

Datasheet for 600-101-295**POLK Antibody****Overview**

Description:	Anti-POLK (DNA polymerase kappa) (GOAT) Antibody - 600-101-295
Item No.:	600-101-295
Size:	100 µg
Applications:	ELISA, WB
Reactivity:	Human
Host Species:	Goat

Product Details

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 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:	goat Anti-POLK antibody, goat Anti-DNA polymerase kappa antibody, DINB homolog 1 (E. coli) antibody, DINB protein antibody, DINB1 antibody, DINP antibody, DNA damage inducible protein b antibody, POLQ antibody
Host Species:	Goat
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	POLK
Reactivity:	Human
Immunogen Type:	Conjugated Peptide

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).
Purity/Specificity:	This affinity purified antibody is directed against human POLK protein. The product was affinity purified from monospecific antiserum by immunoaffinity purification. A BLAST analysis was used to suggest reactivity with this protein from human, chimpanzee and orangutan based on 100% homology for the immunogen sequence. Cross reactivity with POLK protein from mouse is expected, as this sequence is highly homologous in human and mouse. Expect reactivity with multiple splice variants of this protein. Cross reactivity with POLK homologues from other sources has not been determined.
Relevant Links:	• NCBI - 59798438 • UniProtKB - Q9UBT6 • GeneID - 51426

Application Details

Tested Applications:	ELISA, WB
Application Note:	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.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:2,000 - 1:10,000
WB:	1:500 - 1:3,000

Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1.4 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

Shipping Condition:	Dry Ice
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Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



Western Blot

Western blot using Rockland's 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 (p/n W09-000-364) 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 IRDye™800 conjugated Rb-a-Goat IgG [H&L] MXHu (p/n 605-432-013) for 45 min at room temperature. IRDye™800 fluorescence image was captured using the Odyssey® Infrared Imaging System developed by LI-COR. IRDye is a trademark of LI-COR, Inc. Other detection systems will yield similar results.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.