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# POLN Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP14647b

## Product Information

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| **Application** | WB, E |
| **Primary Accession** | Q7Z5Q5 |
| **Other Accession** | NP_861524.2 |
| **Reactivity** | Human, Rat, Mouse |
| **Predicted** | Bovine, Rabbit |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Isotype** | Rabbit IgG |
| **Clone Names** | RB28575 |
| **Calculated MW** | 100307 |
| **Antigen Region** | 651-679 |

## Additional Information

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| **Gene ID** | 353497 |
| **Other Names** | DNA polymerase nu, POLN |
| **Target/Specificity** | This POLN antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 651-679 amino acids from the C-terminal region of human POLN. |
| **Dilution** | WB~~1:1000 E~~Use at an assay dependent concentration. |
| **Format** | Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS. |
| **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** | POLN Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

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| **Name** | POLN |
| **Function** | DNA polymerase with very low fidelity that catalyzes considerable misincorporation by inserting dTTP opposite a G template, and dGTP opposite a T template (PubMed:16787914, PubMed:17118716). Is the least accurate of |

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| | the DNA polymerase A family (i.e. POLG, POLN and POLQ) (PubMed:17118716). Can perform accurate translesion DNA synthesis (TLS) past a 5S-thymine glycol. Can perform efficient strand displacement past a nick or a gap and gives rise to an amount of product similar to that on non-damaged template. Has no exonuclease activity (PubMed:16787914). Error-prone DNA polymerase that preferentially misincorporates dT regardless of template sequence (PubMed:25775266). May play a role in TLS during interstrand cross-link (ICL) repair (PubMed:19908865). May be involved in TLS when genomic replication is blocked by extremely large major groove DNA lesions. May function in the bypass of some DNA-protein and DNA-DNA cross-links. May have a role in cellular tolerance to DNA cross-linking agents (PubMed:20102227). Involved in the repair of DNA cross-links and double-strand break (DSB) resistance. Participates in FANCD2-mediated repair. Forms a complex with HELQ helicase that participates in homologous recombination (HR) repair and is essential for cellular protection against DNA cross-links (PubMed:19995904). |
| **Cellular Location** | Nucleus. |
| **Tissue Location** | Highly expressed in testis and heart. Weakly expressed in skeletal muscle. |

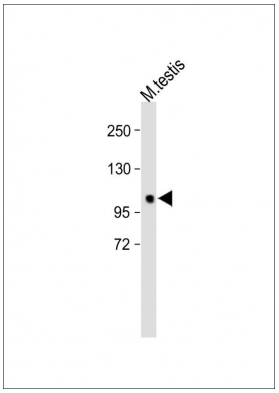
## Background

The function of this protein remains unknown.

## References


Rose, J. Phd, et al. Mol. Med. (2010) In press :
Yamanaka, K., et al. Chem. Res. Toxicol. 23(3):689-695(2010)
Moldovan, G.L., et al. Mol. Cell. Biol. 30(4):1088-1096(2010)
Zietlow, L., et al. Biochemistry 48(49):11817-11824(2009)
Arana, M.E., et al. DNA Repair (Amst.) 6(2):213-223(2007)


## Images




All lanes : Anti-POLN Antibody (C-term) at 1:500 dilution Lane 1: mouse testis lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 100 kDa Blocking/Dilution buffer: 5% NFDM/TBST.


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