

PDCL3 Antibody
Catalog # ASC11821**Specification****PDCL3 Antibody - Product Information**

Application	WB, IHC, IF
Primary Accession	O9H2J4
Other Accession	NP_076970 , 13129044
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	Predicted: 26 kDa
Application Notes	Observed: 25 kDa KDa PDCL3 antibody can be used for detection of PDCL by Western blot at 1 - 2 µg/ml. Antibody can also be used for Immunohistochemistry at 5 µg/mL. For Immunofluorescence start at 20 µg/mL.

PDCL3 Antibody - Additional InformationGene ID **79031****Target/Specificity**

PDCL3; PDCL3 antibody is human, mouse and rat reactive. PDCL3 antibody is predicted to not cross-react with other members of the PDCL protein family.

Reconstitution & Storage

PDCL3 antibody can be stored at 4°C for three months and -20°C, stable for up to one year.

Precautions

PDCL3 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

PDCL3 Antibody - Protein Information

Name PDCL3

Synonyms PhLP2A, VIAF1

Function

Acts as a chaperone for the angiogenic VEGF receptor KDR/VEGFR2, increasing its abundance by inhibiting its ubiquitination and degradation (PubMed: [23792958](http://www.uniprot.org/citations/23792958)), PubMed: [26059764](http://www.uniprot.org/citations/26059764)). Inhibits the folding activity of the chaperonin-containing T-complex (CCT) which leads to inhibition of cytoskeletal actin folding (PubMed: [17429077](http://www.uniprot.org/citations/17429077)). Acts as a chaperone during heat shock alongside HSP90 and

HSP40/70 chaperone complexes (By similarity). Modulates the activation of caspases during apoptosis (PubMed:15371430).

Cellular Location

Cytoplasm. Cytoplasm, perinuclear region. Endoplasmic reticulum

Tissue Location

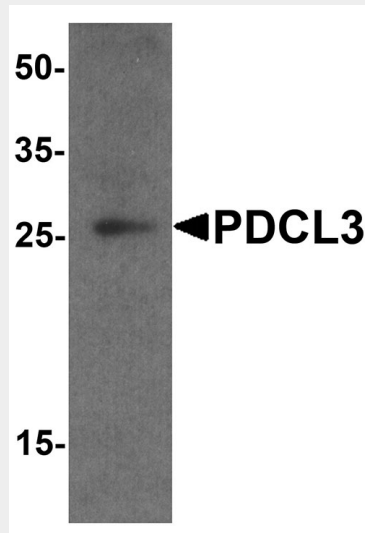
Expressed in endothelial cells (at protein level) (PubMed:26059764). Expressed in all tissues examined including spleen, thymus, prostate, testis, ovary, small intestine and colon (PubMed:15371430).

PDCL3 Antibody - Protocols

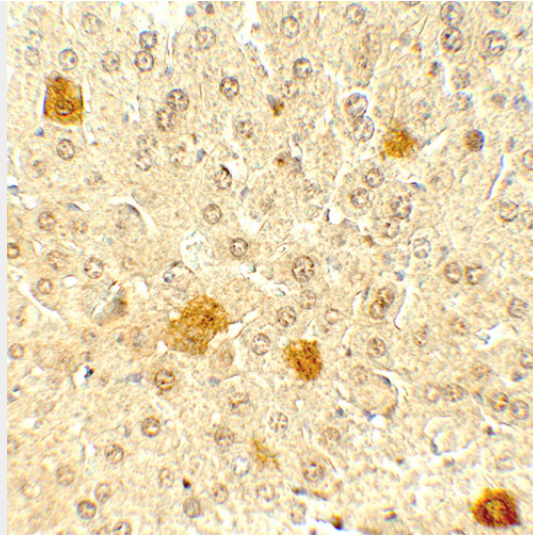
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

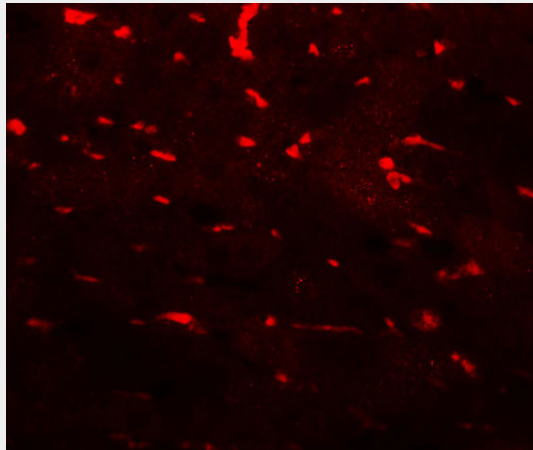
PDCL3 Antibody - Images



Western blot analysis of PDCL3 in human brain tissue lysate with PDCL3 antibody at 1 µg/ml.



Immunohistochemistry of PDCL3 in mouse liver tissue with PDCL3 antibody at 5 µg/mL.



Immunofluorescence of PDCL3 in mouse liver tissue with PDCL3 antibody at 20 µg/mL.

PDCL3 Antibody - Background

Phosducin-like proteins (PhLPs) are a conserved family of proteins with thioredoxin-like domains that were initially identified as modulators of G protein signaling (1,2). PDCL3 is highly homologous to PDCL and shares an N-terminal helix domain and a C-terminal thioredoxin-fold (Trx-fold) domain (3). Along with the related protein PDCL2, PDCL3 interacts with the chaperonin CCT and modulates CCT-mediated actin and tubulin folding (4). Modulation of PDCL3 levels by MAPK phosphorylation and RhoA-dependent changes also promote cytoskeletal remodeling (5).

PDCL3 Antibody - References

- Miles MF, Barhite S, Sganga M, et al. Phosducin-like protein: an ethanol-responsive potential modulator of guanine nucleotide-binding protein function. *Proc. Natl. Acad. Sci. USA* 1993; 90:10831-5.
- Ruiz-Gomez A, Humrich J, Murga C, et al. Phosphorylation of phosducin and phosducinlike protein by G protein-coupled receptor kinase 2. *J. Biol. Chem.* 2000; 275:29724-30.
- Lou X, Bao R, Zhou CZ, et al. Structure of the thioredoxin-fold domain of human phosducin-like protein 2. *Acta Crystallographica* 2009; F65:67-70.
- Stirling PC, Srayko M, Takhar KS, et al. Functional interaction between phosducin-like protein 2 and cytosolic chaperonin is essential for cytoskeletal protein function and cell cycle progression. *Mol. Biol. Cell* 2007; 18:2336-45.