

**POLN Antibody (C-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP14647b**

**Specification**

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**POLN Antibody (C-term) - Product Information**

Application	WB,E
Primary Accession	<a href="#">O7Z5Q5</a>
Other Accession	<a href="#">NP_861524.2</a>
Reactivity	Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	651-679

**POLN Antibody (C-term) - Additional Information**

**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

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**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.

**POLN Antibody (C-term) - Protein Information**

**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 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**

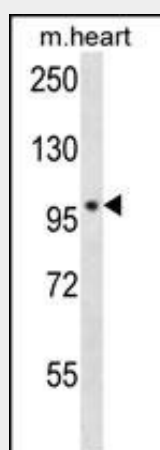
Highly expressed in testis and heart. Weakly expressed in skeletal muscle.

#### **POLN Antibody (C-term) - Protocols**

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### **POLN Antibody (C-term) - Images**



POLN Antibody (C-term) (Cat. #AP14647b) western blot analysis in mouse heart tissue lysates (35ug/lane). This demonstrates the POLN antibody detected the POLN protein (arrow).

#### **POLN Antibody (C-term) - Background**

The function of this protein remains unknown.

**POLN Antibody (C-term) - 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)