[KD Validated] Anti-DCP1A Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

Catalog # R021190

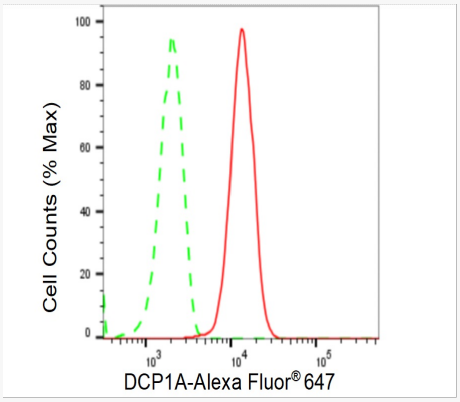
Product Information

Application	WB, FC, IF (Cell)/ICC
Reactivity	Human, Mouse
Dilution	WB 1:1,000~1:5,000; FC 1:200~1:2,000; IF 1:100~1:1,000
Host	Rabbit
Clonality	Monoclonal
Clone No.	46C53S29
Isotype	IgG
Label	Unconjugated
Immunogen	A synthesized peptide derived from human DCP1A
Format	Affinity purified monoclonal antibody supplied in PBS with 0.02% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 12 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	[KD Validated] Anti-DCP1A Rabbit mAb [46C53S29] is for research use only and not for use in diagnostic or therapeutic procedures.

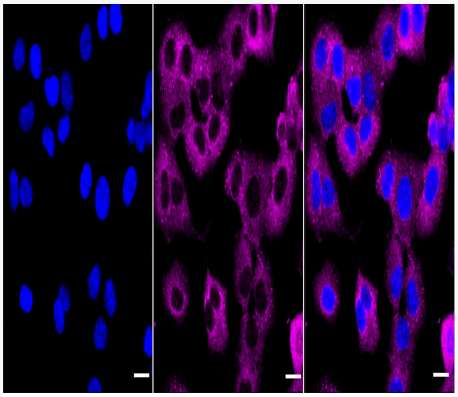
Protein Information

Synonyms	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.
Calculated MW	Calculated MW: 63 kDa, Observed MW: 75 kDa
Uniprot ID	Q9NPI6
Gene ID	55802
Background	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.
Cellular Location	Cytoplasm > P-body. Nucleus. Co-localizes with NANOS3 in the processing bodies (By similarity). Predominantly cytoplasmic, in processing bodies (PB). Nuclear, after TGFB1 treatment. Translocation to the nucleus depends on interaction with SMAD4.
Tissue Location	Detected in heart, brain, placenta, lung, skeletal muscle, liver, kidney and pancreas.

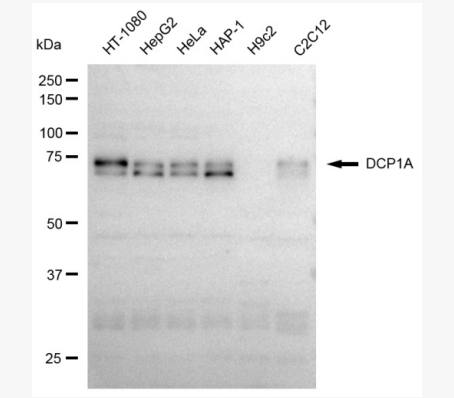
Validation Images



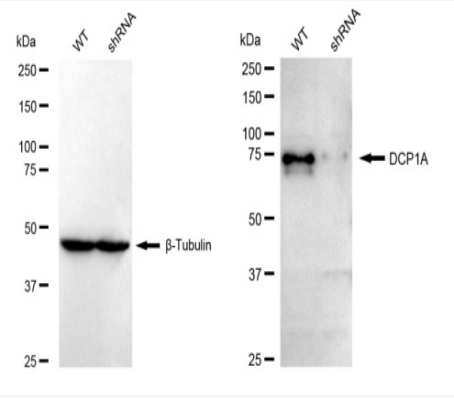
Flow cytometric analysis of DCP1A expression in HT-1080 cells using DCP1A antibody (R021190, 1:2,000). Green, isotype control; red, DCP1A.



Immunocytochemical staining of HT-1080 cells with DCP1A antibody (R021190, 1:1,000) . Nuclei were stained blue with DAPI; DCP1A was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar, 20 µm.



Western blotting analysis using DCP1A antibody (R021190). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with DCP1A antibody (R021190, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (1:20,000) respectively. Image was developed using ECL Substrate Kit.



Western blotting analysis using DCP1A antibody (R021190). DCP1A expression in wild type (WT) and DCP1A shRNA knockdown (KD) HT-1080 cells with 30 µg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with DCP1A antibody (R021190, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (1:20,000) respectively. Image was developed using ECL Substrate Kit.