# Anti-POLD1 Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

Catalog # R014421

## Product Information

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| Application | WB, IHC-P/IF (Tissue-P), IF (Cell)/ICC, ELISA |
| Reactivity | Rat, Human, Mouse |
| Dilution | WB 1:1,000~1:2,000; IHC-P 1:100~1:200; IF 1:100~1:200 |
| Host | Rabbit |
| Clonality | Monoclonal |
| Clone No. | 83G86D04 |
| Isotype | IgG |
| Label | Unconjugated |
| Immunogen | A synthesized peptide derived from human POLD1 |
| Format | Affinity purified monoclonal antibody supplied in PBS with 0.01% sodium azide and 50% glycerol, pH 7.3. |
| Storage | Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage. |
| Precautions | Anti-POLD1 Rabbit mAb [83G86D04] is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

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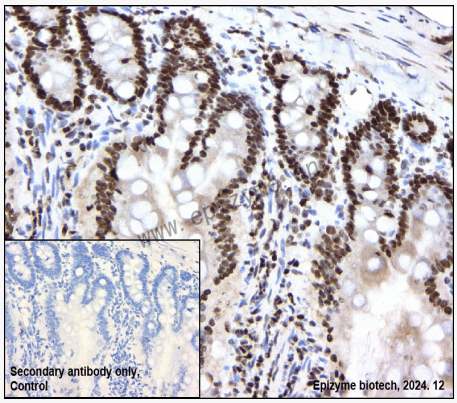
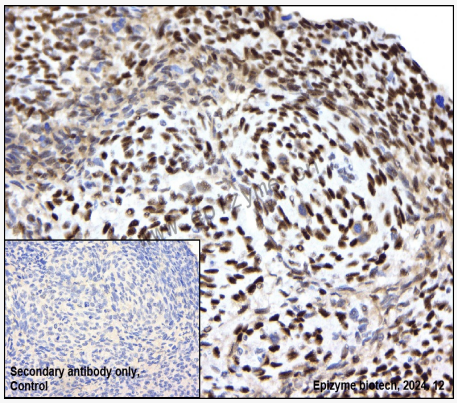
| Synonyms | Polymerase (DNA directed) delta 1 catalytic subunit, CDC2, CDC2 homolog, CRCS10, DNA directed DNA polymerase delta 1, DNA directed polymerase delta 1, DNA pol delta 1, DNA polymerase delta catalytic subunit, DNA polymerase subunit delta p125, DPOD1_HUMAN, MDPL, POLD, POLD 1, POLD1, Polymerase (DNA directed) delta 1 catalytic subunit 125kDa, Polymerase (DNA) delta 1 catalytic subunit, Polymerase DNA directed delta 1 catalytic subunit 125kD, polymerase, DNA, delta. |
| Calculated MW | Calculated MW: 124 kDa; Observed MW: 124 kDa |
| Uniprot ID | P28340 |
| Gene ID | 5424 |
| Background | Possesses two enzymatic activities: DNA synthesis (polymerase) and an exonucleolytic activity that degrades single stranded DNA in the 3'- to 5'-direction. Required with its accessory proteins (proliferating cell nuclear antigen (PCNA) and replication factor C (RFC) or activator 1) for leading strand synthesis. Also involved in completing Okazaki fragments initiated by the DNA polymerase alpha/primase complex. |
| Cellular Location | Nucleus. |

