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DNA pol ι Polyclonal Antibody

Catalog # AP69560

Product Information

Application	WB, E
Primary Accession	Q9UNA4
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	83006

Additional Information

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. E~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20℃

Protein Information

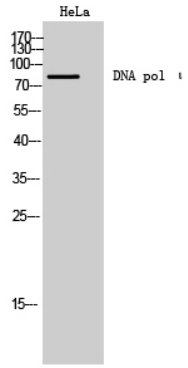
Name	POLI
Synonyms	RAD30B
Function	Error-prone DNA polymerase specifically involved in DNA repair (PubMed:11013228, PubMed:11387224). Plays an important role in translesion synthesis, where the normal high-fidelity DNA polymerases cannot proceed and DNA synthesis stalls (PubMed:11013228, PubMed:11387224, PubMed:14630940, PubMed:15199127, PubMed:20388628). 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}

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).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.