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KLHL6 Rabbit pAb

Catalog # AP99462

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q8WZ60
Other Accession	Q8WZ60
Reactivity	Mouse
Predicted	Rat, Pig, Human, Dog, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	70359
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human KLHL6
Epitope Specificity	531-621/621
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 BACK (BTB/Kelch associated) domain. 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.

Additional Information

Gene ID	89857
Other Names	KLHL6_HUMAN; KLHL6; KLHL6_MOUSE; kelch like family member 6; kelch-like 6 (Drosophila); kelch-like protein KLHL6
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
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	KLHL6
Function	Substrate-specific adapter of a BCR (BTB-CUL3-RBX1) E3 ubiquitin ligase complex that acts as a multifunctional regulator of B- cell receptor (BCR) signaling, germinal center formation, and T-cell function. Functions by mediating polyubiquitination of target proteins, leading to their proteasomal degradation. In B-cells, plays an essential role in BCR signaling and germinal center B-cell maturation. Targets the BCR signaling subunits CD79A and

CD79B for ubiquitin- mediated degradation, thereby controlling surface BCR homeostasis (PubMed:38630892). Mediates polyubiquitination and degradation of the mRNA decay factor roquin-2/RC3H2, which in turn allows accumulation of TNFAIP3, a negative regulator of NF-kappa-B signaling, thereby providing feedback inhibition of BCR-induced NF-kappa-B activation (PubMed:29695787). In T-cells, acts as a dual negative regulator of T- cell exhaustion and mitochondrial dysfunction. Promotes 'Lys-48'-linked polyubiquitination and proteasomal degradation of the transcription factor TOX, thereby attenuating the transition of progenitor exhausted T-cells towards terminal exhaustion (PubMed:41535474). Also targets the mitochondrial phosphatase PGAM5 for degradation, thereby preventing excessive PGAM5-mediated dephosphorylation and activation of DRP1, which would otherwise drive pathological mitochondrial fission (PubMed:41535474). Through these mechanisms, maintains mitochondrial fitness in T-cells during chronic antigen stimulation.

Cellular Location Cytoplasm.

Tissue Location Found in germinal center B-cells.

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