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PAPD5 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP18427a

Product Information

Application	WB, E
Primary Accession	Q8NDF8
Other Accession	NP_001035375.2
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB38544
Calculated MW	63267
Antigen Region	1-30

Additional Information

Gene ID	64282
Other Names	Non-canonical poly(A) RNA polymerase PAPD5, PAP-associated domain-containing protein 5, Terminal uridylyltransferase 3, TUTase 3, Topoisomerase-related function protein 4-2, TRF4-2, PAPD5
Target/Specificity	This PAPD5 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human PAPD5.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	PAPD5 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

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:21788334, PubMed:30026317). 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:21788334, PubMed:21855801). Required for cytoplasmic polyadenylation of mRNAs involved in carbohydrate metabolism, including the glucose transporter SLC2A1/GLUT1 (PubMed:28383716). 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:18172165). Mediates 3' adenylation of the microRNA MIR21 followed by its 3'-to-5' trimming by the exoribonuclease PARN leading to degradation (PubMed:25049417). 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:22442037).

Cellular Location

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

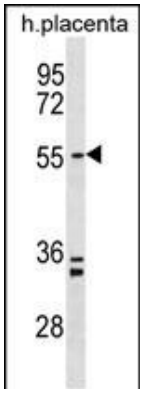
Background

PAPD5 plays a role in replication-dependent histone mRNA degradation. May be involved in the terminal uridylation of mature histone mRNAs before their degradation is initiated. DNA polymerase, probably involved in DNA repair. May play a role in sister chromatid cohesion.

References

Rose, J. Phd, et al. Mol. Med. (2010) In press :
Mullen, T.E., et al. Genes Dev. 22(1):50-65(2008)
Walowsky, C., et al. J. Biol. Chem. 274(11):7302-7308(1999)

Images



PAPD5 Antibody (N-term) (Cat. #AP18427a) western blot analysis in human placenta tissue lysates (35ug/lane).This demonstrates the PAPD5 Antibody detected the PAPD5 protein (arrow).