10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

PAPD5 Antibody (N-term) Blocking Peptide

Synthetic peptide
Catalog # BP18427a

Specification

PAPD5 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession Q8NDF8

PAPD5 Antibody (N-term) Blocking Peptide - 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

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

PAPD5 Antibody (N-term) Blocking Peptide - 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)

PAPD5 Antibody (N-term) Blocking Peptide - Protocols

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

- Blocking Peptides

PAPD5 Antibody (N-term) Blocking Peptide - Images

PAPD5 Antibody (N-term) Blocking Peptide - 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.

PAPD5 Antibody (N-term) Blocking Peptide - 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)