

# DCP1A Antibody

Rabbit mAb Catalog # AP91766

#### **Product Information**

**Application** WB, IHC, IF, FC, ICC, IHF

Primary Accession Q9NPI6

**Reactivity** Rat, Human, Mouse

**Clonality** Monoclonal

Other Names Dcp1a; HSA275986; Nbla00360; SMAD4IP1; SMIF;

IsotypeRabbit IgGHostRabbitCalculated MW63278

### **Additional Information**

**Dilution** WB 1:500~1:2000 IHC 1:50~1:200 ICC/IF 1:50~1:200 FC 1:100

**Purification** Affinity-chromatography

**Immunogen** A synthesized peptide derived from human DCP1A

**Description** Necessary for the degradation of mRNAs, both in normal mRNA turnover and

in nonsense-mediated mRNA decay. Removes the 7-methyl guanine cap structure from mRNA molecules, yielding a 5'-phosphorylated mRNA

fragment and 7m-GDP. Contributes to the transactivation of target genes after

stimulation by TGFB1.

Storage Condition and Buffer Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium

azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term.

Avoid freeze / thaw cycle.

#### **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:<u>12417715</u>). Removes the 7-methyl guanine cap structure from mRNA molecules, yielding a 5'-phosphorylated mRNA fragment and 7m-GDP (PubMed:<u>12417715</u>).

Contributes to the transactivation of target genes after stimulation by TGFB1

(PubMed: 11836524). Essential for embryonic development

(PubMed:<u>33813271</u>).

Cellular Location Cytoplasm, P-body. Nucleus. Note=Co- localizes with NANOS3 in the

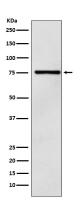
processing bodies (By similarity) Predominantly cytoplasmic, in processing

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.

## **Images**



Western blot analysis of DCP1A expression in 293T cell lysate.

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