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PDCL3 Antibody
Catalog # ASC11821

Specification

PDCL3 Antibody - Product Information

Application	**WB, IHC-P, IF, E**
Primary Accession	Q9H2J4
Other Accession	NP_076970, 13129044
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Calculated MW	**Predicted: 26 kDa** **Observed: 25 kDa KDa**
Application Notes	**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 Immunoflorescence start at 20 µg/mL.**

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℃ for three months and -20℃, 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, PubMed:26059764). Inhibits the folding activity of the chaperonin-containing T-complex (CCT) which leads to inhibition of cytoskeletal actin folding (PubMed: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

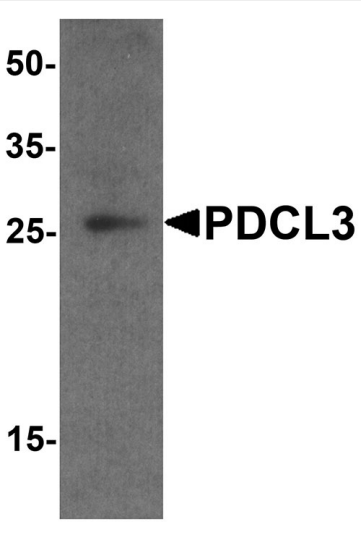
Tissue Location
Expressed in endothelial cells (at protein level) (PubMed:26059764). Expressed in all tissues examined including spleen, thymus, prostate, testis, ovary, small intestine and colon (PubMed:15371430).

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 Cytomety
- Cell Culture

PDCL3 Antibody - Images



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

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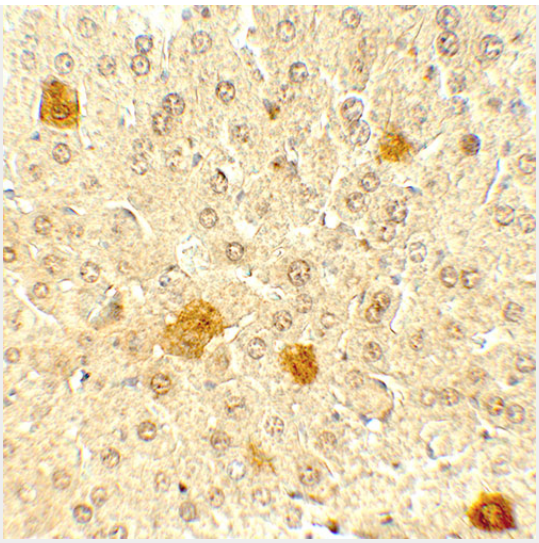
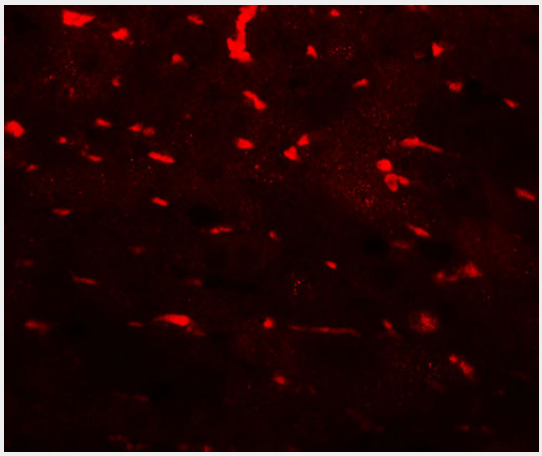


Immunohistochemistry of PDCL3 in mouse lver tissue with PDCL3 antibody at 5 µg/mL.



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 cytoskeltal protein function and cell cycle progrssion. Mol. Biol. Cell 2007; 18:2336-45.