Datasheet for ABIN964928

anti-POLB antibody (C-Term)

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Overview

Quantity:	100 µg
Target:	POLB
Binding Specificity:	C-Term
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This POLB antibody is un-conjugated
Application:	Western Blotting (WB), ELISA

Product Details

Immunogen:	This affinity-purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptidecorresponding to a region near the C-terminus of the POLß protein. Immunogen Type: Peptide
Isotype:	IgG
Specificity:	This product was affinity purified from monospecific antiserum by immunoaffinity chromatography. This antibody reacts with overexpressed and endogenous POLß protein. A BLAST analysis was used to suggest reactivity with POLß from human, bovine, and Xenopus laevis based on a 100% homology with the immunizing sequence. Cross-reactivity with POLß from other sources has not been determined.
Characteristics:	The POLß protein belongs to the DNA polymerase type-X family. It is a DNA polymerase

Product Details

	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.
Purification:	affinity purified
Sterility:	Sterile filtered

Target Details

Target:	POLB
Alternative Name:	POLB (POLB Products)
Background:	The POLß 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: DNA polymerase beta, POLB, beta-pol
Gene ID:	5423
NCBI Accession:	NP_002681
UniProt:	P06746
Pathways:	DNA Damage Repair

Application Details

Application Notes:	This affinity purified antibody is suitable for 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 POLß by western blotting in the appropriate cell lysate or extract.
Comment:	Gene Name: POLB
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	1.4 mg/mL

Handling

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:	4 °C/-20 °C
Storage Comment:	Store vial at 4 °C prior to restoration. For extended storage aliquot contents and freeze at -20 °C or below. 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 date is one (1) year from date of opening.
Expiry Date:	12 months

Publications

Product cited in:

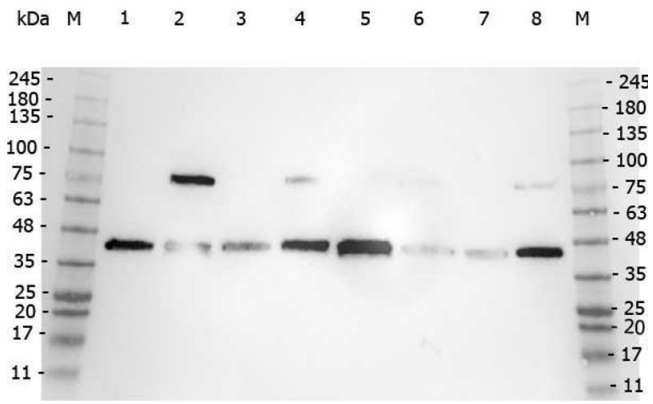
Taylor, Devon, Millar, Porteous: "Evolutionary constraints on the Disrupted in Schizophrenia locus." in: **Genomics**, Vol. 81, Issue 1, pp. 67-77, (2003) (PubMed).

Morris, Kandpal, Ma, Austin: "DISC1 (Disrupted-In-Schizophrenia 1) is a centrosome-associated protein that interacts with MAP1A, MIPT3, ATF4/5 and NUDEL: regulation and loss of interaction with mutation." in: **Human molecular genetics**, Vol. 12, Issue 13, pp. 1591-608, (2003) (PubMed).

Ozeki, Tomoda, Kleiderlein, Kamiya, Bord, Fujii, Okawa, Yamada, Hatten, Snyder, Ross, Sawa: " Disrupted-in-Schizophrenia-1 (DISC-1): mutant truncation prevents binding to NudE-like (NUDEL) and inhibits neurite outgrowth." in: **Proceedings of the National Academy of Sciences of the United States of America**, Vol. 100, Issue 1, pp. 289-94, (2003) (PubMed).

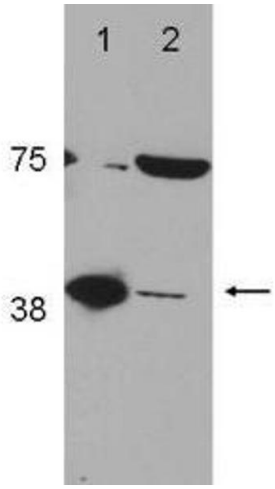
Millar, Wilson-Annan, Anderson, Christie, Taylor, Semple, Devon, St Clair, Muir, Blackwood, Porteous: "Disruption of two novel genes by a translocation co-segregating with schizophrenia." in: **Human molecular genetics**, Vol. 9, Issue 9, pp. 1415-23, (2000) (PubMed).

Seki, Ohira, Nagase, Ishikawa, Miyajima, Nakajima, Nomura, Ohara: "Characterization of cDNA clones in size-fractionated cDNA libraries from human brain." in: **DNA research : an international journal for rapid publication of reports on genes and genomes**, Vol. 4, Issue 5, pp. 345-9, (1998) (PubMed).



Western Blotting

Image 1. Western Blot of Rabbit anti-POLB antibody. Marker: Opal Pre-stained ladder . Lane 1: HEK293 lysate . Lane 2: HeLa Lysate . Lane 3: MCF-7 Lysate . Lane 4: Jurkat Lysate . Lane 5: A431 Lysate . Lane 6: Raji Lsyate . Lane 7: Ramos Lysate . Lane 8: NIH/3T3 Lysate . Load: 35 µg per lane. Primary antibody: POLB antibody at 1:5,000 for 3hrs at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:30,000 for 60 min at RT. Blocking Buffer: 1% Casein-TTBS for 30 min at RT. Predicted/Observed size: 38 kDa for POLB.



Western Blotting

Image 2. Western Blot of Rabbit Anti-POLß (DNA polymerase beta) Antibody (). Lane 1: LN428 FLAG POLß (control). Lane 2: A172. Load: 35 µg per lane. Primary antibody: POLß antibody at 1:2000 for overnight at 4°C. Secondary antibody: goat anti-rabbit at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: ~40 kDa, ~40 kDa. Other band(s): unknown band ~75 kDd.