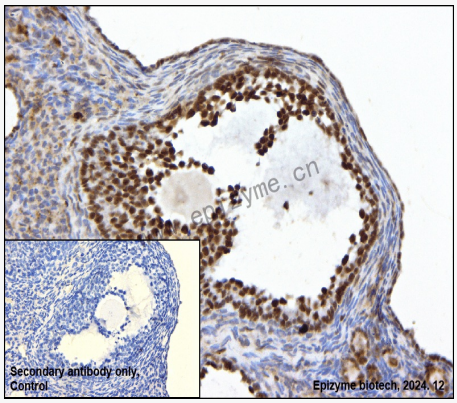
## Validation Images



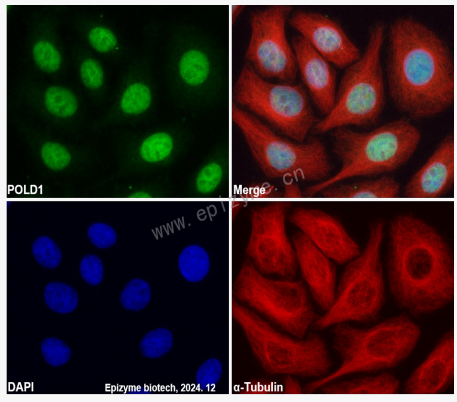

Immunohistochemistry - Anti-POLD1 Rabbit mAb [83G86D04]
Sample: Paraformaldehyde-fixed, paraffin embedded rat colon tissue
Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.
Primary antibody: R014421 at 1:200 dilution
Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution
DAB was used as the chromogen.
Counter stained with hematoxylin.
Positive/negative staining were presented.
Only the secondary antibody was used as the negative control.



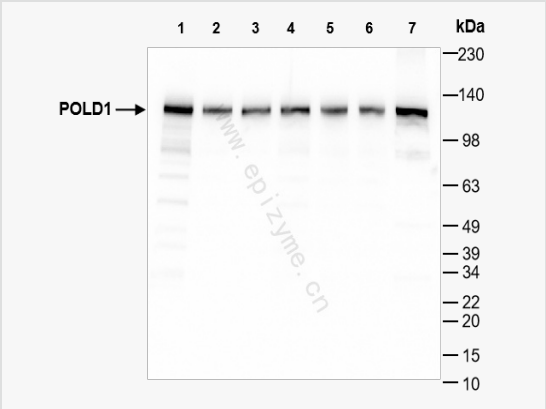

Immunohistochemistry - Anti-POLD1 Rabbit mAb [83G86D04]
Sample: Paraformaldehyde-fixed, paraffin embedded human cervical cancer tissue
Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.
Primary antibody: R014421 at 1:200 dilution
Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution
DAB was used as the chromogen.
Counter stained with hematoxylin.
Positive/negative staining were presented.
Only the secondary antibody was used as the negative control.




Immunohistochemistry - Anti-POLD1 Rabbit mAb [83G86D04]
Sample: Paraformaldehyde-fixed, paraffin embedded mouse ovary tissue
Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.
Primary antibody: R014421 at 1:200 dilution
Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution
DAB was used as the chromogen.
Counter stained with hematoxylin.
Positive/negative staining were presented.
Only the secondary antibody was used as the negative control.




Immunofluorescence - Anti-POLD1 Rabbit mAb [83G86D04]
Sample: Hela cells
The cells were fixed with 4% paraformaldehyde (10 min), permeabilized with 0.5% Triton X-100 for 10 minutes and then blocked with 5% BSA in 0.1% PBS-Tween for 0.5 hours.
Primary antibodies: R014421 at 1:100 dilution and α-tubulin Mouse Monoclonal Antibody (Cat. No. LF209) at 1:100 dilution
Secondary antibodies: Goat anti-Rabbit (488) at 1:1,000 dilution (shown in green) and Goat anti-Mouse (555) at 1:1,000 dilution (shown in red)
Nuclei were stained with DAPI (shown in blue).




Western Blot - Anti-POLD1 Rabbit mAb [83G86D04]
All lanes: R014421 at 1:1,000 dilution
Lane 1: HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates
Lane 2: HepG2 (Human hepatocarcinoma epithelial cell) whole cell lysates
Lane 3: HCT116 (Human colorectal carcinoma epithelial cell) whole cell lysates
Lane 4: A431 (Human epidermoid teratoma cell line) whole cell lysates
Lane 5: T24 (Human bladder cancer epithelial cell) whole cell lysates
Lane 6: U2OS (Human osteosarcoma epithelial cell) whole cell lysates
Lane 7: Raw264.7 (Mouse mononuclear macrophage leukemia cell) whole cell lysates
Lysates/proteins at 10 µg per lane.
Secondary antibody: Goat Anti-Rabbit IgG(H+L), HRP Conjugated (Cat. No. LF102) at 1:5,000 dilution
Predicted band size: 124 kDa
Observed band size: 124 kDa
Developed using the ECL technique (Cat. No. SQ201).