

POLN Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP14647b

Product Information

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

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 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

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.

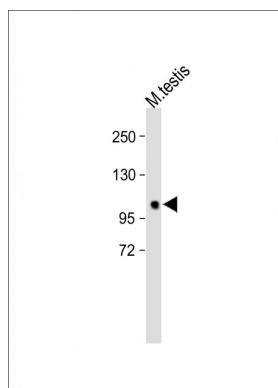
Background

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'.