

## **SMIF Polyclonal Antibody**

Catalog No: YT4343

**Reactivity:** Human; Mouse

**Applications:** WB;IHC;IF;ELISA

Target: SMIF

**Fields:** >>RNA degradation

Gene Name: DCP1A

**Protein Name:** mRNA-decapping enzyme 1A

Q9NPI6

Q91YD3

Human Gene Id: 55802

**Human Swiss Prot** 

Tullian Swiss From

No:

Mouse Gene ld: 75901

**Mouse Swiss Prot** 

No:

**Immunogen:** The antiserum was produced against synthesized peptide derived from human

DCP1A. AA range:111-160

**Specificity:** SMIF Polyclonal Antibody detects endogenous levels of SMIF protein.

**Formulation :** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

**Dilution:** WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:20000.. IF 1:50-200

**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

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**Storage Stability:** -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 75kD

**Cell Pathway:** RNA degradation;

**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 nonsensemediated decay factor hUpf1 and may be recruited to mRNAs containing

premature termination codons. This protein also participates in the TGF-beta signaling pathway. Alternative splicing of this gene results in multiple transcript

variants. [provided by RefSeq, Feb 2014],

**Function:** function: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.,similarity:Belongs to the DCP1 family.,subcellular location:Predominantly cytoplasmic, in processing bodies (PB). Nuclear, after TGFB1 treatment. Translocation to the nucleus depends on interaction with SMAD4.,subunit:Forms a complex with EDC3, DCP2, DDX6 and EDC4/HEDLS, within this complex directly interacts with EDC3. Binds DCP1B, UPF1 and

SMAD4. Part of a cytoplasmic complex containing proteins involved in mRNA decay, including XRN1 and LSM1. Interacts with PNRC2., tissue

specificity: Detected in heart, brain, placenta, lung, skeletal muscle, liver, kidney

and pancreas.,

Subcellular Location : Cytoplasm, P-body . Nucleus . 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

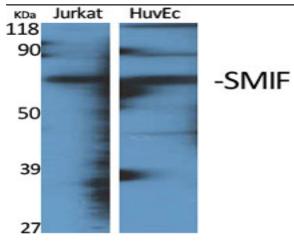
nucleus depends on interaction with SMAD4 (PubMed:11836524). .

**Expression:** Detected in heart, brain, placenta, lung, skeletal muscle, liver, kidney and

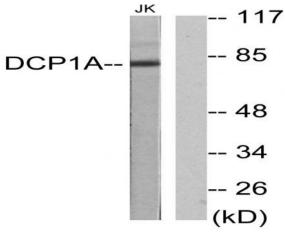
pancreas.

## **Products Images**

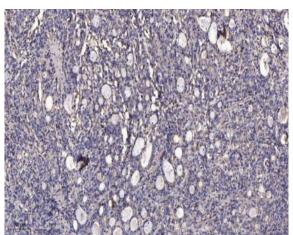
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Western Blot analysis of various cells using SMIF Polyclonal Antibody



Western blot analysis of lysates from Jurkat cells, using DCP1A Antibody. The lane on the right is blocked with the synthesized peptide.



Immunohistochemical analysis of paraffin-embedded human Gastric adenocarcinoma. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).