

## Dcp1a Rabbit mAb

Catalog No: #49808

Package Size: #49808-1 50ul #49808-2 100ul

Orders: [order@signalwayantibody.com](mailto:order@signalwayantibody.com)Support: [tech@signalwayantibody.com](mailto:tech@signalwayantibody.com)

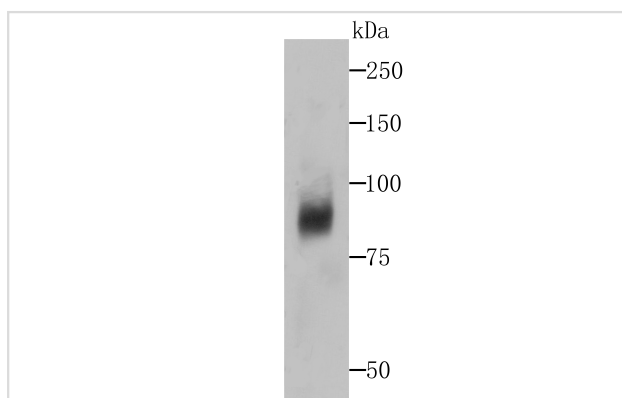
## Description

Product Name	Dcp1a Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal antibody
Clone No.	JB51-34
Purification	ProA affinity purified
Applications	WB,ICC,IHC,FC
Species Reactivity	Hu
Other Names	DCP1 decapping enzyme homolog A antibody Dcp1a antibody DCP1A_HUMAN antibody Decapping enzyme hDcp1a antibody Decapping mRNA 1A antibody HSA275986 antibody mRNA decapping enzyme 1A antibody mRNA-decapping enzyme 1A antibody Nbla00360 antibody Putative protein product of Nbla00360 antibody Smad4 interacting transcriptional co activator antibody Smad4-interacting transcriptional co-activator antibody Smad4-interacting transcriptional co-activator antibody SMAD4IP1 antibody SMIF antibody Transcription factor SMIF antibody
Accession No.	Swiss-Prot#:Q9NPI6
Uniprot	Q9NPI6
GeneID	55802;
Calculated MW	63 kDa(Predicted band size)
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

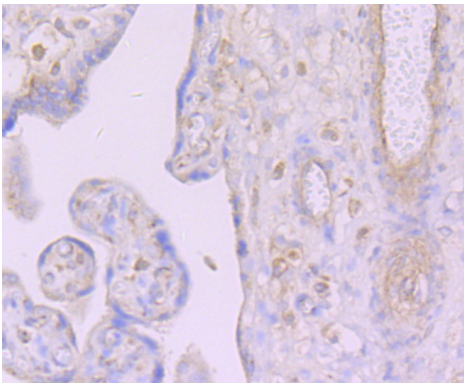
## Application Details

WB: 1:500-1:2000 IHC: 1:50-1:200 ICC: 1:50-1:200 FC: 1:50-1:100

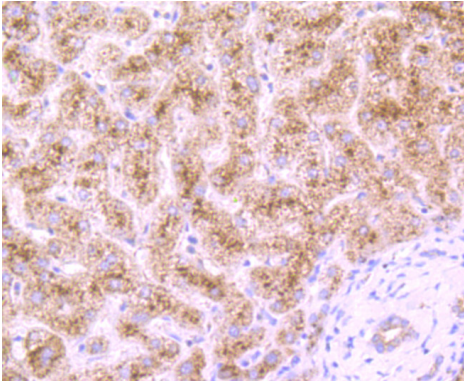
## Images



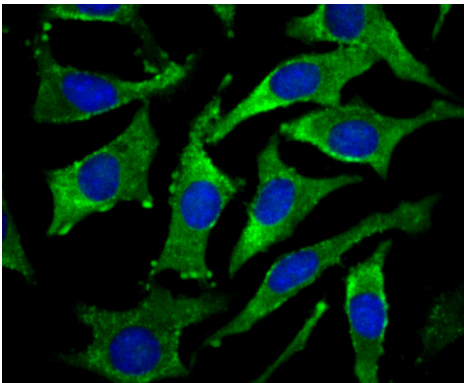
Western blot analysis of Dcp1a on human liver tissue lysates using anti-Dcp1a antibody at 1/500 dilution.



