

PAN2 Antibody (C-term) Blocking Peptide
Synthetic peptide
Catalog # BP16665b**Specification**

PAN2 Antibody (C-term) Blocking Peptide - Product InformationPrimary Accession [Q504Q3](#)**PAN2 Antibody (C-term) Blocking Peptide - 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

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.

PAN2 Antibody (C-term) Blocking Peptide - 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) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

PAN2 Antibody (C-term) Blocking Peptide - Images

PAN2 Antibody (C-term) Blocking Peptide - 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) Blocking Peptide - 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)