

POLK Antibody (clone 6F2)
Mouse Monoclonal Antibody
Catalog # ALS14095**Specification**

POLK Antibody (clone 6F2) - Product Information

Application	WB, IF, IHC
Primary Accession	Q9UBT6
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Calculated MW	99kDa KDa

POLK Antibody (clone 6F2) - Additional Information**Gene ID** 51426**Other Names**

DNA polymerase kappa, 2.7.7.7, DINB protein, DINP, POLK, DINB1

Target/Specificity

Human POLK

Reconstitution & Storage

Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Precautions

POLK Antibody (clone 6F2) is for research use only and not for use in diagnostic or therapeutic procedures.

POLK Antibody (clone 6F2) - Protein Information**Name** POLK**Synonyms** DINB1**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. Lacks 3'-5' proofreading exonuclease activity. Forms a Schiff base with 5'-deoxyribose phosphate at abasic sites, but does not have lyase activity.

Cellular Location

Nucleus. Note=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)

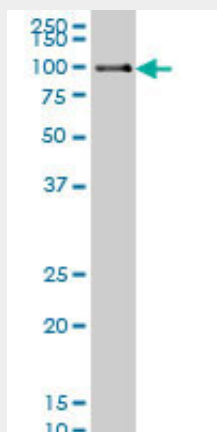
Tissue Location

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

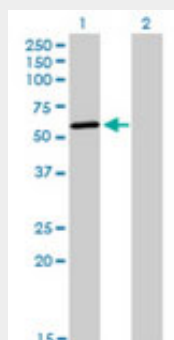
POLK Antibody (clone 6F2) - Protocols

Provided below are standard protocols that you may find useful for product applications.

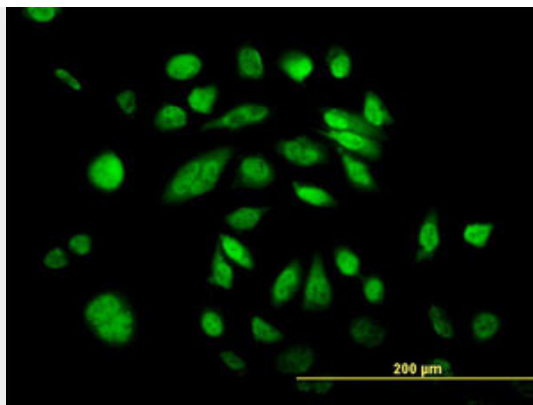
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

POLK Antibody (clone 6F2) - Images

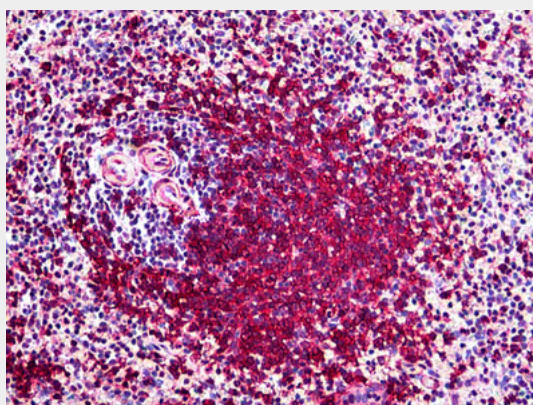
Western blot of POLK expression in HeLa nuclear extracts by POLK monoclonal antibody, clone 6F2.



Western blot of POLK expression in transfected 293T cell line by POLK monoclonal antibody, clone 6F2.



Immunofluorescence of monoclonal antibody to POLK on HeLa cell. [antibody concentration 10 ug/ml]



Anti-POLK antibody IHC of human spleen.

POLK Antibody (clone 6F2) - Background

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. Lacks 3'-5' proofreading exonuclease activity. Forms a Schiff base with 5'-deoxyribose phosphate at abasic sites, but does not have lyase activity.

POLK Antibody (clone 6F2) - References

Ogi T.,et al.Genes Cells 4:607-618(1999).
Gerlach V.L.,et al.Proc. Natl. Acad. Sci. U.S.A. 96:11922-11927(1999).
Guo C.,et al.DNA Repair 4:397-402(2005).
Poltoratsky V.P.,et al.Submitted (OCT-1999) to the EMBL/GenBank/DDBJ databases.
Revert-Ros F.,et al.Submitted (NOV-2000) to the EMBL/GenBank/DDBJ databases.