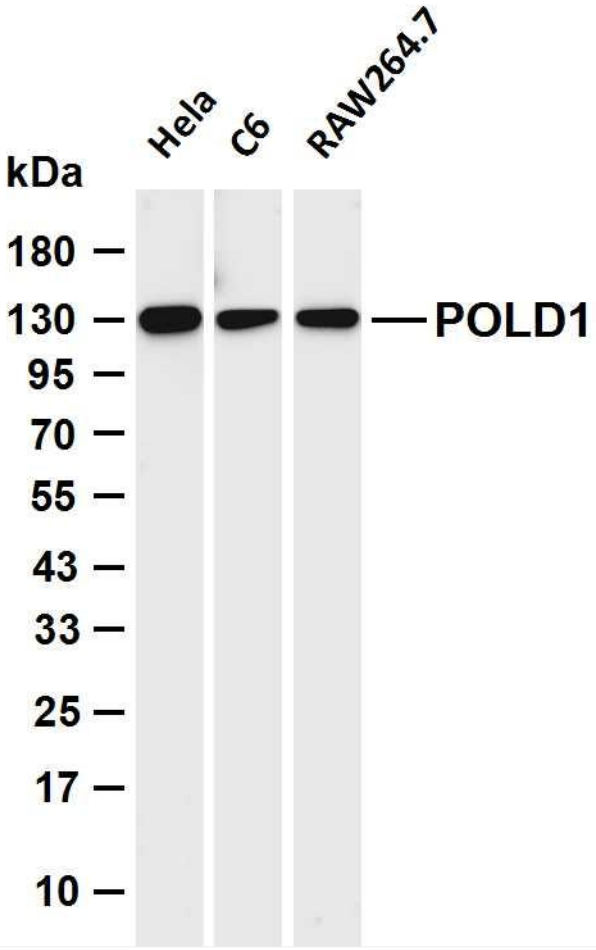
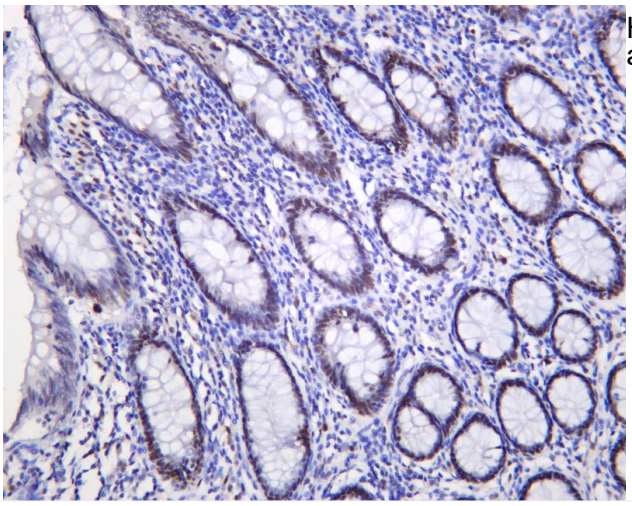
POLD1 Rabbit mAb

Catalog No	YP-rAb-17109
Isotype	IgG
Reactivity	Human,Mouse,Rat
Applications	WB,IHC,IF,ELISA
Gene Name	POLD1
Protein Name	DNA polymerase delta catalytic subunit
Purification Process	Protein A
Specificity	Endogenous
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source	Monoclonal, Rabbit,IgG
Dilution	IHC 1:200-1:1000; WB 1:2000-1:10000; IF 1:200-1:1000; ELISA 1:5000-1:20000; Note: For IHC, we suggest antigen retrieval with TE buffer pH 9.0
Concentration	0.5 mg/ml
Purity	≥90%
Storage Stability	-15° C to -25° C/1 year(Do not lower than -25° C)
Synonyms	POLD1 ; POLD ; DNA polymerase delta catalytic subunit ; DNA polymerase subunit delta p125
Observed Band	130kD
Calculated Molecular Weight	134kD
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 the 3'-5' exonuclease activity. Interacts with WRNIP1. Interacts with POLD4 and PCNA.,
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.



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-POLD1 antibody. The HRP-conjugated Goat anti-Rabbit IgG (H + L) antibody was used to detect the antibody. Lane 1: Hela Lane 2: C6 Lane 3: RAW264.7 Predicted band size: 134kDa Observed band size: 130kDa



Human appendix was stained with anti-POLD1 Rabbit antibody