

For Research Use Only

# POLD1 Recombinant monoclonal antibody

Catalog Number: 86197-2-RR



## Basic Information

<b>Catalog Number:</b> 86197-2-RR	<b>GenBank Accession Number:</b> BC008800	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ul, Concentration: 1000 µg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 5424	<b>CloneNo.:</b> 250828E5
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P28340	<b>Recommended Dilutions:</b> WB: 1:5000-1:50000 IHC: 1:500-1:2000 IF/ICC: 1:400-1:1600
<b>Isotype:</b> IgG	<b>Full Name:</b> polymerase (DNA directed), delta 1, catalytic subunit 125kDa	
<b>Immunogen Catalog Number:</b> AG8178	<b>Calculated MW:</b> 1107 aa, 124 kDa	
	<b>Observed MW:</b> 124 kDa	

## Applications

### Tested Applications:

WB, IF/ICC, ELISA

### Species Specificity:

human, mouse, rat

**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 : HeLa cells, HEK-293 cells, RAW 264.7 cells, PC-12 cells

IHC : human colon cancer tissue,

IF/ICC : HeLa cells,

## 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. (

## Storage

### Storage:

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

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

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

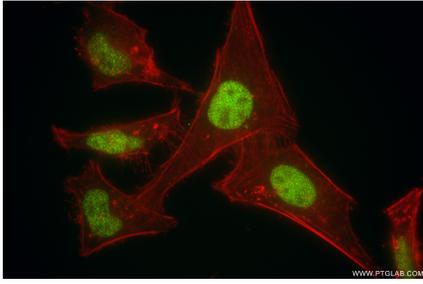
For technical support and original validation data for this product please contact:

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

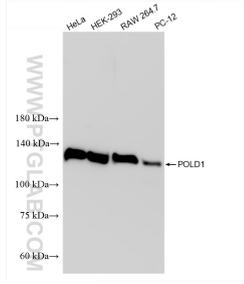
E: proteintech@ptglab.com  
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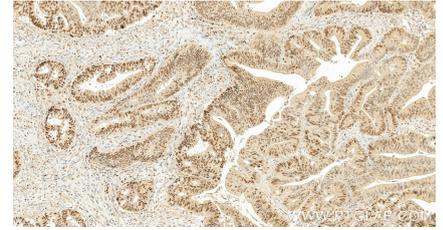
## Selected Validation Data



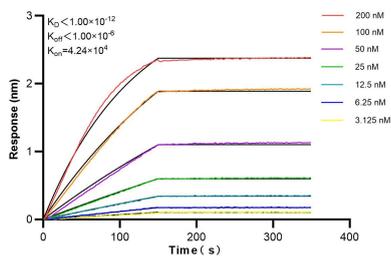
Immunofluorescent analysis of (4% PFA) fixed HeLa cells using POLD1 antibody (86197-2-RR, Clone: 250828E5 ) at dilution of 1:800 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red).



Various lysates were subjected to SDS PAGE followed by western blot with 86197-2-RR (POLD1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 86197-2-RR (POLD1 antibody) at dilution of 1:1000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Biolayer interferometry (BLI) kinetic assays of 86197-2-RR against Human POLD1 were performed. The affinity constant is below 1 pM.