

For Research Use Only

# POLD1 Polyclonal antibody

Catalog Number: 15646-1-AP

Featured Product

10 Publications



## Basic Information

**Catalog Number:**  
15646-1-AP

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

**Source:**  
Rabbit

**Isotype:**  
IgG

**Immunogen Catalog Number:**  
AG8178

**GenBank Accession Number:**  
BC008800

**GeneID (NCBI):**  
5424

**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 IP and 1:500-1:1000 for WB  
IHC 1:50-1:500

## Applications

**Tested Applications:**  
IHC, IP, WB, ELISA

**Cited Applications:**  
WB

**Species Specificity:**  
human

**Cited Species:**  
human

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

**Positive Controls:**

**WB:** Jurkat cells, MCF-7 cells, K-562 cells, HeLa cells

**IP:** HeLa cells,

**IHC:** human breast cancer tissue, human colon cancer tissue

## 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
Xiaolin Yang	35350592	Oncol Lett	WB
Lei Wei	33707452	Nat Commun	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

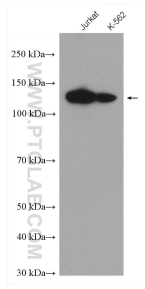
For technical support and original validation data for this product please contact:

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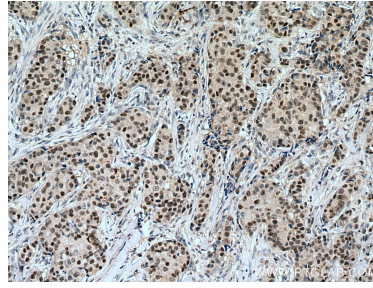
E: proteintech@ptglab.com  
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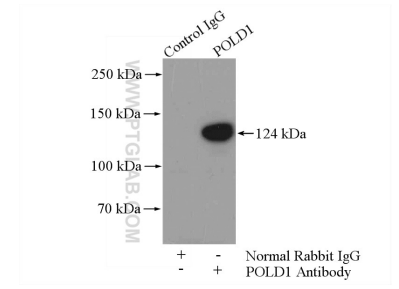
## Selected Validation Data



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.