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KLHL6 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP5793b

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	Q8WZ60
Other Accession	NP_569713.2
Reactivity	Human, Mouse
Predicted	Rat, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB27338
Calculated MW	70359
Antigen Region	543-571

Additional Information

Gene ID	89857
Other Names	Kelch-like protein 6, KLHL6
Target/Specificity	This KLHL6 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 543-571 amino acids from the C-terminal region of human KLHL6.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	KLHL6 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

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.

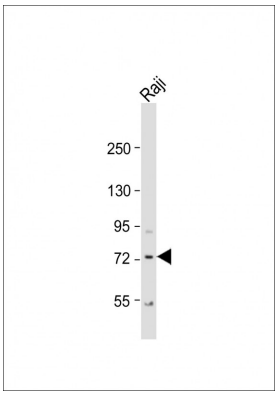
Background

Involved in B-lymphocyte antigen receptor signaling and germinal center formation

References

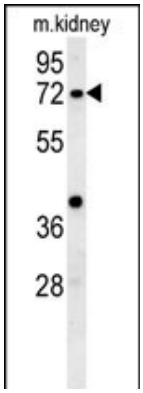
Gupta-Rossi, N., et al. Mol. Immunol. 39(13):791-799(2003)
Hattori, A., et al. DNA Res. 7(6):357-366(2000)

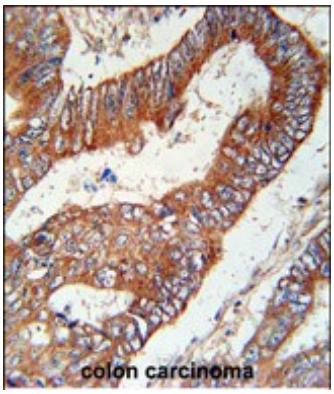
Images



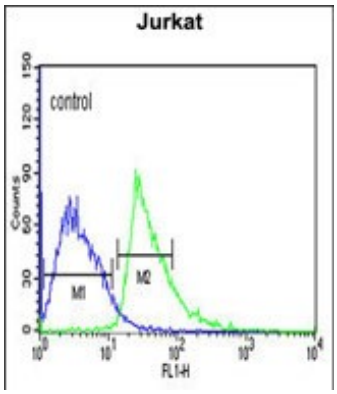
Anti-KLHL6 Antibody (C-term) at 1:1000 dilution + Raji whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 70 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

KLHL6 Antibody (C-term) (Cat. #AP5793b) western blot analysis in mouse kidney tissue lysates (15ug/lane).This demonstrates the KLHL6 antibody detected KLHL6 protein (arrow).





KLHL6 Antibody (C-term) (Cat. #AP5793b) immunohistochemistry analysis in formalin fixed and paraffin embedded human colon carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the KLHL6 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.



KLHL6 Antibody (C-term) (Cat. #AP5793b) flow cytometric analysis of Jurkat cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

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