

Product name:	DNA pol γ Rabbit Polyclonal Antibody
Cat number:	ABN10063
Conjugate:	Unconjugated
Size:	100 μ L
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	The antiserum was produced against synthesized peptide derived from human POLI. AA range:641-690
Reactivity:	Human,Rat,Mouse
Applications:	WB 1:500-1:2000,ELISA 1:20000-1:40000
Molecular Weight:	85kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

Background:

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.,