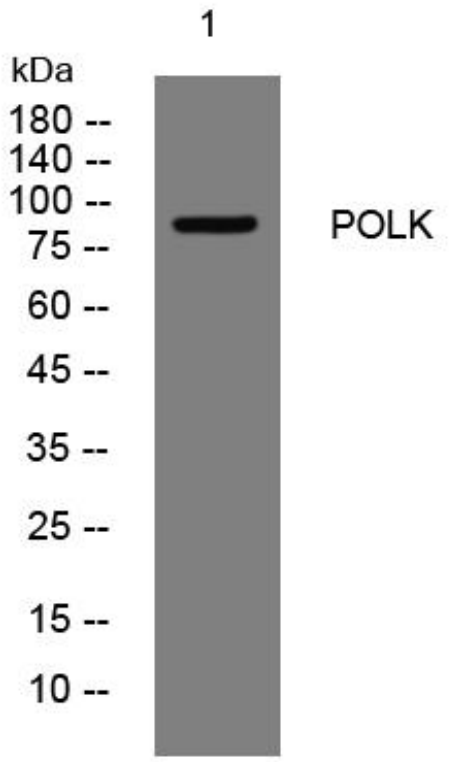
POLK mouse mAb

Catalog No	YP-mAb-08270
Isotype	IgG
Reactivity	Human; Mouse
Applications	WB
Gene Name	POLK DINB1
Protein Name	POLK
Immunogen	Synthesized peptide derived from human POLK AA range: 272-322
Specificity	This antibody detects endogenous levels of POLK at Human/Mouse
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	
Observed Band	
Cell Pathway	Nucleus . Detected throughout the nucleus and at replication foci (PubMed:12414988). Recruited to DNA damage sites in response to ultraviolet irradiation: N6-methyladenosine (m6A)-containing mRNAs accumulate in the vicinity of DNA damage sites and their presence is required to recruit POLK (PubMed:28297716). .
Tissue Specificity	Detected at low levels in testis, spleen, prostate and ovary. Detected at very low levels in kidney, colon, brain, heart, liver, lung, placenta, pancreas and peripheral blood leukocytes.
Function	catalytic activity:Deoxynucleoside triphosphate + DNA(n) = diphosphate + DNA(n+1).,cofactor:Divalent metal cations. Prefers magnesium, but can also use manganese.,domain:The catalytic core consists of fingers, palm and thumb subdomains, but the fingers and thumb subdomains are much smaller than in high-fidelity polymerases; residues from five sequence motifs of the Y-family cluster around an active site cleft that can accommodate DNA and nucleotide substrates with relaxed geometric constraints, with consequently higher rates of misincorporation and low processivity.,function:DNA polymerase specifically involved in DNA repair. Plays an important role in translesion synthesis, where the normal high-fidelity DNA polymerases cannot proceed and DNA synthesis stalls. Depending on the context, it inserts the correct base, but causes frequent base

	transitions, transversions and frameshifts. Lack
Background	This gene encodes a member of the DNA polymerase type-Y family of proteins. The encoded protein is a specialized DNA polymerase that catalyzes translesion DNA synthesis, which allows DNA replication in the presence of DNA lesions. Human cell lines lacking a functional copy of this gene exhibit impaired genome integrity and enhanced susceptibility to oxidative damage. Mutations in this gene that impair enzyme activity may be associated with prostate cancer in human patients. [provided by RefSeq, Sep 2016],
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 various cells using POLK mouse mAb