

POLN Antibody (C-term) Blocking Peptide
Synthetic peptide
Catalog # BP14647b**Specification**

POLN Antibody (C-term) Blocking Peptide - Product InformationPrimary Accession [Q7Z5Q5](#)**POLN Antibody (C-term) Blocking Peptide - Additional Information****Gene ID** 353497**Other Names**

DNA polymerase nu, POLN

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

POLN Antibody (C-term) Blocking Peptide - 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) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

POLN Antibody (C-term) Blocking Peptide - Images**POLN Antibody (C-term) Blocking Peptide - Background**

The function of this protein remains unknown.

POLN Antibody (C-term) Blocking Peptide - 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)