

# **Product datasheet for AP06755PU-M**

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OriGene Technologies, Inc.

## **DCP1A Rabbit Polyclonal Antibody**

**Product data:** 

**Product Type:** Primary Antibodies

Applications: IHC, WB

Recommended Dilution: Western blot: 1/500-1/1000.

Immunohistochemistry on paraffin sections: 1/50-1/200.

Reactivity: Human, Mouse

**Host:** Rabbit

Clonality: Polyclonal

**Immunogen:** Synthetic peptide, corresponding to amino acids 102-150 of Human SMIF.

**Specificity:** This antibody detects endogenous levels of SMIF protein.

(region surrounding Ser133)

**Formulation:** Phosphate buffered saline (PBS), pH 7.2.

State: Aff - Purified

State: Liquid purified lg fraction Preservative: 0.05% sodium azide

**Concentration:** 1.0 mg/ml

**Purification:** Affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-

PAGE)

Conjugation: Unconjugated

**Storage:** Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

Avoid repeated freezing and thawing.

**Stability:** Shelf life: one year from despatch.

**Predicted Protein Size:** ~ 75 kDa

**Gene Name:** decapping mRNA 1A

Database Link: Entrez Gene 75901 MouseEntrez Gene 55802 Human

Q9NPI6





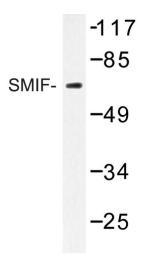
#### Background:

Signal transduction of TGF-beta superfamily members is regulated by Smad proteins. In particular, Smads influence specific gene transcription by relaying signals from the cell membrane to the nucleus. Smad4 plays an essential role in TGF-beta-induced transcriptional activation wherein phosphorylated receptor-associated Smads associate with Smad4. Furthermore, SMIF (Smad4-intereacting protein) and Smad4 complex with TGF-beta and BMP4. An increase in Smad4 concentration increases the translocation of this complex to the nucleus. SMIF and Smad4 interact directly through a EVH1/WH1 domain on SMIF and a proline-rich activation domain on Smad4. Smad4 is essential to nuclear translocation of SMIF as deletion of the Smad4-interacting domain (located in the N-terminal 100 amino acids) of SMIF eliminates TGF- $\beta$ -induced nuclear translocation of SMIF (1). The human SMIF gene is ubiquitously expressed and encodes a protein with a relative molecular mass of 70 kDa.

**Synonyms:** SMIF, mRNA-decapping enzyme 1A, Transcription factor SMIF

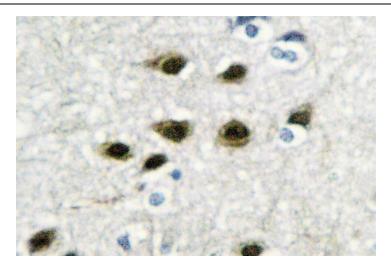
Protein Families: Transcription Factors
Protein Pathways: RNA degradation

## **Product images:**



Western blot (WB) analysis of SMIF antibody in extracts from Jurkat cells.





Immunohistochemistry (IHC) analyzes of SMIF antibody on paraffin-embedded sections.