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**Product Name: DNA pol  $\epsilon$  A Rabbit Polyclonal Antibody****Catalog #: APRab10059**

For research use only.

**Summary**

<b>Description</b>	Rabbit polyclonal Antibody
<b>Host</b>	Rabbit
<b>Application</b>	IHC,ICC/IF,ELISA
<b>Reactivity</b>	Human,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**

**Dilution Ratio** IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:20000-1:40000

**Molecular Weight**

**Antigen Information**

<b>Gene Name</b>	POLE
<b>Alternative Names</b>	POLE; POLE1; DNA polymerase epsilon catalytic subunit A; DNA polymerase II subunit A
<b>Gene ID</b>	5426.0
<b>SwissProt ID</b>	Q07864
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human POLE1. AA range:1261-1310

**Background**

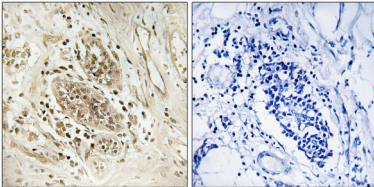
DNA polymerase epsilon, catalytic subunit(POLE) Homo sapiens This gene encodes the catalytic subunit of DNA polymerase

epsilon. The enzyme is involved in DNA repair and chromosomal DNA replication. Mutations in this gene have been associated with colorectal cancer 12 and facial dysmorphism, immunodeficiency, livedo, and short stature. [provided by RefSeq, Sep 2013],catalytic activity:Deoxynucleoside triphosphate + DNA(n) = diphosphate + DNA(n+1).,domain:The DNA polymerase activity domain resides in the N-terminal half of the protein, while the C-terminus is necessary for complexing subunits B and C. The C-terminus may also regulate the catalytic activities of the enzyme.,function:Participates in DNA repair and in chromosomal DNA replication.,PTM:Phosphorylated upon DNA damage, probably by ATM or ATR.,similarity:Belongs to the DNA polymerase type-B family.,subunit:Consists of two subunits (258 kDa and 55 kDa). Interacts with RAD17 and TOPBP1.,

## Research Area

Purine metabolism;Pyrimidine metabolism;DNA replication;Base excision repair;Nucleotide excision repair;

## Image Data



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma tissue, using POLE1 Antibody. The picture on the right is blocked with the synthesized peptide.