

# PAPOG Rabbit pAb

Catalog # AP97642

## Product Information

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| <b>Application</b>                      | IHC-P, IHC-F, IF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Primary Accession</b>                | <a href="#">Q9BWT3</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Other Accession</b>                  | <a href="#">Q9BWT3</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Reactivity</b>                       | Mouse                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Predicted</b>                        | Rat, Pig, Human, Dog, Horse                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Host</b>                             | Rabbit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Clonality</b>                        | Polyclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Calculated MW</b>                    | 82803                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Physical State</b>                   | Liquid                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Immunogen</b>                        | KLH conjugated synthetic peptide derived from human PAPOG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Epitope Specificity</b>              | 101-200/736                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Isotype</b>                          | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Purity</b>                           | affinity purified by Protein A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Buffer</b>                           | 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>SIMILARITY</b>                       | Belongs to the poly(A) polymerase family.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>SUBUNIT</b>                          | Responsible for the post-transcriptional adenylation of the 3'-terminal of mRNA precursors and several small RNAs including signal recognition particle (SRP) RNA, nuclear 7SK RNA, U2 small nuclear RNA, and ribosomal 5S RNA.                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Post-translational modifications</b> | Polysumoylated. Varying sumoylation depending on tissue- and cell-type. Highly sumoylated in bladder and NIH 3T3 cells. Sumoylation is required for nuclear localization and enhances PAP stability. Desumoylated by SENP1. Inhibits polymerase activity. Hyperphosphorylation on multiple CDK2 consensus and non-consensus sites in the C-terminal Ser/Thr-rich region represses PAP activity in late M-phase. Phosphorylation/dephosphorylation may regulate the interaction between PAP and CPSF. Acetylated in the C-terminus. Acetylation decreases interaction with NUDT21 and KPNB1, and inhibits nuclear localization through inhibiting binding to the importin alpha/beta complex. |
| <b>Important Note</b>                   | This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Background Descriptions</b>          | This gene encodes a member of the poly(A) polymerase family which catalyzes template-independent extension of the 3' end of a DNA/RNA strand. This enzyme shares 60% identity to the well characterized poly(A) polymerase II (PAPII) at the amino acid level. These two enzymes have similar organization of structural and functional domains. This enzyme is exclusively localized in the nucleus and exhibits both nonspecific and CPSF (cleavage and polyadenylation specificity factor)/AAUAAA-dependent polyadenylation activity. This gene is located on chromosome 2 in contrast to the PAPII gene, which is located on chromosome 14. [provided by RefSeq, Jul 2008].              |

## Additional Information

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Gene ID 64895

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| <b>Other Names</b> | PAPOG_HUMAN; PAPOLG; PAP-gamma; Neo-poly(A) polymerase (Neo-PAP); Polynucleotide adenylyltransferase gamma; SRP RNA 3'-adenylating enzyme; Signal recognition particle RNA-adenylating enzyme (SRP RNA-adenylating enzyme); 2.7.7.19; PAP2; PAPG; poly(A) polymerase gamma |
| <b>Dilution</b>    | IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500                                                                                                                                                                                                                               |
| <b>Storage</b>     | 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

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| <b>Name</b>              | PAPOLG ( <a href="#">HGNC:14982</a> )                                                                                                                                                                                           |
| <b>Synonyms</b>          | PAP2, PAPG                                                                                                                                                                                                                      |
| <b>Function</b>          | Responsible for the post-transcriptional adenylation of the 3'-terminal of mRNA precursors and several small RNAs including signal recognition particle (SRP) RNA, nuclear 7SK RNA, U2 small nuclear RNA, and ribosomal 5S RNA. |
| <b>Cellular Location</b> | Nucleus                                                                                                                                                                                                                         |
| <b>Tissue Location</b>   | Expressed predominantly in testis, and weakly in other tissues.<br>Overexpressed in several tumors                                                                                                                              |

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