

Rabbit Anti-DNA Polymerase delta , catalytic subunit antibody

SL10580R

Product Name DNA Polymerase delta, catalytic subunit

Chinese Name DNA 聚合酶 δ 催化亚单位/DNA pol δ cat 抗体

Alias CDC2; CDC2 homolog; 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; POLD; POLD 1; POLD1; Polymerase (DNA directed) delta 1 catalytic subunit 125kDa; Polymerase DNA directed delta 1 catalytic subunit 125kD.

Research Area Cell biology Epigenetics

Immunogen Species Rabbit

Clonality Polyclonal

React Species Mouse, (predicted: Human, Rat, Dog, Pig, Cow, Sheep,)

Applications IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500 (Paraffin sections need antigen repair)
not yet tested in other applications.
optimal dilutions/concentrations should be determined by the end user.

Theoretical molecular weight 124kDa

Cellular localization The nucleus

Form Liquid

Concentration 1mg/ml

immunogen KLH conjugated synthetic peptide derived from human DNA Polymerase delta, catalytic subunit: 751-850/1107

Lsotype IgG

Purification affinity purified by Protein A

Buffer Solution 1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.



Storage	Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Attention	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
PubMed	PubMed DNA replication, recombination and repair, all of which are necessary for genome stability, require the presence of exonucleases (1). In DNA replication, these enzymes are involved in the processing of Okazaki fragments, whereas in DNA repair, they function to excise damaged DNA fragments and correct recombinational mismatches (2). Exonucleases involved in these processes include DNA polymerases, including DNA pol δ and ϵ . DNA pol δ consists of two subunits, p125 which interacts directly with the sliding DNA clamp protein PCNA, and p50 (3,4). DNA pol δ can be regulated by cell cycle proteins (5). DNA pol ϵ is a multiple subunit enzyme, the catalytic subunit of which is encoded by the POL2 gene (6,7). The exact reactions catalyzed by DNA pol δ and ϵ on leading and lagging strands have not yet been elucidated.
	Function: 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.
Product Detail	Subunit: Heterotetramer composed of subunits of 125 kDa, 50 kDa, 66 kDa and 12 kDa. The 125 kDa subunit contains the polymerase active site and most likely the active site for the 3'-5' exonuclease activity. Interacts with WRNIP1. Interacts with POLD4 and PCNA. Subcellular Location: Nucleus. Similarity: Belongs to the DNA polymerase type-B family. Contains 1 CysA-type zinc finger. SWISS: P28340 Gene ID: 5424 Database links:

[Entrez Gene: 5424](#) Human

[Entrez Gene: 18971](#) Mouse

[Omim: 174761](#) Human

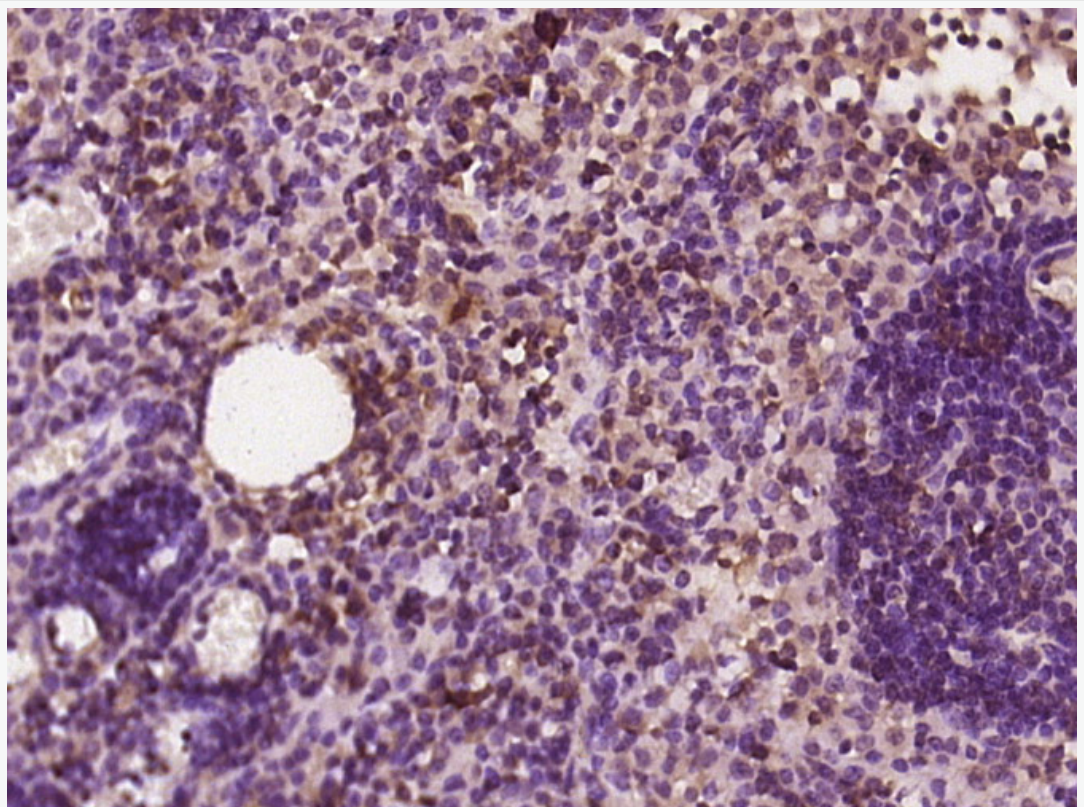
[SwissProt: P28340](#) Human

[SwissProt: P52431](#) Mouse

[Unigene: 279413](#) Human

[Unigene: 16549](#) Mouse

**Product
Picture**



Paraformaldehyde-fixed, paraffin embedded (mouse lymphoid); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (CDC2) Polyclonal Antibody,



SunLong Biotech Co.,LTD
Tel: 0086-571-56623320 Fax:0086-571-56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

Unconjugated (SL10580R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.