

# Anti-DNA Polymerase iota Antibody

Rabbit polyclonal antibody to DNA Polymerase iota Catalog # AP60950

#### **Product Information**

Application WB
Primary Accession Q9UNA4

Reactivity Human, Monkey

HostRabbitClonalityPolyclonalCalculated MW83006

#### **Additional Information**

**Gene ID** 11201

Other Names RAD30B; DNA polymerase iota; Eta2; RAD30 homolog B

**Target/Specificity** Recognizes endogenous levels of DNA Polymerase iota protein.

**Dilution** WB~~WB (1/500 - 1/1000)

Format Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30%

glycerol, and 0.09% (W/V) 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:<u>11013228</u>, PubMed:<u>11387224</u>). Plays an important role in translesion synthesis, where the normal high-fidelity DNA polymerases

cannot proceed and DNA synthesis stalls (PubMed:<u>11013228</u>, PubMed:<u>11387224</u>, PubMed:<u>14630940</u>, PubMed:<u>15199127</u>). Favors Hoogsteen base-pairing in the active site (PubMed:<u>15254543</u>). 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:<u>14630940</u>).

**Cellular Location** Nucleus. Note=Binding to ubiquitin mediates localization to replication forks

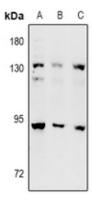
after UV-induced DNA damage. {ECO:0000250|UniProtKB:Q6R3M4}

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

## **Background**

KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human DNA Polymerase iota. The exact sequence is proprietary.

### **Images**



Western blot analysis of DNA Polymerase iota expression in A549 (A), U87MG (B), MCF7 (C) whole cell lysates.

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