
Summary

Production Name	DNA pol ι Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	WB,ELISA
Reactivity	Human,Rat,Mouse

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	POLI
Alternative Names	POLI; RAD30B; DNA polymerase iota; Eta2; RAD30 homolog B
Gene ID	11201.0
SwissProt ID	Q9UNA4.The antiserum was produced against synthesized peptide derived from human POLI. AA range:641-690

Application

Dilution Ratio	WB 1:500 - 1:2000. ELISA: 1:40000. Not yet tested in other applications.
Molecular Weight	85kD

Background

Product Name: DNA pol ι Rabbit Polyclonal Antibody
Catalog #: APRab10063

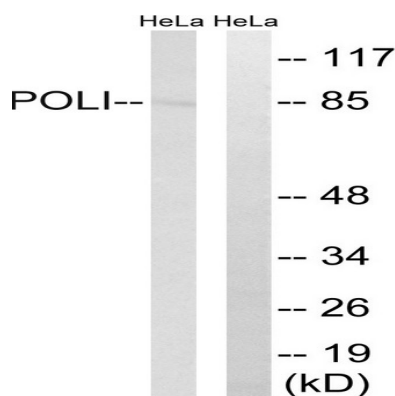


catalytic activity:Deoxynucleoside triphosphate + DNA(n) = diphosphate + DNA(n+1),cofactor:Magnesium.,domain:The catalytic core consists of fingers, palm and thumb subdomains, but the fingers and thumb subdomains are much smaller than in high-fidelity polymerases; residues from five sequence motifs of the Y-family cluster around an active site cleft that can accommodate DNA and nucleotide substrates with relaxed geometric constraints, with consequently higher rates of misincorporation and low processivity.,function:Error-prone DNA polymerase specifically involved in DNA repair. Plays an important role in translesion synthesis, where the normal high-fidelity DNA polymerases cannot proceed and DNA synthesis stalls. Favors Hoogsteen base-pairing in the active site. Inserts the correct base with high-fidelity opposite an adenosine template. Exhibits low fidelity and efficiency opposite a thymidine template, where it will preferentially insert guanosine. May play a role in hypermutation of immunoglobulin genes. Forms a Schiff base with 5'-deoxyribose phosphate at abasic sites, but may not have lyase activity.,similarity:Belongs to the DNA polymerase type-Y family.,similarity:Contains 1 umuC domain.,subcellular location:Accumulates at replication forks after DNA damage.,subunit:Binds REV1L (By similarity). Binds POLH.,tissue specificity:Ubiquitous. Highly expressed in testis.,catalytic activity:Deoxynucleoside triphosphate + DNA(n) = diphosphate + DNA(n+1),cofactor:Magnesium.,domain:The catalytic core consists of fingers, palm and thumb subdomains, but the fingers and thumb subdomains are much smaller than in high-fidelity polymerases; residues from five sequence motifs of the Y-family cluster around an active site cleft that can accommodate DNA and nucleotide substrates with relaxed geometric constraints, with consequently higher rates of misincorporation and low processivity.,function:Error-prone DNA polymerase specifically involved in DNA repair. Plays an important role in translesion synthesis, where the normal high-fidelity DNA polymerases cannot proceed and DNA synthesis stalls. Favors Hoogsteen base-pairing in the active site. Inserts the correct base with high-fidelity opposite an adenosine template. Exhibits low fidelity and efficiency opposite a thymidine template, where it will preferentially insert guanosine. May play a role in hypermutation of immunoglobulin genes. Forms a Schiff base with 5'-deoxyribose phosphate at abasic sites, but may not have lyase activity.,similarity:Belongs to the DNA polymerase type-Y family.,similarity:Contains 1 umuC domain.,subcellular location:Accumulates at replication forks after DNA damage.,subunit:Binds REV1L (By similarity). Binds POLH.,tissue specificity:Ubiquitous. Highly expressed in testis.,

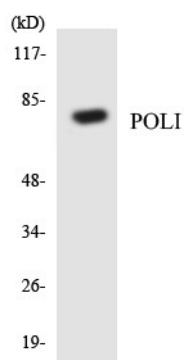
Research Area

Image Data

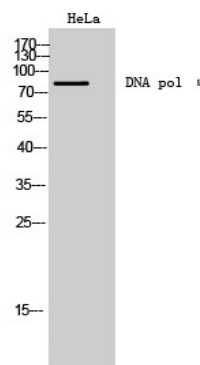
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Western blot analysis of lysates from HeLa cells, using POLI Antibody. The lane on the right is blocked with the synthesized peptide.



Western blot analysis of the lysates from HeLa cells using POLI antibody.



Western Blot analysis of HeLa cells using DNA pol ϵ Polyclonal Antibody cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003, Inventbiotech, MN, USA) .

Note

For research use only.