 13:1133-7.
Robinson DN and Cooley L. Drosophila kelch is an oligomeric ring canal actin organizer. J. Cell Biol.1997; 138:799-810.
Adams J, Kelso R, and Cooley L. The kelch repeat superfamily of proteins: propellers of cell function. Trends Cell Biol.2000; 10:17-24.

Images

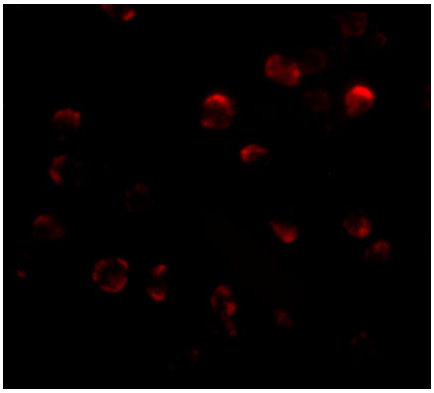


Western blot analysis of KLHL15 in HeLa cell lysate with KLHL15 antibody at (A) 1 and (B) 2 µg/mL.



Immunocytochemistry of KLHL15 in HeLa cells with KLHL15 antibody at 5 µg/mL.

Immunofluorescence of KLHL15 in HeLa cells with KLHL15 antibody at 20 µg/mL.



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