

PAPD5 (aa78-90) Antibody (internal region)

Peptide-affinity purified goat antibody Catalog # AF3521a

## Specification

# PAPD5 (aa78-90) Antibody (internal region) - Product Information

Application Primary Accession Other Accession

Reactivity Host Clonality Concentration Isotype Calculated MW WB <u>Q8NDF8</u> <u>NP\_001035374.2</u>, <u>NP\_001035375.2</u>, <u>64282</u>, <u>214627 (mouse)</u> Human, Mouse Goat Polyclonal 0.5 mg/ml IgG 63267

# PAPD5 (aa78-90) Antibody (internal region) - Additional Information

Gene ID 64282

**Other Names** 

Non-canonical poly(A) RNA polymerase PAPD5, 2.7.7.19, PAP-associated domain-containing protein 5, Terminal uridylyltransferase 3, TUTase 3, Topoisomerase-related function protein 4-2, TRF4-2, PAPD5

Format

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions** 

PAPD5 (aa78-90) Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

### PAPD5 (aa78-90) Antibody (internal region) - Protein Information

Name TENT4B (HGNC:30758)

#### Function

Terminal nucleotidyltransferase that catalyzes preferentially the transfer of ATP and GTP on RNA 3' poly(A) tail creating a heterogeneous 3' poly(A) tail leading to mRNAs stabilization by protecting mRNAs from active deadenylation (PubMed:<a href="http://www.uniprot.org/citations/21788334" target="\_blank">21788334</a>, PubMed:<a href="http://www.uniprot.org/citations/30026317" target="\_blank">30026317</a>). Also functions as a catalytic subunit of a TRAMP-like complex



which has a poly(A) RNA polymerase activity and is involved in a post-transcriptional quality control mechanism. Polyadenylation with short oligo(A) tails is required for the degradative activity of the exosome on several of its nuclear RNA substrates. Doesn't need a cofactor for polyadenylation activity (in vitro) (PubMed: <a href="http://www.uniprot.org/citations/21788334" target=" blank">21788334</a>, PubMed:<a href="http://www.uniprot.org/citations/21855801" target=" blank">21855801</a>). Required for cytoplasmic polyadenylation of mRNAs involved in carbohydrate metabolism, including the glucose transporter SLC2A1/GLUT1 (PubMed:<a href="http://www.uniprot.org/citations/28383716" target=" blank">28383716</a>). Plays a role in replication-dependent histone mRNA degradation, probably through terminal uridylation of mature histone mRNAs. May play a role in sister chromatid cohesion (PubMed:<a href="http://www.uniprot.org/citations/18172165" target=" blank">18172165</a>). Mediates 3' adenylation of the microRNA MIR21 followed by its 3'-to-5' trimming by the exoribonuclease PARN leading to degradation (PubMed: <a href="http://www.uniprot.org/citations/25049417" target=" blank">25049417</a>). Mediates 3' adenylation of H/ACA box snoRNAs (small nucleolar RNAs) followed by its 3'-to-5' trimming by the exoribonuclease PARN which enhances snoRNA stability and maturation (PubMed: <a href="http://www.uniprot.org/citations/22442037" target=" blank">22442037</a>).

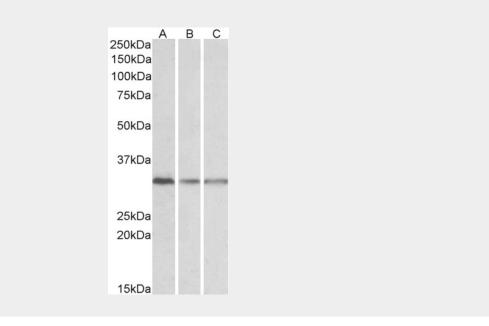
**Cellular Location** Nucleus. Nucleus, nucleolus. Cytoplasm Note=Predominantly expressed in the cytoplasm (PubMed:18172165)

# PAPD5 (aa78-90) Antibody (internal region) - Protocols

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

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

PAPD5 (aa78-90) Antibody (internal region) - Images





AF3521a (0.3  $\mu$ g/ml) staining of Human Cerebral Cortex (A), Human Frontal Cortex (B) and Mouse Brain lysates (35  $\mu$ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

### PAPD5 (aa78-90) Antibody (internal region) - Background

This antibody is expected to recognize both reported isoforms (NP\_001035374.2; NP\_001035375.2).

## PAPD5 (aa78-90) Antibody (internal region) - References

The topoisomerase-related function gene TRF4 affects cellular sensitivity to the antitumor agent camptothecin. Walowsky C, Fitzhugh DJ, Castaño IB, Ju JY, Levin NA, Christman MF. J Biol Chem. 1999 Mar 12;274(11):7302-8. PMID: 10066793