



Rabbit Anti-DNA polymerase delta antibody

SL7416R

Product Name:	DNA polymerase delta
Chinese Name:	DNA聚合酶 δ 抗体
Alias:	DNA polymerase delta subunit 2; DNA polymerase delta subunit p50; DNA polymerase subunit delta 2; DNA polymerase subunit delta p50; DPOD2_HUMAN; POLD 2; POLD2.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Rabbit,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	51kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from Human DNA polymerase delta:101-200/469
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	DNA replication, recombination and repair, all of which are necessary for genomic 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). These exonucleases include the family of DNA polymerases (3). DNA pol α , β , γ , and ϵ are involved in DNA replication and repair (4). DNA pol δ and DNA pol ϵ are multisubunit enzymes, with DNA pol δ consisting of two subunits p125, which interacts with the sliding DNA clamp protein PCNA, and p50 (5). The nuclear-encoded DNA pol γ is the only DNA polymerase required for the replication of the mitochondrial DNA (6). DNA pol Ω is ubiquitously expressed in various tissues and mediates the cellular mechanism of damage-induced mutagenesis (7). DNA pol θ is a DNA polymerase-helicase that binds ATP and is involved in the repair of interstrand crosslinks (8).

Function:

The function of the small subunit is not yet clear.

Subcellular Location:

Nucleus.

Similarity:

Belongs to the DNA polymerase delta/II small subunit family.

SWISS:

P49005

Gene ID:

5425

Database links:

[Entrez Gene: 281991](#)Cow

[Entrez Gene: 5425](#)Human

[Entrez Gene: 18972](#)Mouse

[Entrez Gene: 289758](#)Rat

[Omim: 600815](#)Human

[SwissProt: P49004](#)Cow

[SwissProt: P49005](#)Human

[SwissProt: O35654](#)Mouse

[SwissProt: Q6AXY4](#)Rat

[Unigene: 306791](#)Human

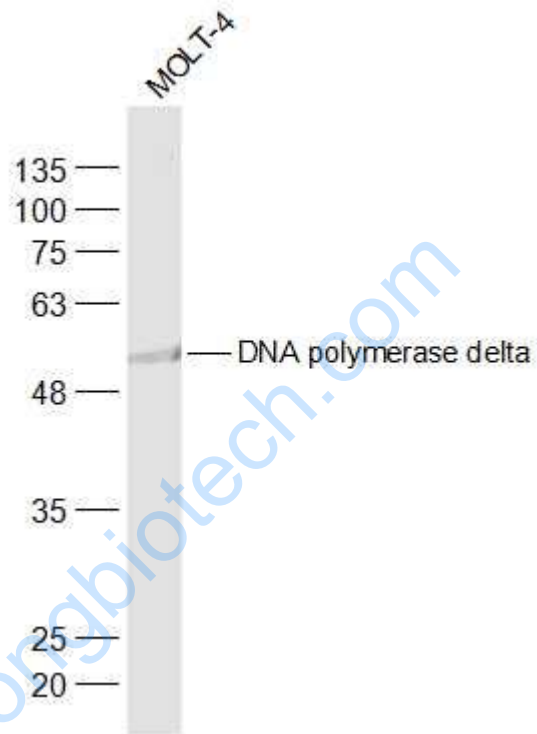
[Unigene: 35788](#)Mouse

[Unigene: 22989](#)Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Picture:



Sample:

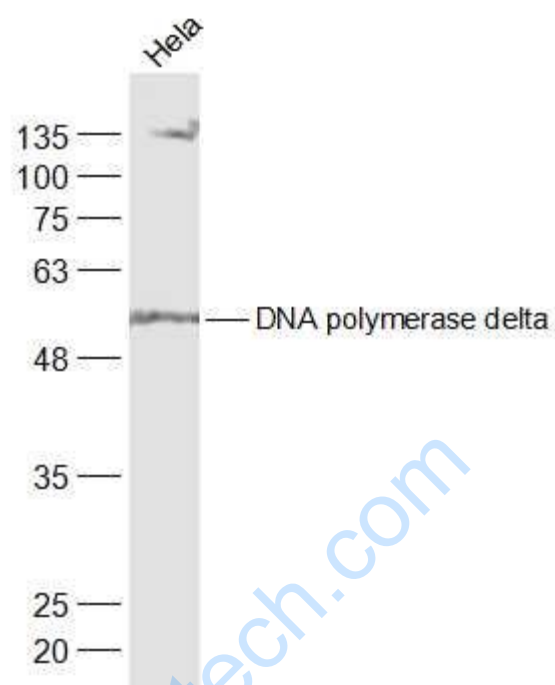
MOLT-4(Human) Cell Lysate at 30 ug

Primary: Anti-DNA polymerase delta (SL7416R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 51 kD

Observed band size: 51 kD



Sample:

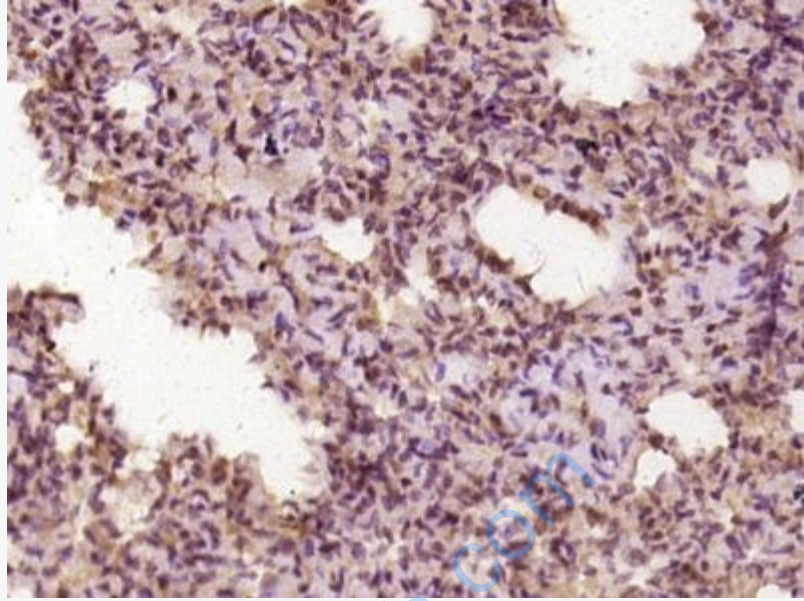
HeLa(Human) Cell Lysate at 30 ug

Primary: Anti-DNA polymerase delta (SL7416R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 51 kD

Observed band size: 51 kD



Paraformaldehyde-fixed, paraffin embedded (rat lung tissue); 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 (POLD2) Polyclonal Antibody, Unconjugated (SL7416R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.