

KD-Validated Anti-DCP1A Rabbit Monoclonal Antibody

Rabbit monoclonal antibody Catalog # AGI1502

Specification

KD-Validated Anti-DCP1A Rabbit Monoclonal Antibody - Product Information

Application WB, FC Primary Accession O9NPI6

Reactivity
Clonality
Isotype

Human, Mouse
Monoclonal
Rabbit IgG

Calculated MW Predicted, 63 kDa , observed, 75 kDa KDa

Gene Name DCP1A

Aliases DCP1A; Decapping MRNA 1A; SMIF;

HSA275986; SMAD4IP1; Smad4-Interacting Transcriptional Co-Activator; Transcription Factor SMIF; MRNA-Decapping Enzyme 1A; DCP1 Decapping Enzyme Homolog A (S. Cerevisiae); Putative Protein Product Of Nbla00360; DCP1 Decapping Enzyme-Like

Protein A; DCP1 Decapping Enzyme

Homolog A; Decapping Enzyme HDcp1a; EC

3.6.1.62; Nbla00360

Immunogen A synthesized peptide derived from human

DCP1A

KD-Validated Anti-DCP1A Rabbit Monoclonal Antibody - Additional Information

Gene ID **55802**

Other Names

mRNA-decapping enzyme 1A, 3.6.1.62, Smad4-interacting transcriptional co-activator,

Transcription factor SMIF, DCP1A, SMIF

KD-Validated Anti-DCP1A Rabbit Monoclonal 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:<a href="http://www.uniprot.org/citations/33813271"



target=" blank">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

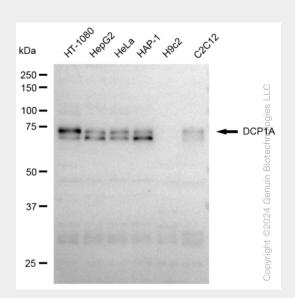
Detected in heart, brain, placenta, lung, skeletal muscle, liver, kidney and pancreas.

KD-Validated Anti-DCP1A Rabbit Monoclonal Antibody - Protocols

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

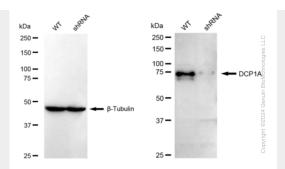
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

KD-Validated Anti-DCP1A Rabbit Monoclonal Antibody - Images

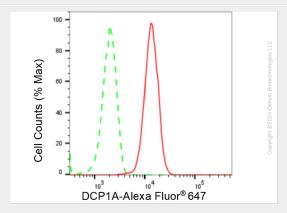


Western blotting analysis using anti-DCP1A antibody (Cat#AGI1502). Total cell lysates (30 μ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-DCP1A antibody (Cat#AGI1502, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.





Western blotting analysis using anti-DCP1A antibody (Cat#AGI1502). DCP1A expression in wild type (WT) and DCP1A shRNA knockdown (KD) HT-1080 cells with 30 μ g of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with anti-DCP1A antibody (Cat#AGI1502, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of DCP1A expression in HT-1080 cells using DCP1A antibody (Cat#AGI1502, 1:2,000). Green, isotype control; red, DCP1A.