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# DNA pol ι Polyclonal Antibody

Catalog # AP69560

## Product Information

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|---|---|
| **Application** | WB |
| **Primary Accession** | Q9UNA4 |
| **Reactivity** | Human |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Calculated MW** | 83006 |

## Additional Information

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|---|---|
| **Gene ID** | 11201 |
| **Other Names** | POLI; RAD30B; DNA polymerase iota; Eta2; RAD30 homolog B |
| **Dilution** | WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/40000. Not yet tested in other applications. |
| **Format** | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide. |
| **Storage Conditions** | -20℃ |

## Protein Information

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|---|---|
| **Name** | POLI |
| **Synonyms** | RAD30B |
| **Function** | Error-prone DNA polymerase specifically involved in DNA repair (PubMed:11013228, PubMed:11387224). Plays an important role in translesion synthesis, where the normal high-fidelity DNA polymerases cannot proceed and DNA synthesis stalls (PubMed:11013228, PubMed:11387224, PubMed:14630940, PubMed:15199127). Favors Hoogsteen base-pairing in the active site (PubMed:15254543). Inserts the correct base with high-fidelity opposite an adenosine template (PubMed:15254543). Exhibits low fidelity and efficiency opposite a thymidine template, where it will preferentially insert guanosine (PubMed:11013228). May play a role in hypermutation of immunoglobulin genes (PubMed:12410315). Forms a Schiff base with 5'-deoxyribose phosphate at abasic sites, but may not have lyase activity (PubMed:11251121, PubMed:14630940). |
| **Cellular Location** | Nucleus. Note=Binding to ubiquitin mediates localization to replication forks after UV-induced DNA damage. {ECO:0000250\|UniProtKB:Q6R3M4} |

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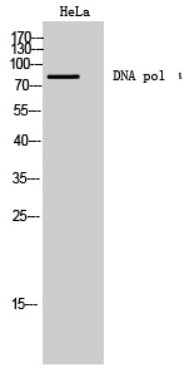
|---|---|
| **Tissue Location** | Ubiquitous. Highly expressed in testis. |

## Background

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 immunogobulin genes. Forms a Schiff base with 5'-deoxyribose phosphate at abasic sites, but may not have lyase activity.

## Images




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