



DNA pol δ cat Polyclonal Antibody

Catalog No	YP-Ab-01657
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;ELISA
Gene Name	POLD1
Protein Name	DNA polymerase delta catalytic subunit
Immunogen	The antiserum was produced against synthesized peptide derived from human POLD1. AA range:1051-1100
Specificity	DNA pol δ cat Polyclonal Antibody detects endogenous levels of DNA pol δ cat protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	Western Blot: 1/500 - 1/2000. ELISA: 1/40000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	$\geq 90\%$
Storage Stability	-20°C/1 year
Synonyms	POLD1; POLD; DNA polymerase delta catalytic subunit; DNA polymerase subunit delta p125
Observed Band	110 124kD
Cell Pathway	Nucleus . Colocalizes with PCNA and POLD3 at S phase replication sites (PubMed:11595739). After UV irradiation, recruited to DNA damage sites within 2 hours, independently on the cell cycle phase, nor on PCNA ubiquitination. This recruitment requires POLD3, PCNA and RFC1-replication factor C complex (PubMed:20227374, PubMed:22801543). .
Tissue Specificity	Widely expressed, with high levels of expression in heart and lung.
Function	catalytic activity:Deoxynucleoside triphosphate + DNA(n) = diphosphate + DNA(n+1).,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.,miscellaneous:In eukaryotes there are five DNA polymerases: alpha, beta, gamma, delta, and epsilon which are responsible for different reactions of DNA synthesis.,similarity:Belongs to the DNA polymerase type-B family.,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

Background

This gene encodes the 125-kDa catalytic subunit of DNA polymerase delta. DNA polymerase delta possesses both polymerase and 3' to 5' exonuclease activity and plays a critical role in DNA replication and repair. Alternatively spliced transcript variants have been observed for this gene, and a pseudogene of this gene is located on the long arm of chromosome 6. [provided by RefSeq, Mar 2012],

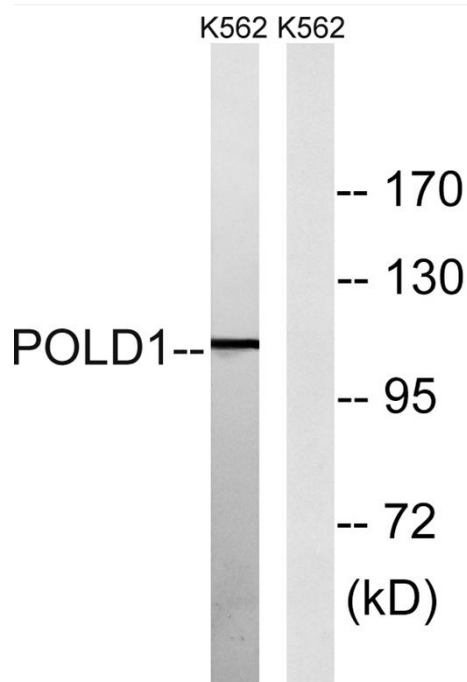
matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western blot analysis of lysates from K562 cells, using POLD1 Antibody. The lane on the right is blocked with the synthesized peptide.