

Mouse Pan3 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP13932b

Specification

Mouse Pan3 Antibody (C-term) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW Antigen Region WB,E <u>O64005</u> <u>O58A45</u>, <u>NP_082567.3</u> Human, Mouse Rabbit Polyclonal Rabbit IgG 95451 727-755

Mouse Pan3 Antibody (C-term) - Additional Information

Gene ID 72587

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}, Pan3

Target/Specificity

This Mouse Pan3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 727-755 amino acids from the C-terminal region of mouse Pan3.

Dilution WB~~1:1000

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

Mouse Pan3 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Mouse Pan3 Antibody (C-term) - 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

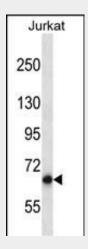
Cytoplasm, P-body {ECO:0000255|HAMAP- Rule:MF_03181, ECO:0000269|PubMed:18625844} [Isoform 3]: Cytoplasm {ECO:0000250|UniProtKB:Q58A45}

Mouse Pan3 Antibody (C-term) - Protocols

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

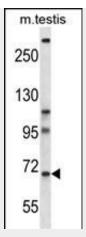
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Mouse Pan3 Antibody (C-term) - Images



Mouse Pan3 Antibody (C-term) (Cat. #AP13932b) western blot analysis in Jurkat cell line lysates (35ug/lane). This demonstrates the Pan3 antibody detected the Pan3 protein (arrow).





Mouse Pan3 Antibody (C-term) (Cat. #AP13932b) western blot analysis in mouse testis tissue lysates (35ug/lane). This demonstrates the Pan3 antibody detected the Pan3 protein (arrow).

Mouse Pan3 Antibody (C-term) - Background

Functions in cytoplasmic mRNA decay. As part of the Pan nuclease complex, recruits polyadenylate-binding protein which in turn stimulates PAN2 nuclease activity (By similarity).

Mouse Pan3 Antibody (C-term) - References

Zheng, D., et al. J. Cell Biol. 182(1):89-101(2008) Siddiqui, N., et al. J. Biol. Chem. 282(34):25067-25075(2007) Nishimura, M., et al. DNA Res. 11(5):315-323(2004) Zambrowicz, B.P., et al. Proc. Natl. Acad. Sci. U.S.A. 100(24):14109-14114(2003) Hansen, J., et al. Proc. Natl. Acad. Sci. U.S.A. 100(17):9918-9922(2003)