

# **DNA polι Rabbit pAb**

CatalogNo: YT1377

## **Key Features**

Host Species Reactivity Applications
• Rabbit • Human, Mouse • WB, ELISA

MW Isotype • 85kD (Observed) • IgG

### Recommended Dilution Ratios

WB 1:500-1:2000 ELISA 1:40000

Not yet tested in other applications.

### Storage

Storage\* -15°C to -25°C/1 year(Do not lower than -25°C)

**Formulation** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

### **Basic Information**

**Clonality** Polyclonal

### Immunogen Information

Immunogen The antiserum was produced against synthesized peptide derived from human POLI. AA

range:641-690

**Specificity** DNA pol ι Polyclonal Antibody detects endogenous levels of DNA pol ι protein.

# | Target Information

#### Gene name

**POLI** 

#### **Protein Name**

DNA polymerase iota

Organism	Gene ID	UniProt ID
Human	<u>11201;</u>	Q9UNA4;
Mouse		Q6R3M4;

### Cellular Localization

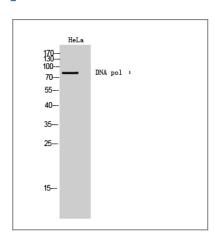
Nucleus . Binding to ubiquitin mediates localization to replication forks after UV-induced DNA damage. .

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

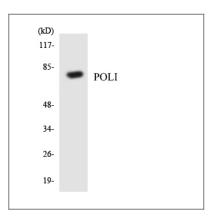
#### **Function**

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 highfidelity 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 quanosine. 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., 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.,

### **Validation Data**



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).



Western blot analysis of the lysates from HeLa cells using POLI antibody.

# | Contact information

Orders: order@immunoway.com Support: tech@immunoway.com

Telephone: 877-594-3616 (Toll Free), 408-747-0185

Website: http://www.immunoway.com

Address: 2200 Ringwood Ave San Jose, CA 95131 USA



Please scan the QR code to access additional product information: **DNA pol L Rabbit** 

pAb

For Research Use Only. Not for Use in Diagnostic Procedures.

Antibody | ELISA Kits | Protein | Reagents