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KLH20 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP5499b

Product Information

Application	WB, IHC-P, E
Primary Accession	Q9Y2M5
Other Accession	Q6DFF6, D3Z8N4, Q8VCK5, Q5ZKD9, Q08DK3, NP_055273.2
Reactivity	Human
Predicted	Bovine, Chicken, Mouse, Rat, Xenopus
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB26987
Calculated MW	67955
Antigen Region	412-439

Additional Information

Gene ID	27252
Other Names	Kelch-like protein 20, Kelch-like ECT2-interacting protein, Kelch-like protein X, KLHL20, KLEIP
Target/Specificity	This KLH20 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 412-439 amino acids from the C-terminal region of human KLH20.
Dilution	WB~~1:1000 IHC-P~~1:100~500 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	KLH20 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	KLHL20
Synonyms	KLEIP, KLHLX

Function

Substrate-specific adapter of a BCR (BTB-CUL3-RBX1) E3 ubiquitin-protein ligase complex involved in interferon response and anterograde Golgi to endosome transport. The BCR(KLHL20) E3 ubiquitin ligase complex mediates the ubiquitination of DAPK1, leading to its degradation by the proteasome, thereby acting as a negative regulator of apoptosis (PubMed:20389280). The BCR(KLHL20) E3 ubiquitin ligase complex also specifically mediates 'Lys-33'-linked ubiquitination (PubMed:24768539). Involved in anterograde Golgi to endosome transport by mediating 'Lys-33'-linked ubiquitination of CORO7, promoting interaction between CORO7 and EPS15, thereby facilitating actin polymerization and post-Golgi trafficking (PubMed:24768539). Also acts as a regulator of endothelial migration during angiogenesis by controlling the activation of Rho GTPases. The BCR(KLHL20) E3 ubiquitin ligase complex acts as a regulator of neurite outgrowth by mediating ubiquitination and degradation of PDZ-RhoGEF/ARHGEF11 (PubMed:21670212). In case of tumor, the BCR(KLHL20) E3 ubiquitin ligase complex is involved in tumor hypoxia: following hypoxia, the BCR(KLHL20)complex mediates ubiquitination and degradation of PML, potentiating HIF-1 signaling and cancer progression (PubMed:21840486).

Cellular Location

Cytoplasm, perinuclear region. Nucleus. Golgi apparatus, trans-Golgi network. Cell projection, axon Cell projection, dendrite. Note=Localizes in the perinuclear region in normal conditions. Following IFN-alpha or IFN- gamma treatment, it is relocalized and sequestrated to the PML nuclear bodies, preventing DAPK1 ubiquitination (PubMed:20389280)

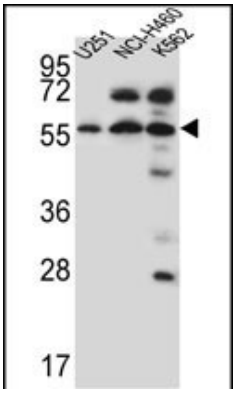
Background

KLH20 is a member of the kelch family of proteins, which is characterized by a 44-56 amino acid repeat motif. The kelch motif appears in many different polypeptide contexts and contains multiple potential protein-protein contact sites. Members of this family are present both throughout the cell and extracellularly, with diverse activities.

References

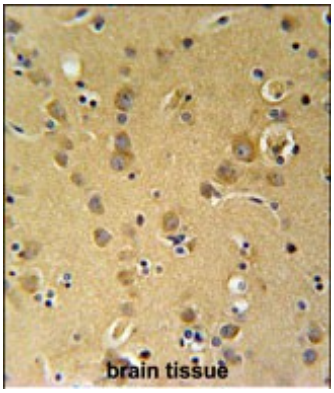
Nacak, T.G., et al. Circ. Res. 100(8):1155-1163(2007)
Hara, T., et al. Mol. Biol. Cell 15(3):1172-1184(2004)
Shin, B.K., et al. J. Biol. Chem. 278(9):7607-7616(2003)

Images



KLH20 Antibody (C-term) (Cat.#AP5499b) western blot analysis in U251,NCI-H460,K562 cell line lysates (35ug/lane).This demonstrates the KLH20 antibody detected the KLH20 protein (arrow).

KLH20 Antibody (C-term) (Cat. #AP5499b) immunohistochemistry analysis in formalin fixed and paraffin embedded human brain tissue followed by



peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the KLH20 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.

Citations

- Inhibition of CRL-NEDD8 pathway as a new approach to enhance ATRA-induced differentiation of acute promyelocytic leukemia cells.