

**Product Name: DNA pol  $\delta$  cat Rabbit Polyclonal Antibody****Catalog #: APRab10056**

For research use only.

**Summary**

<b>Description</b>	Rabbit polyclonal Antibody
<b>Host</b>	Rabbit
<b>Application</b>	WB,ELISA
<b>Reactivity</b>	Human,Mouse,Rat
<b>Conjugation</b>	Unconjugated
<b>Modification</b>	Unmodified
<b>Isotype</b>	IgG
<b>Clonality</b>	Polyclonal
<b>Form</b>	Liquid
<b>Concentration</b>	1mg/ml
<b>Storage</b>	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
<b>Shipping</b>	Ice bags
<b>Buffer</b>	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
<b>Purification</b>	Affinity purification

**Application**

<b>Dilution Ratio</b>	WB 1:500-1:2000,ELISA 1:20000-1:40000
<b>Molecular Weight</b>	110 124kDa

**Antigen Information**

<b>Gene Name</b>	POLD1
<b>Alternative Names</b>	POLD1; POLD; DNA polymerase delta catalytic subunit; DNA polymerase subunit delta p125
<b>Gene ID</b>	5424.0
<b>SwissProt ID</b>	P28340
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human POLD1. AA range:1051-1100

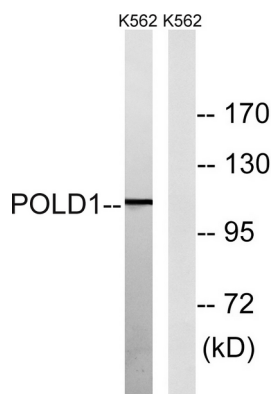
**Background**

This gene encodes the 125-kDa catalytic subunit of DNA polymerase delta. DNA polymerase delta possesses both polymerase and 3' to 5' exonuclease activity and plays a critical role in DNA replication and repair. Alternatively spliced transcript variants have been observed for this gene, and a pseudogene of this gene is located on the long arm of chromosome 6. [provided by RefSeq, Mar 2012],catalytic activity:Deoxynucleoside triphosphate + DNA(n) = diphosphate + DNA(n+1),.function:Possesses two enzymatic activities: DNA synthesis (polymerase) and an exonucleolytic activity that degrades single stranded DNA in the 3'- to 5'-direction. Required with its accessory proteins (proliferating cell nuclear antigen (PCNA) and replication factor C (RFC) or activator 1) for leading strand synthesis. Also involved in completing Okazaki fragments initiated by the DNA polymerase alpha/primase complex.,miscellaneous:In eukaryotes there are five DNA polymerases: alpha, beta, gamma, delta, and epsilon which are responsible for different reactions of DNA synthesis.,similarity:Belongs to the DNA polymerase type-B family.,subunit:Heterotetramer composed of subunits of 125 kDa, 50 kDa, 66 kDa and 12 kDa. The 125 kDa subunit contains the polymerase active site and most likely the active site for the 3'-5' exonuclease activity. Interacts with WRNIP1. Interacts with POLD4 and PCNA.,

## Research Area

Purine metabolism;Pyrimidine metabolism;DNA replication;Base excision repair;Nucleotide excision repair;Mismatch repair;Homologous recombination;

## Image Data



Western blot analysis of lysates from K562 cells, using POLD1 Antibody. The lane on the right is blocked with the synthesized peptide.