

PAN2 Antibody (C-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP16665b

Specification

PAN2 Antibody (C-term) - Product Information

Application	WB,E
Primary Accession	Q504Q3
Other Accession	Q6IE70 , Q8BGF7 , Q5F450 , NP_055686.3 , NP_001120932.1
Reactivity	Human
Predicted	Chicken, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	135368
Antigen Region	860-888

PAN2 Antibody (C-term) - Additional Information

Gene ID 9924

Other Names

PAB-dependent poly(A)-specific ribonuclease subunit PAN2 {ECO:0000255|HAMAP-Rule:MF_03182}, hPan2, 31134 {ECO:0000255|HAMAP-Rule:MF_03182}, Inactive ubiquitin carboxyl-terminal hydrolase 52 {ECO:0000255|HAMAP-Rule:MF_03182}, PAB1P-dependent poly(A)-nuclease {ECO:0000255|HAMAP-Rule:MF_03182}, PAN deadenylation complex catalytic subunit 2 {ECO:0000255|HAMAP-Rule:MF_03182}, PAN2 {ECO:0000255|HAMAP-Rule:MF_03182}, KIAA0710, USP52

Target/Specificity

This PAN2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 860-888 amino acids from the C-terminal region of human PAN2.

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

PAN2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

PAN2 Antibody (C-term) - Protein Information

Name PAN2 {ECO:0000255|HAMAP-Rule:MF_03182}

Synonyms KIAA0710, USP52

Function Catalytic 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. Also acts as an important regulator of the HIF1A-mediated hypoxic response. Required for HIF1A mRNA stability independent of poly(A) tail length regulation.

Cellular Location

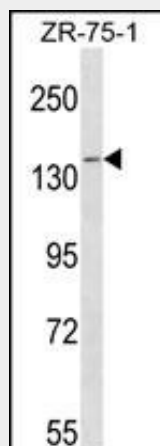
Cytoplasm. Cytoplasm, P-body {ECO:0000255|HAMAP-Rule:MF_03182, ECO:0000269|PubMed:18625844, ECO:0000269|PubMed:23398456}. Nucleus {ECO:0000255|HAMAP-Rule:MF_03182, ECO:0000269|PubMed:16284618}. Note=Shuttles between nucleus and cytoplasm. {ECO:0000255|HAMAP-Rule:MF_03182, ECO:0000269|PubMed:16284618}

PAN2 Antibody (C-term) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

PAN2 Antibody (C-term) - Images



PAN2 Antibody (C-term) (Cat. #AP16665b) western blot analysis in ZR-75-1 cell line lysates

(35ug/lane). This demonstrates the PAN2 antibody detected the PAN2 protein (arrow).

PAN2 Antibody (C-term) - Background

This gene encodes a deadenylase that functions as the catalytic subunit of the polyadenylate binding protein dependent poly(A) nuclease complex. The encoded protein is a magnesium dependent 3' to 5' exoribonuclease that is involved in the degradation of cytoplasmic mRNAs. Alternate splicing results in multiple transcript variants.

PAN2 Antibody (C-term) - References

Bailey, S.D., et al. Diabetes Care (2010) In press :
Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009)
Funakoshi, Y., et al. Genes Dev. 21(23):3135-3148(2007)
Ezzeddine, N., et al. Mol. Cell. Biol. 27(22):7791-7801(2007)
Yamashita, A., et al. Nat. Struct. Mol. Biol. 12(12):1054-1063(2005)