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USP52/Pan2 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP57822

Product Information

Application	WB, IHC-P, IHC-F, IF, ICC, E
Primary Accession	Q504Q3
Reactivity	Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	135368

Additional Information

Gene ID	9924
Other Names	PAN2-PAN3 deadenylation complex catalytic subunit PAN2 {ECO:0000255|HAMAP-Rule:MF_03182}, 3.1.13.4 {ECO:0000255|HAMAP-Rule:MF_03182}, Inactive ubiquitin carboxyl-terminal hydrolase 52 {ECO:0000255|HAMAP-Rule:MF_03182}, PAB1P-dependent poly(A)-specific ribonuclease {ECO:0000255|HAMAP-Rule:MF_03182}, Poly(A)-nuclease deadenylation complex subunit 2 {ECO:0000255|HAMAP-Rule:MF_03182}, PAN deadenylation complex subunit 2 {ECO:0000255|HAMAP-Rule:MF_03182}, PAN2 {ECO:0000255|HAMAP-Rule:MF_03182}, KIAA0710, USP52
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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 decaping 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}