

Datasheet for 600-401-C65**POLB Antibody****Overview**

Description:	Anti-POLB (DNA polymerase beta) (RABBIT) Antibody - 600-401-C65
Item No.:	600-401-C65
Size:	100 µg
Applications:	ELISA, WB
Reactivity:	Human
Host Species:	Rabbit

Product Details

Background:	The POLβ protein belongs to the DNA polymerase type-X family. It is a DNA polymerase involved in gap-filling DNA synthesis or base excision and repair in a stepwise distributive fashion unlike other DNA polymerases. It is required for DNA maintenance, replication, recombination, and drug resistance. It is normally found as a monomer, in the cytoplasm and it translocates to the nucleus upon DNA damage.
Synonyms:	rabbit anti-POLB antibody, rabbit anti-DNA polymerase beta antibody, DNA polymerase β, POLβ, POL-B, POL-β, pol-beta, beta-pol
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	POLB
Reactivity:	Human
Immunogen Type:	Conjugated Peptide
Immunogen:	This affinity-purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to a region near the C-terminus of the POLβ protein.

Purity/Specificity: This product was affinity purified from monospecific antiserum by immunoaffinity chromatography. This antibody reacts with overexpressed and endogenous POL β protein. A BLAST analysis was used to suggest reactivity with POL β from human, bovine, and *Xenopus laevis* based on a 100% homology with the immunizing sequence. Cross-reactivity with POL β from other sources has not been determined.

Relevant Links:

- [UniProtKB - P06746](#)
- [GeneID - 5423](#)
- [NCBI - NP_002681.1](#)

Application Details

Tested Applications: ELISA, WB

Application Note: This affinity purified POL β antibody has been tested by ELISA and western blotting. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 38.1 kDa in size corresponding to POL β by western blotting in the appropriate cell lysate or extract.

Assay Dilutions: All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.

ELISA: 1:50,000

WB: 0.5 μ g/mL

Formulation

Physical State: Liquid (sterile filtered)

Concentration: 1.0 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

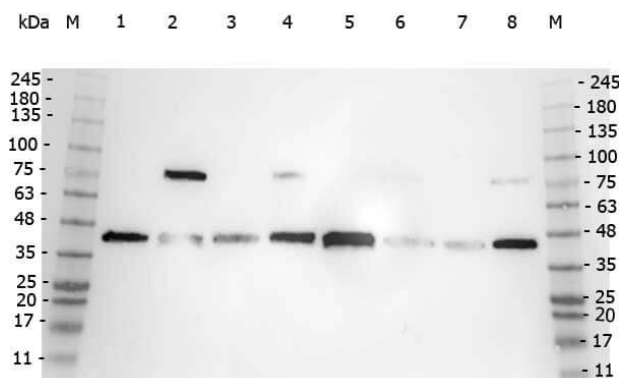
Shipping & Handling

Shipping Condition: Dry Ice

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

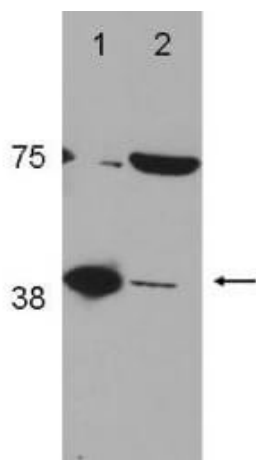


Western Blot

Western Blot of Rabbit anti-POLB antibody. Marker: Opal Pre-stained ladder (p/n MB-210-0500). Lane 1: HEK293 lysate (p/n W09-000-365). Lane 2: HeLa Lysate (p/n W09-000-364). Lane 3: MCF-7 Lysate (p/n W09-000-360). Lane 4: Jurkat Lysate (p/n W09-000-370). Lane 5: A431 Lysate (p/n W09-000-361). Lane 6: Raji Lysate (p/n W09-001-368). Lane 7: Ramos Lysate (p/n W09-000-GK4). Lane 8: NIH/3T3 Lysate (p/n W10-000-358). Load: 35 µg per lane. Primary antibody: POLB antibody at 1:5,000 for 3hrs at RT. Secondary antibody: Peroxidase rabbit secondary antibody (p/n 611-103-122) at 1:30,000 for 60 min at RT. Blocking Buffer: 1% Casein-TTBS (p/n MB-082) for 30 min at RT. Predicted/Observed size: 38 kDa for POLB.

Western Blot

Western Blot of Rabbit Anti-POLβ (DNA polymerase beta) Antibody (600-401-C65). Lane 1: LN428 FLAG POLβ (control). Lane 2: A172 (p/n W09-001-GL5). Load: 35 µg per lane. Primary antibody: POLβ antibody at 1:2000 for overnight at 4°C. Secondary antibody: IRDye800™ goat anti-rabbit at 1:10,000 for 45 min at RT. Block: 5% BLOTTO (p/n B501-0500) overnight at 4°C. Predicted/Observed size: ~40 kDa, ~40 kDa. Other band(s): unknown band ~75 kDa.



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.