

Goat Anti-DCP1A Antibody
Peptide-affinity purified goat antibody
Catalog # AF1307a**Specification**

Goat Anti-DCP1A Antibody - Product Information

Application	WB
Primary Accession	Q9NPI6
Other Accession	NP_060873 , 55802 , 75901 (mouse)
Reactivity	Human
Predicted	Mouse, Rat
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	63278

Goat Anti-DCP1A Antibody - Additional Information**Gene ID** 55802**Other Names**

mRNA-decapping enzyme 1A, 3'-5'-, Smad4-interacting transcriptional co-activator, Transcription factor SMIF, DCP1A, SMIF

Format

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Goat Anti-DCP1A Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-DCP1A Antibody - Protein Information**Name** DCP1A**Synonyms** SMIF**Function**

Necessary for the degradation of mRNAs, both in normal mRNA turnover and in nonsense-mediated mRNA decay (PubMed:12417715). Removes the 7-methyl guanine cap structure from mRNA

molecules, yielding a 5'- phosphorylated mRNA fragment and 7m-GDP (PubMed:12417715). Contributes to the transactivation of target genes after stimulation by TGFB1 (PubMed:11836524). Essential for embryonic development (PubMed:33813271).

Cellular Location

Cytoplasm, P-body. Nucleus. Note=Co- localizes with NANOS3 in the processing bodies (By similarity) Predominantly cytoplasmic, in processing bodies (PB) (PubMed:16364915) Nuclear, after TGFB1 treatment. Translocation to the nucleus depends on interaction with SMAD4 (PubMed:11836524) {ECO:0000250|UniProtKB:Q91YD3, ECO:0000269|PubMed:11836524, ECO:0000269|PubMed:16364915}

Tissue Location

Detected in heart, brain, placenta, lung, skeletal muscle, liver, kidney and pancreas.

Goat Anti-DCP1A 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](#)

Goat Anti-DCP1A Antibody - Images



AF1307a (2 µg/ml) staining of A431 cell lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Goat Anti-DCP1A Antibody - Background

Decapping is a key step in general and regulated mRNA decay. The protein encoded by this gene is a decapping enzyme. This protein and another decapping enzyme form a decapping complex,

which interacts with the nonsense-mediated decay factor hUpf1 and may be recruited to mRNAs containing premature termination codons. This protein also participates in the TGF-beta signaling pathway.

Goat Anti-DCP1A Antibody - References

Dcp1-bodies in mouse oocytes. Swetloff A, et al. Mol Biol Cell, 2009 Dec. PMID 19812249.
Defining the human deubiquitinating enzyme interaction landscape. Sowa ME, et al. Cell, 2009 Jul 23. PMID 19615732.
Human proline-rich nuclear receptor coregulatory protein 2 mediates an interaction between mRNA surveillance machinery and decapping complex. Cho H, et al. Mol Cell, 2009 Jan 16. PMID 19150429.
New application of intelligent agents in sporadic amyotrophic lateral sclerosis identifies unexpected specific genetic background. Penco S, et al. BMC Bioinformatics, 2008 May 30. PMID 18513389.
Toward a confocal subcellular atlas of the human proteome. Barbe L, et al. Mol Cell Proteomics, 2008 Mar. PMID 18029348.