10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

KLHDC10 Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP56390

Specification

KLHDC10 Polyclonal Antibody - Product Information

Application	**WB, IHC-P, IHC-F, IF, ICC, E**
Primary Accession	Q6PID8
Reactivity	**Rat, Bovine**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**49 KDa**
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**
SIMILARITY	**Contains 6 Kelch repeats.**
SUBUNIT	**Interacts with CUL2, TCEB1 and TCEB2; may be the substrate recognition component of an E3 ubiquitin ligase complex.**
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.

KLHDC10 Polyclonal Antibody - Additional Information

Gene ID 23008

Other Names
Kelch domain-containing protein 10, KLHDC10, KIAA0265

Dilution
WB~~1:1000<br \>IHC-P~~N/A<br \>IHC-F~~N/A<br \>IF~~1:50~200<br \>ICC~~N/A<br \>E~~N/A

Storage
Store at -20 ℃ 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 ℃.

KLHDC10 Polyclonal Antibody - 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

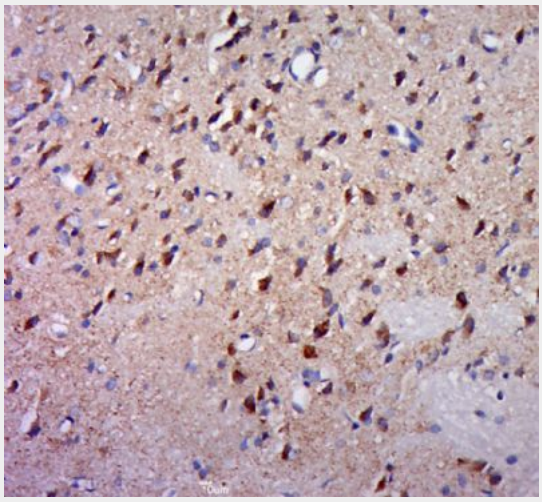
KLHDC10 Polyclonal Antibody - Protocols

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

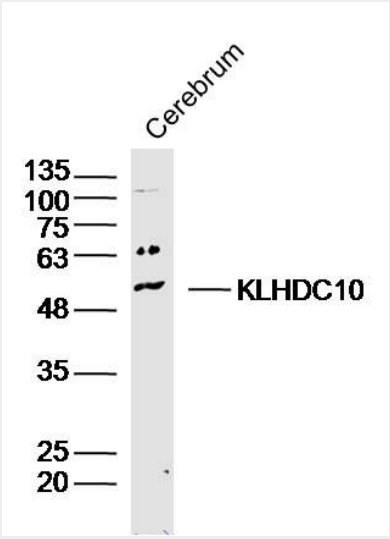
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence

- Immunoprecipitation
- Flow Cytomety
- Cell Culture

KLHDC10 Polyclonal Antibody - Images



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 (bs-16757R) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.



Sample: Cerebrum (Mouse) Lysate at 40 ug
Primary: Anti-KLHDC10(bs-16757R) at 1/300 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 49 kD
Observed band size: 52 kD

KLHDC10 Polyclonal Antibody - Citations

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

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