

# Mouse Pan3 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP13932b

## **Product Information**

Application Primary Accession	WB, E <u>064005</u>
Other Accession	<u>Q58A45</u> , <u>NP_082567.3</u>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB34660
Calculated MW	95451
Antigen Region	727-755

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

#### **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}

#### 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).

#### 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)

#### Images



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