10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

PELO Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP58767

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	Q9BRX2
Reactivity	Rat, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	43359
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human PELO
Epitope Specificity	141-240/385
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Nucleus (Potential). Cytoplasm (Bysimilarity).
SIMILARITY	Belongs to the eukaryotic release factor 1 family.Pelota subfamily.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Required for normal chromosome segregation during cell division and genomic stability (By similarity). May function in recognizing stalled ribosomes and triggering endonucleolytic cleavage of the mRNA, a mechanism to release non-functional ribosomes and degrade damaged mRNAs. May have ribonuclease activity.

Additional Information

Gene ID	53918
Other Names	Protein pelota homolog, 3.1.-.-, PELO
Target/Specificity	Ubiquitously expressed.
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=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	PELO {ECO:0000303|PubMed:11060452, ECO:0000312|HGNC:HGNC:8829}
Function	Component of the Pelota-HBS1L complex, a complex that recognizes stalled ribosomes and triggers the No-Go Decay (NGD) pathway (PubMed:21448132, PubMed:23667253, PubMed:27543824, PubMed:27863242). In the Pelota-HBS1L complex, PELO recognizes ribosomes stalled at the 3' end of an mRNA and engages stalled ribosomes by destabilizing mRNA in the mRNA channel (PubMed:27543824, PubMed:27863242). Following mRNA extraction from stalled ribosomes by the SKI complex, the Pelota-HBS1L complex promotes recruitment of ABCE1, which drives the disassembly of stalled ribosomes, followed by degradation of damaged mRNAs as part of the NGD pathway (PubMed:21448132, PubMed:32006463). As part of the PINK1-regulated signaling, upon mitochondrial damage is recruited to the ribosome/mRNA-ribonucleoprotein complex associated to mitochondrial outer membrane thereby enabling the recruitment of autophagy receptors and induction of mitophagy (PubMed:29861391).
Cellular Location	Cytoplasm.
Tissue Location	Ubiquitously expressed.

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