

PAN3 Antibody (C-term) Blocking Peptide

Synthetic peptide Catalog # BP4958b

Specification

PAN3 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession

Q58A45

PAN3 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 255967

Other Names

PAB-dependent poly(A)-specific ribonuclease subunit PAN3 {ECO:0000255|HAMAP-Rule:MF_03181}, PAB1P-dependent poly(A)-nuclease {ECO:0000255|HAMAP-Rule:MF_03181}, PAN deadenylation complex subunit 3 {ECO:0000255|HAMAP-Rule:MF_03181}, hPan3, PAN3 {ECO:0000255|HAMAP-Rule:MF_03181}

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.

PAN3 Antibody (C-term) Blocking Peptide - Protein Information

Name PAN3 {ECO:0000255|HAMAP-Rule:MF 03181}

Function

Regulatory subunit of the poly(A)-nuclease (PAN) deadenylation complex, one of two cytoplasmic mRNA deadenylases involved in general and miRNA-mediated mRNA turnover. PAN specifically shortens poly(A) tails of RNA and the activity is stimulated by poly(A)-binding protein (PABP). PAN deadenylation is followed by rapid degradation of the shortened mRNA tails by the CCR4-NOT complex. Deadenylated mRNAs are then degraded by two alternative mechanisms, namely exosome-mediated 3'-5' exonucleolytic degradation, or deadenylation-dependent mRNA decapping and subsequent 5'-3' exonucleolytic degradation by XRN1. PAN3 acts as a regulator for PAN activity, recruiting the catalytic subunit PAN2 to mRNA via its interaction with RNA and PABP, and to miRNA targets via its interaction with GW182 family proteins.

Cellular Location

Cytoplasm, P-body {ECO:0000255|HAMAP- Rule:MF_03181, ECO:0000269|PubMed:14583602, ECO:0000269|PubMed:18625844} [Isoform 3]: Cytoplasm



PAN3 Antibody (C-term) Blocking Peptide - Protocols

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

• Blocking Peptides

PAN3 Antibody (C-term) Blocking Peptide - Images

PAN3 Antibody (C-term) Blocking Peptide - Background

PAN3 is functions in cytoplasmic mRNA decay. It is as part of the Pan nuclease complex, recruits polyadenylate-binding protein which in turn stimulates PAN2 nuclease activity.

PAN3 Antibody (C-term) Blocking Peptide - References

Uchida, N., et al. J. Biol. Chem. 279(2):1383-1391(2004)