

#### KLDC2 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP4819b

#### Specification

# KLDC2 Antibody (C-term) - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Calculated MW Antigen Region WB,E <u>O9Y2U9</u> Human, Mouse Rabbit Polyclonal Rabbit IgG 46099 293-320

### KLDC2 Antibody (C-term) - 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.

# KLDC2 Antibody (C-term) - 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:<u>29775578</u>, PubMed:<u>29779948</u>, PubMed:<u>30526872</u>, PubMed:<u>36805027</u>, PubMed:<u>38177675</u>). 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:<u>29775578</u>, PubMed:<u>29779948</u>, PubMed:<u>30526872</u>). The CRL2(KLHDC2) complex specifically recognizes proteins with a diglycine (Gly-Gly) at the C-terminus, leading to their ubiquitination and degradation (PubMed:<u>29775578</u>, PubMed:<u>29779948</u>, PubMed:<u>30526872</u>, PubMed:<u>36805027</u>, PubMed:<u>38177675</u>). 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:<u>26138980</u>, PubMed:<u>30526872</u>, PubMed:<u>36805027</u>). 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:<u>29775578</u>, PubMed:<u>30526872</u>, PubMed:<u>36805027</u>, PubMed:<u>36805027</u>, PubMed:<u>30526872</u>, PubMed:<u>30526872</u>, PubMed:<u>30526872</u>, PubMed:<u>30526872</u>, PubMed:<u>36805027</u>, PubMed:<u>36805027</u>, PubMed:<u>36805027</u>).

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)

### KLDC2 Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>
- KLDC2 Antibody (C-term) 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.

# KLDC2 Antibody (C-term) - Background

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

# KLDC2 Antibody (C-term) - 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)