

**PDCL3 Antibody**  
**Catalog # ASC11821****Specification**

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**PDCL3 Antibody - Product Information**

Application	WB, IHC, IF
Primary Accession	<a href="#">Q9H2J4</a>
Other Accession	<a href="#">NP_076970</a> , <a href="#">13129044</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	Predicted: 26 kDa

Application Notes	<b>Observed: 25 kDa KDa</b> 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.
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**PDCL3 Antibody - Additional Information**

Gene 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:<a href="http://www.uniprot.org/citations/23792958" target="\_blank">23792958</a>, PubMed:<a href="http://www.uniprot.org/citations/26059764" target="\_blank">26059764</a>). Inhibits the folding activity of the chaperonin-containing T-complex (CCT) which leads to inhibition of cytoskeletal actin folding (PubMed:<a href="http://www.uniprot.org/citations/17429077" target="\_blank">17429077</a>). Acts as a chaperone during heat shock alongside HSP90 and

HSP40/70 chaperone complexes (By similarity). Modulates the activation of caspases during apoptosis (PubMed:<a href="http://www.uniprot.org/citations/15371430" target="\_blank">15371430</a>).

**Cellular Location**

Cytoplasm. Cytoplasm, perinuclear region. Endoplasmic reticulum

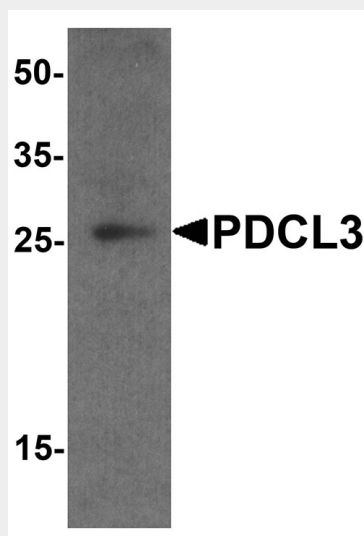
**Tissue Location**

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).

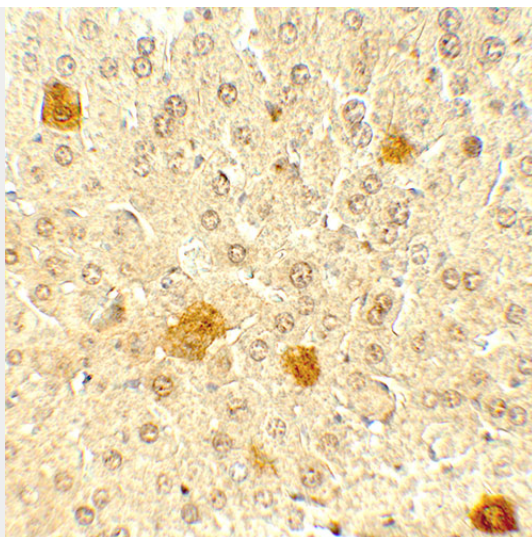
**PDCL3 Antibody - Protocols**

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

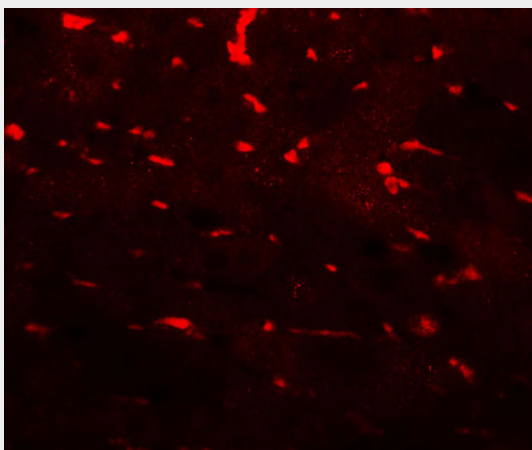
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**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.