

DCP2 Antibody
Rabbit Polyclonal Antibody
Catalog # ALS16562**Specification**

DCP2 Antibody - Product Information

Application	IHC, WB
Primary Accession	Q8IU60
Other Accession	167227
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	48423

DCP2 Antibody - Additional Information**Gene ID** 167227**Other Names**

DCP2, MRNA-decapping enzyme 2, Nudix motif 20, NUDT20, HDpc, M7GpppN-mRNA hydrolase

Target/Specificity

Not yet tested in other species.

Reconstitution & Storage

Supplied as a liquid PBS, pH 7.4, with 0.02% Sodium Azide. Store at -20°C for up to one year.

Precautions

DCP2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

DCP2 Antibody - Protein Information**Name** DCP2**Synonyms** NUDT20**Function**

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

Volume

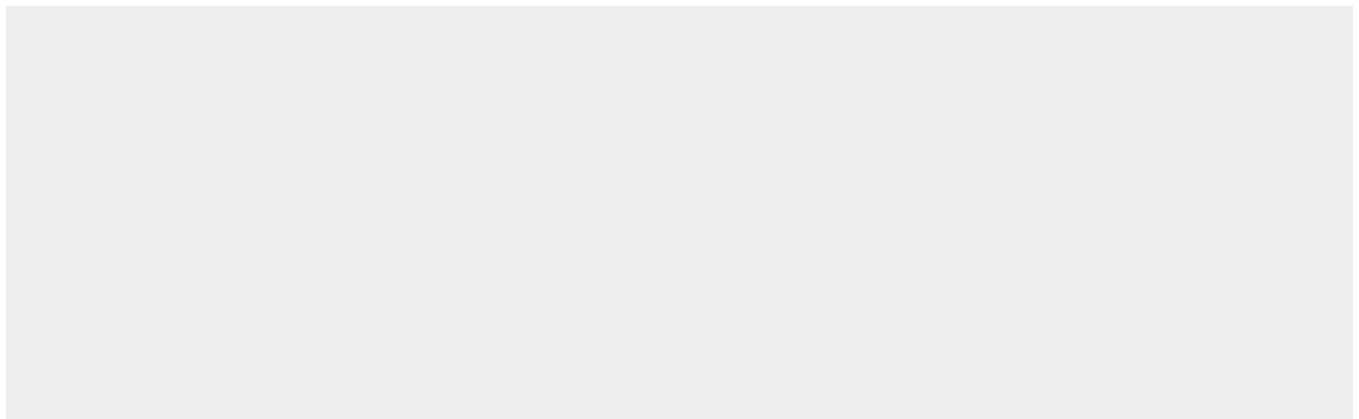
50 µl

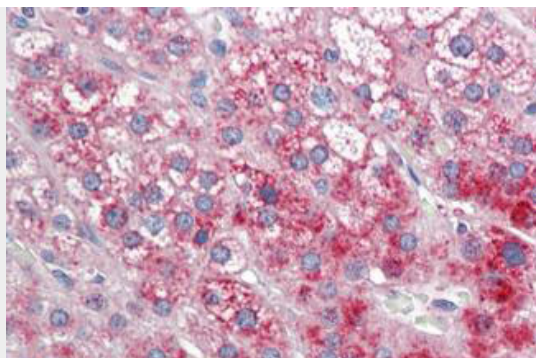
DCP2 Antibody - Protocols

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

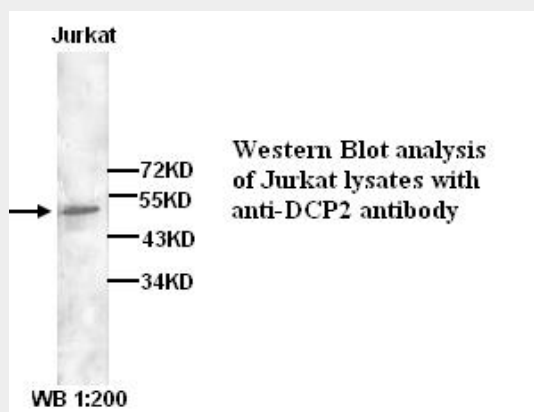
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

DCP2 Antibody - Images





Human Adrenal: Formalin-Fixed, Paraffin-Embedded (FFPE)



Western Blot analysis of Jurkat lysates with anti-DCP2 antibody

DCP2 Antibody - 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 - References

- Lykke-Andersen J., et al. Mol. Cell. Biol. 22:8114-8121(2002).
- Wang Z., et al. Proc. Natl. Acad. Sci. U.S.A. 99:12663-12668(2002).
- Ota T., et al. Nat. Genet. 36:40-45(2004).
- Schmutz J., et al. Nature 431:268-274(2004).
- van Dijk E., et al. EMBO J. 21:6915-6924(2002).