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PAN3 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP4958b

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	Q58A45
Other Accession	Q640Q5
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB25565
Calculated MW	95613
Antigen Region	771-799

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}
Target/Specificity	This PAN3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 771-799 amino acids from the C-terminal region of human PAN3.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 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	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:14583602, ECO:0000269|PubMed:18625844} [Isoform 3]: Cytoplasm

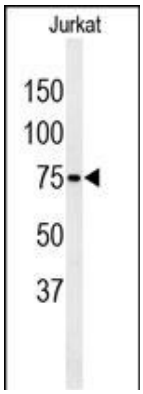
Background

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.

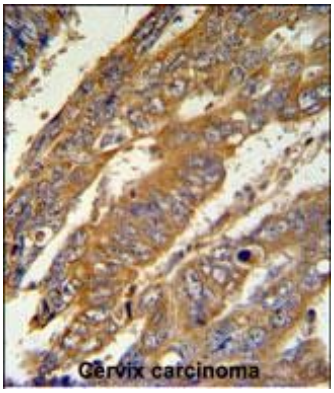
References

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

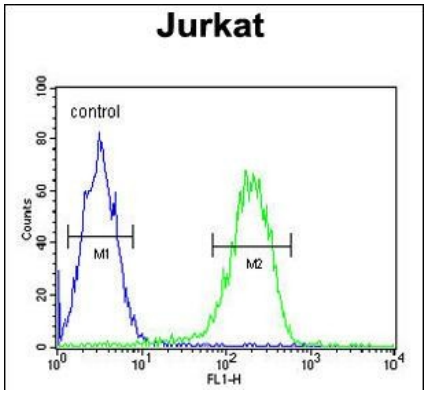
Images



Western blot analysis of PAN3 Antibody (C-term) (Cat. #AP4958b) in Jurkat cell line lysates (35ug/lane). PAN3 (arrow) was detected using the purified Pab.



PAN3 Antibody (C-term) (Cat. #AP4958b) IHC analysis in formalin fixed and paraffin embedded human cervix carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the PAN3 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.



PAN3 Antibody (C-term) (Cat. #AP4958b) flow cytometric analysis of Jurkat cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.