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DCP2 Antibody (C-Terminus)
Rabbit Polyclonal Antibody
Catalog # ALS15666

Specification

DCP2 Antibody (C-Terminus) - Product Information

Application	**IHC, IF, WB**
Primary Accession	Q8IU60
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**48kDa KDa**

DCP2 Antibody (C-Terminus) - Additional Information

Gene ID 167227

Other Names
m7GpppN-mRNA hydrolase, 3.6.1.62, Nucleoside diphosphate-linked moiety X motif 20, Nudix motif 20, mRNA-decapping enzyme 2, hDpc, DCP2, NUDT20

Target/Specificity
Human DCP2. Multiple isoforms of DCP2 are known to exist.

Reconstitution & Storage
Long term: -20°C; Short term: +4°C. Avoid repeat freeze-thaw cycles.

Precautions
DCP2 Antibody (C-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

DCP2 Antibody (C-Terminus) - Protein Information

Name DCP2

Synonyms NUDT20

Function
Decapping metalloenzyme that catalyzes the cleavage of the cap structure on mRNAs (PubMed:12417715, PubMed:12218187, PubMed:12923261, PubMed:21070968, PubMed:28002401, PubMed:31875550). Removes the 7-methyl guanine cap structure from mRNA molecules, yielding a 5'-phosphorylated mRNA fragment and 7m-GDP (PubMed:12486012, PubMed:<a href="http://www.uniprot.org/citations/12923261"

target="_blank">12923261, PubMed:21070968, PubMed:28002401, PubMed:31875550). Necessary for the degradation of mRNAs, both in normal mRNA turnover and in nonsense-mediated mRNA decay (PubMed:14527413). Plays a role in replication-dependent histone mRNA degradation (PubMed:18172165). Has higher activity towards mRNAs that lack a poly(A) tail (PubMed:21070968). Has no activity towards a cap structure lacking an RNA moiety (PubMed:21070968). The presence of a N(6)-methyladenosine methylation at the second transcribed position of mRNAs (N(6),2'-O- dimethyladenosine cap; m6A(m)) provides resistance to DCP2-mediated decapping (PubMed:28002401). Blocks autophagy in nutrient-rich conditions by repressing the expression of ATG-related genes through degradation of their transcripts (PubMed:26098573).

Cellular Location
Cytoplasm, P-body. Nucleus Note=Predominantly cytoplasmic, in processing bodies (PB) (PubMed:15273322). A minor amount is nuclear (PubMed:15273322)

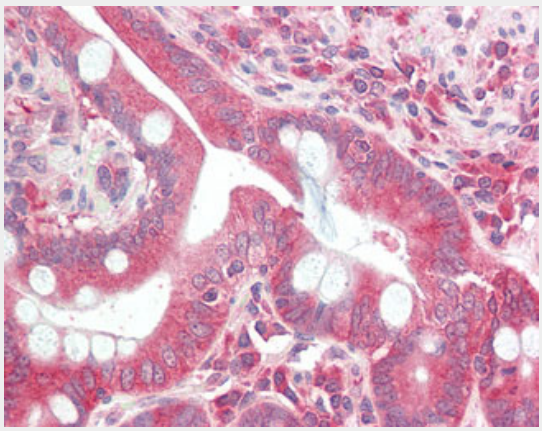
Tissue Location
Expressed in brain and testis. Not detected in heart (at protein level).

DCP2 Antibody (C-Terminus) - 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

DCP2 Antibody (C-Terminus) - Images



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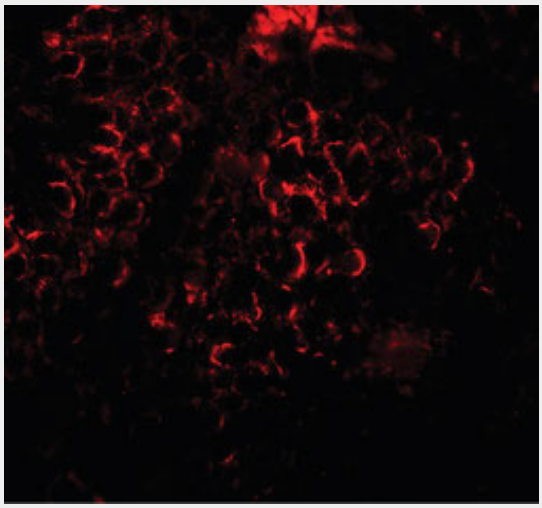
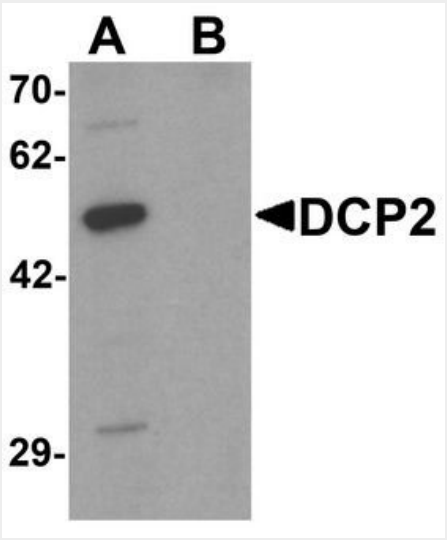
Anti-DCP2 antibody IHC staining of human small intestine.



Immunofluorescence of DCP2 in human testis tissue with DCP2 antibody at 20 ug/ml.



Western blot analysis of DCP2 in 293 cell lysate with DCP2 antibody at 1 ug/ml in (A) the...

DCP2 Antibody (C-Terminus) - Background

Decapping metalloenzyme that catalyzes the cleavage of the cap structure on mRNAs. Removes the 7-methyl guanine cap structure from mRNA molecules, yielding a 5'-phosphorylated mRNA fragment and 7m-GDP. Necessary for the degradation of mRNAs, both in normal mRNA turnover and in nonsense-mediated mRNA decay. Plays a role in replication-dependent histone mRNA degradation. Has higher activity towards mRNAs that lack a poly(A) tail. Has no activity towards a cap structure lacking an RNA moiety.

DCP2 Antibody (C-Terminus) - References

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