

DNA pol ? Polyclonal Antibody

Cat No: HR1AP5725

For research use only

Overview

Product Name	DNA pol ? Polyclonal Antibody
Source	Rabbit
Applications	WB,ELISA
Species Reactivity	Human
Recommended Dilutions	
Immunogen	
Species	Rabbit
Storage	-20°C/1 year
Isotype	
Clonality	
Concentration	1 mg/ml
Observed band	85kDa
GeneID?Human?	POL1
Human Swiss-Prot No.	
Cellular localization	
Alternative Names	POL1; RAD30B; DNA polymerase iota; Eta2; RAD30 homolog B
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.,