

KLHL2 Rabbit pAb

Catalog # AP99919

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	O95198
Other Accession	O95198
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	65975
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human KLHL2
Epitope Specificity	1-100/593
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Contains 1 BTB (POZ) domain. Contains 6 Kelch repeats.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	KLHL2 is a 593 amino acid actin-binding protein. Highly expressed in brain, KLHL2 is thought to play a role in the organization of the actin cytoskeleton in brain cells. KLHL3 (kelch-like protein 3), is a 587 amino acid protein active in the protein ubiquitination pathway. KLHL3 is thought to be a substrate-specific adapter of an E3 ubiquitin-ligase complex that mediates the ubiquitination of target proteins, which leads to proteasomal degradation of the target protein. KLHL2 and KLHL3 proteins contain six kelch repeats and one BTB (POZ) domain. The BTB (Broad-Complex, Tramtrack and Bric a brac) domain, also known as the POZ (Poxvirus and Zinc finger) domain, is an N-terminal homodimerization domain that contains multiple copies of kelch repeats and/or C2H2-type zinc fingers. Proteins that contain BTB domains are thought to be involved in transcriptional regulation via control of chromatin structure and function.

Additional Information

Gene ID	11275
Other Names	ABP-KELCH; MAV; MAYVEN; KLHL2_HUMAN; KLHL2; Actin-binding protein Mayven; kelch like family member 2; kelch (Drosophila)-like 2 (Mayven); kelch-like 2, Mayven (Drosophila)
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000-10000,WB=1:500-2000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody

is stable for at least two weeks at 2-4 °C.

Protein Information

Name	KLHL2 {ECO:0000303 PubMed:23838290, ECO:0000312 HGNC:HGNC:6353}
Function	Substrate-specific adapter of a BCR (BTB-CUL3-RBX1) E3 ubiquitin ligase complex that mediates the ubiquitination of target proteins, such as NPTXR, WNK1, WNK3 and WNK4, leading most often to their proteasomal degradation (PubMed: 23838290). The BCR(KLHL2) complex catalyzes ubiquitination and degradation of NPTXR (By similarity). Responsible for degradative ubiquitination of the WNK kinases WNK1, WNK3 and WNK4 (PubMed: 23838290). Plays a role in the reorganization of the actin cytoskeleton (PubMed: 10397770). Promotes growth of cell projections in oligodendrocyte precursors (PubMed: 15715669).
Cellular Location	Cytoplasm, cytoskeleton. Cell projection, ruffle {ECO:0000250 UniProtKB:Q8JZP3}. Cell projection. Cell projection, lamellipodium {ECO:0000250 UniProtKB:F1LZF0}. Cytoplasm, cytosol {ECO:0000250 UniProtKB:Q8JZP3}. Note=A proportion colocalizes with the actin cytoskeleton (PubMed:10397770). When over-expressed, colocalizes with NPTXR in perinuclear aggresomes (By similarity) {ECO:0000250 UniProtKB:Q8JZP3, ECO:0000269 PubMed:10397770}
Tissue Location	Ubiquitous. Detected throughout the brain.

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