

Datasheet for ABIN129559
anti-POLK antibody (AA 817-830)[Go to Product page](#)

1 Image

Overview

Quantity:	100 µg
Target:	POLK
Binding Specificity:	AA 817-830
Reactivity:	Human
Host:	Goat
Clonality:	Polyclonal
Conjugate:	This POLK antibody is un-conjugated
Application:	Western Blotting (WB), ELISA

Product Details

Immunogen:	This affinity-purified antibody was prepared from whole goat serum produced by repeated immunizations with a synthetic peptide corresponding to amino acids 817-830 of Human POLK (polymerase (DNA directed) kappa).
Isotype:	IgG
Characteristics:	Concentration Definition: by UV absorbance at 280 nm

Target Details

Target:	POLK
Alternative Name:	POLK (POLK Products)
Background:	POLK (also known as DNA polymerase kappa, DINB protein and DINP) is involved in DNA repair. POLK plays an important role in translesion synthesis, where the normal high-fidelity

Target Details

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. POLK lacks 3'-5' proofreading exonuclease activity. POLK is a nuclear protein that binds to REV1L and PCNA. POLK is detected throughout the nucleus and at replication foci. Multiple alternative splice variants have been detected for this protein. POLK is found at low levels in testis, spleen, prostate and ovary and at very low levels in kidney, colon, brain, heart, liver, lung, placenta, pancreas and peripheral blood leukocytes.

Synonyms: DinB homolog 1 (E. coli) antibody, DINB protein antibody, DINB1 antibody, DINP antibody, DNA damage inducible protein b antibody, DNA polymerase kappa antibody, POLQ antibody

Gene ID: 51426, 59798438

UniProt: [Q9UBT6](#)

Pathways: [DNA Damage Repair](#)

Application Details

Application Notes: This affinity purified antibody has been tested for use in ELISA and western blot. Specific conditions for reactivity should be optimized by the end user. Expect a band ~ 98.8 kDa in size corresponding to POLK by western blotting in the appropriate cell lysate or extract. Splice variants for this protein may show molecular weights of 89.0 and 76.4 kDa.

Restrictions: For Research Use only

Handling

Format: Liquid

Concentration: 1.4 mg/mL

Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2

Preservative: Sodium azide

Precaution of Use: This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Storage: -20 °C



Western Blotting

Image 1. Western blot using Affinity Purified anti-POLK antibody shows detection of a band ~98 kDa corresponding to human POLK (arrowhead). Approximately 35 µg of a HeLa whole cell lysate was separated by 4-20% SDS-PAGE and transferred onto nitrocellulose. After blocking the membrane was probed with the primary antibody diluted to 1:1,000. Reaction occurred overnight at 4° followed by washes and reaction with a 1:20,000 dilution of 800 conjugated Rb-a-Goat IgG [H&L] MXHu for 45 min at room temperature. 800 fluorescence image was captured using the Infrared Imaging System developed by LI-COR. IRDye is a trademark of LI-COR, Inc. Other detection systems will yield similar results.