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POLN Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP14647b

Specification

POLN Antibody (C-term) - Product Information

Application	**WB,E**
Primary Accession	Q7Z5Q5
Other Accession	NP_861524.2
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.

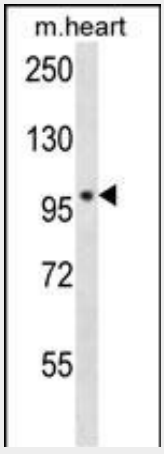
Tissue Location
Highly expressed in testis and heart. Weakly expressed in skeletal muscle.

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 Cytomety
- 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.

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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)