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KLHDC10 Rabbit pAb

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Catalog # AP56390

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	Q6PID8
Reactivity	Rat, Mouse
Predicted	Human, Rabbit, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	49098
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human KLHDC10
Epitope Specificity	1-100/442
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Nucleus
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	KLHDC10 is a 442 amino acid protein that contains six kelch repeats. Expressed in fetal brain, liver, lung, kidney and placenta, KLHDC10 exists as two alternatively spliced isoforms. The gene encoding KLHDC10 maps to human chromosome 7, which houses over 1,000 genes and comprises nearly 5% of the human genome. Chromosome 7 has been linked to Osteogenesis imperfecta, Pendred syndrome, Lissencephaly, Citrullinemia and Shwachman-Diamond syndrome. The deletion of a portion of the q arm of chromosome 7 is associated with Williams-Beuren syndrome, a condition characterized by mild mental retardation, an unusual comfort and friendliness with strangers and an elfin appearance. Deletions of portions of the q arm of chromosome 7 are also seen in a number of myeloid disorders, including cases of acute myelogenous leukemia and myelodysplasia.

Additional Information

Gene ID	23008
Other Names	Kelch domain-containing protein 10, KLHDC10 {ECO:0000303|PubMed:23102700, ECO:0000312|HGNC:HGNC:22194}
Dilution	WB=1:500-2000,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.

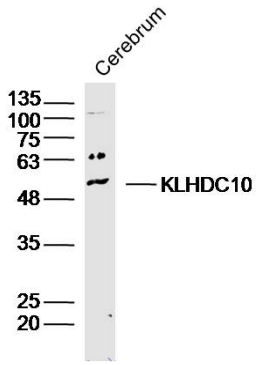
Protein Information

Name	KLHDC10 {ECO:0000303|PubMed:23102700, ECO:0000312|HGNC:HGNC:22194}
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:29779948, PubMed:33909987). 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:29779948, PubMed:33909987, PubMed:39548056). The CRL2(KLHDC10) complex specifically recognizes proteins with a proline-glycine (Pro-Gly) or an alanine tail (CAT tail) at the C-terminus, leading to their ubiquitination and degradation (PubMed:29779948, PubMed:33909987). The CRL2(KLHDC10) complex is involved in the ribosome-associated quality control (RQC) pathway, which mediates the extraction of incompletely synthesized nascent chains from stalled ribosomes: CRL2(KLHDC10) acts downstream of NEMF and recognizes CAT tails associated with stalled nascent chains, leading to their ubiquitination and degradation (PubMed:33909987). Participates in the oxidative stress-induced cell death through MAP3K5 activation (PubMed:23102700). Inhibits PPP5C phosphatase activity on MAP3K5 (PubMed:23102700). Acts as a regulator of necroptosis (By similarity).
Cellular Location	Nucleus. Cytoplasm

Background

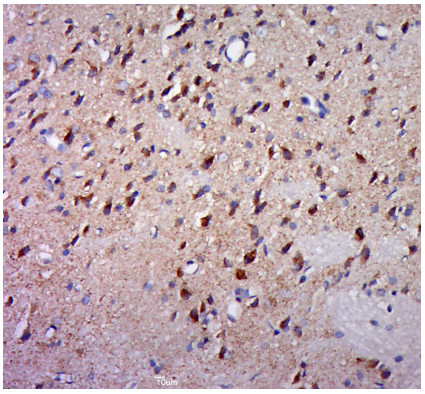
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Images



Sample: Cerebrum (Mouse) Lysate at 40 ug
Primary: Anti-KLHDC10(AP56390) at 1/300 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 49 kD
Observed band size: 52 kD

Paraformaldehyde-fixed, paraffin embedded (Rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (KLHDC10) Polyclonal Antibody, Unconjugated (AP56390) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20



minutes and DAB staining.

Citations

- NEMF-mediated Listerin-independent mitochondrial translational surveillance by E3 ligase Pirh2 and mitochondrial protease ClpXP

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