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Anti-DNA Polymerase iota Antibody

Catalog # AP60950

Product Information

Application	WB, IHC
Primary Accession	Q9UNA4
Reactivity	Human, Mk
Host	Rabbit
Clonality	Polyclonal
Calculated MW	83006

Additional Information

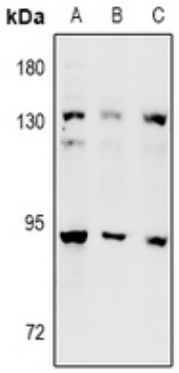
Gene ID	11201
Other Names	RAD30B; DNA polymerase iota; Eta2; RAD30 homolog B
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human DNA Polymerase iota. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IHC~~1:100~500
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

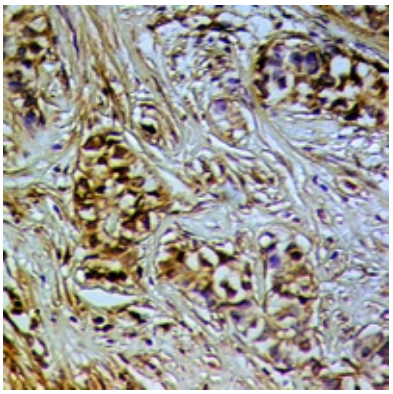
Name	POLI
Synonyms	RAD30B
Function	Error-prone DNA polymerase specifically involved in DNA repair (PubMed:11013228, PubMed:11387224). Plays an important role in translesion synthesis, where the normal high-fidelity DNA polymerases cannot proceed and DNA synthesis stalls (PubMed:11013228, PubMed:11387224,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

Images



Western blot analysis of DNA Polymerase iota expression in A549 (A), U87MG (B), MCF7 (C) whole cell lysates. (Predicted band size: 83 kD; Observed band size: 90 kD)



Immunohistochemical analysis of DNA Polymerase iota staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

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