

For Research Use Only

# POLD1 Polyclonal antibody

Catalog Number: 15646-1-AP

Featured Product

26 Publications



## Basic Information

**Catalog Number:**

15646-1-AP

**Size:**

150ul, Concentration: 300 ug/ml by Nanodrop and 200 ug/ml by Bradford method using BSA as the standard;

**Source:**

Rabbit

**Isotype:**

IgG

**Immunogen Catalog Number:**

AG8178

**GenBank Accession Number:**

BC008800

**GeneID (NCBI):**

5424

**UNIPROT ID:**

P28340

**Full Name:**

polymerase (DNA directed), delta 1, catalytic subunit 125kDa

**Calculated MW:**

1107 aa, 124 kDa

**Observed MW:**

124 kDa

**Purification Method:**

Antigen affinity purification

**Recommended Dilutions:**

WB 1:500-1:3000

IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC 1:50-1:500

## Applications

**Tested Applications:**

WB, IP, IHC, ELISA

**Cited Applications:**

WB, IHC

**Species Specificity:**

human

**Cited Species:**

human, mouse, canine

**Positive Controls:**

WB: Jurkat cells, K-562 cells

IP: HeLa cells,

IHC: human breast cancer tissue, human colon cancer tissue

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

## Background Information

POLD1, also known as DNA polymerase subunit delta p125, is 1107 amino acid protein, which belongs to the DNA polymerase type-B family. POLD1 colocalizes with PCNA and POLD3 at S phase replication sites (PubMed:11595739). As the catalytic component of the trimeric (Pol-delta3 complex) and tetrameric DNA polymerase delta complexes (Pol-delta4 complex), plays a crucial role in high fidelity genome replication, including in lagging strand synthesis, and repair. A previous study demonstrated that overexpression of POLD1 is associated with an increased risk of breast cancer. (PMID: 30344713)

## Notable Publications

Author	Pubmed ID	Journal	Application
Qinghong Qin	30344713	Oncol Lett	WB
Xiulei Mo	35512704	Cell	WB
Xiaolin Yang	35350592	Oncol Lett	WB

## Storage

**Storage:**

Store at -20°C. Stable for one year after shipment.

**Storage Buffer:**

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

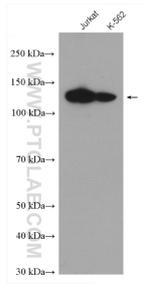
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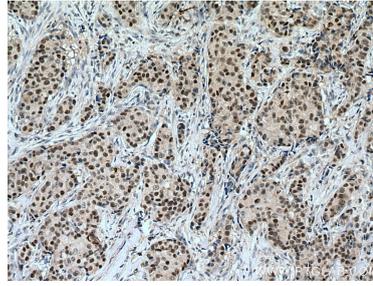
E: proteintech@ptglab.com  
W: ptglab.com

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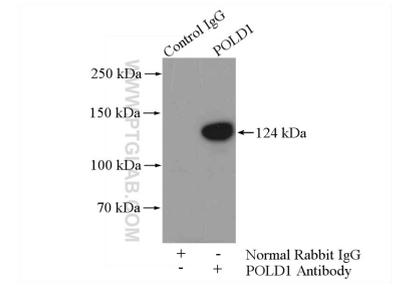
## Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 15646-1-AP (POLD1 antibody) at dilution of 1:1500 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 15646-1-AP (POLD1 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



IP result of anti-POLD1 (IP:15646-1-AP, 4ug; Detection:15646-1-AP 1:500) with HeLa cells lysate 2800ug.