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KLDC2 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP4819b

Product Information

Application	WB, E
Primary Accession	Q9Y2U9
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB24802
Calculated MW	46099
Antigen Region	293-320

Additional Information

Gene ID	23588
Other Names	Kelch domain-containing protein 2, Hepatocellular carcinoma-associated antigen 33, Host cell factor homolog LCP, Host cell factor-like protein 1, HCLP-1, KLHDC2, HCA33
Target/Specificity	This KLDC2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 293-320 amino acids from the C-terminal region of human KLDC2.
Dilution	WB~~1:1000 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	KLDC2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	KLHDC2 {ECO:0000303|PubMed:16964437, ECO:0000312|HGNC:HGNC:20231}
Function	Substrate-recognition component of a Cul2-RING (CRL2) E3 ubiquitin-protein ligase complex of the DesCEND (destruction via C-end

degrons) pathway, which recognizes a C-degron located at the extreme C terminus of target proteins, leading to their ubiquitination and degradation (PubMed:29775578, PubMed:29779948, PubMed:30526872, PubMed:36805027, PubMed:38177675). The C-degron recognized by the DesCEND pathway is usually a motif of less than ten residues and can be present in full-length proteins, truncated proteins or proteolytically cleaved forms (PubMed:29775578, PubMed:29779948, PubMed:30526872). The CRL2(KLHDC2) complex specifically recognizes proteins with a diglycine (Gly-Gly) at the C-terminus, leading to their ubiquitination and degradation (PubMed:29775578, PubMed:29779948, PubMed:30526872, PubMed:36805027, PubMed:38177675). The CRL2(KLHDC2) complex mediates ubiquitination and degradation of truncated SELENOK and SELENOS selenoproteins produced by failed UGA/Sec decoding, which end with a diglycine (PubMed:26138980, PubMed:30526872, PubMed:36805027). The CRL2(KLHDC2) complex also recognizes proteolytically cleaved proteins ending with Gly-Gly, such as the N-terminal fragment of USP1, leading to their degradation (PubMed:29775578, PubMed:30526872, PubMed:36805027, PubMed:38177675). May also act as an indirect repressor of CREB3-mediated transcription by interfering with CREB3- DNA-binding (PubMed:11384994).

Cellular Location Nucleus

Tissue Location Widely expressed, with high levels in skeletal muscle, heart, pancreas and liver (PubMed:11384994, PubMed:16964437) Undetectable in peripheral blood leukocytes (PubMed:16964437)

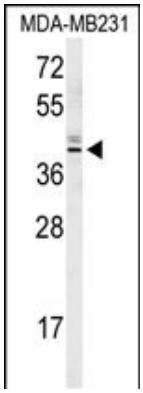
Background

KLDC2 represses CREB3-mediated transcription by interfering with CREB3-DNA binding.

References

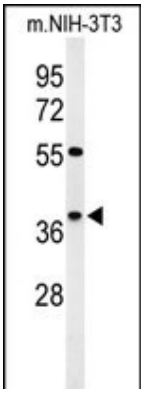
Chin, K.T., et al. Mol. Cell. Biochem. 296 (1-2), 109-119 (2007)
Ewing, R.M., et al. Mol. Syst. Biol. 3, 89 (2007)
Wang, Y., et al. J. Immunol. 169(2):1102-1109(2002)

Images



Western blot analysis of KLDC2 Antibody (C-term) (Cat. #AP4819b) in MDA-MB231 cell line lysates (35ug/lane). KLDC2 (arrow) was detected using the purified Pab.

Western blot analysis of KLDC2 Antibody (C-term) (Cat. #AP4819b) in mouse NIH-3T3 cell line lysates (35ug/lane). KLDC2 (arrow) was detected using the purified Pab.



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