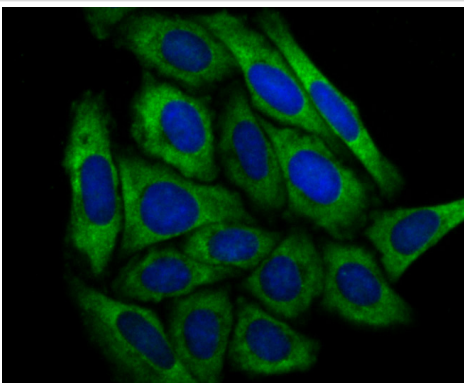
Immunohistochemical analysis of paraffin-embedded human placenta tissue using anti-Dcp1a antibody. Counter stained with hematoxylin.



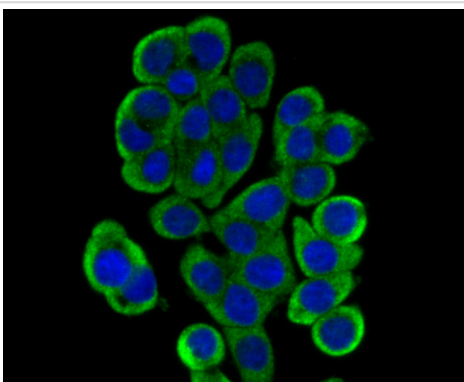
Immunohistochemical analysis of paraffin-embedded human liver tissue using anti-Dcp1a antibody. Counter stained with hematoxylin.



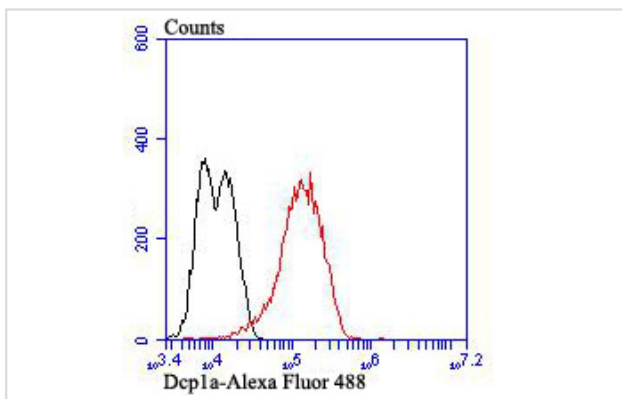
ICC staining Dcp1a in SH-SY-5Y cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



ICC staining Dcp1a in SiHa cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



ICC staining Dcp1a in LOVO cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



Flow cytometric analysis of LOVO cells with Dcp1a antibody at 1/100 dilution (red) compared with an unlabeled control (cells without incubation with primary antibody; black). Alexa Fluor 488-conjugated goat anti-rabbit IgG was used as the secondary antibody.

## Background

Cleavage of the 5'-cap structure is involved in the major 5'-to-3' and nonsense-mediated mRNA decay pathways. The protein complex consisting of Dcp1 and Dcp2 has been identified as the species responsible for the decapping reaction in *Saccharomyces cerevisiae*. In nonsense-mediated decay, the human decapping complex, made up of *S. cerevisiae* homologs Dcp1a and hDcp2, may be recruited to mRNAs containing premature termination codons by nonsense-mediated decay factor (Upf) proteins. hDcp2 specifically hydrolyzes methylated capped RNA to release m(7)GDP, thereby aiding in mRNA degradation. Both Dcp1a and hDcp2 colocalize in the cytoplasm. In addition, Dcp1a interacts with Smad4 forming a complex with TGF $\beta$  and BMP-4. Dcp1a and Smad4 interact directly through a EVH1/WH1 domain on Dcp1a and a proline-rich activation domain on Smad4. Smad4 is essential to nuclear translocation of Dcp1a as deletion of the Smad4-interacting domain (located in the N-terminal 100 amino acids) of Dcp1a eliminates TGF $\beta$ -induced nuclear translocation of Dcp1a.

## References

Note: This product is for in vitro research use only