

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

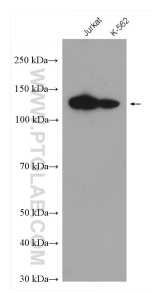
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

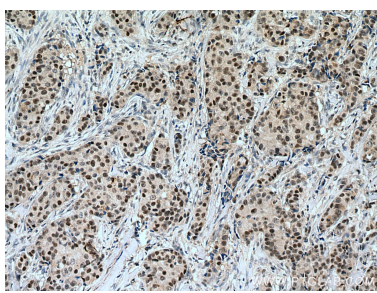
E: proteintech@ptglab.com  
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

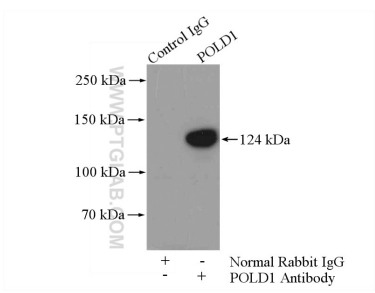
Selected Validation Data



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.