

DATASHEET

DNA Polymerase gamma 1 Rabbit Polyclonal Antibody

CAT. NO. APA16542

KEY FEATURES

Target	DNA Polymerase gamma 1	Source / Host	Rabbit
Reactivity	Human, Mouse, Rat	Clonality	Polyclonal
Applications	WB	Conjugation	Unconjugated
Form / Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.		Storage at -20°C

BACKGROUND

Catalytic subunit of DNA polymerase gamma solely responsible for replication of mitochondrial DNA (mtDNA). Replicates both heavy and light strands of the circular mtDNA genome using a single-stranded DNA template, RNA primers and the four deoxyribonucleoside triphosphates as substrates. Replicates both heavy and light strands of the circular mtDNA genome using a single-stranded DNA template, RNA primers and the four deoxyribonucleoside triphosphates as substrates. Has 5' → 3' polymerase activity. Functionally interacts with TWNK and SSBP1 at the replication fork to form a highly processive replisome, where TWNK unwinds the double-stranded DNA template prior to replication and SSBP1 covers the parental heavy strand to enable continuous replication of the entire mitochondrial genome.

APPLICATION

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:2000
----	----------------

*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

PRODUCT OVERVIEW

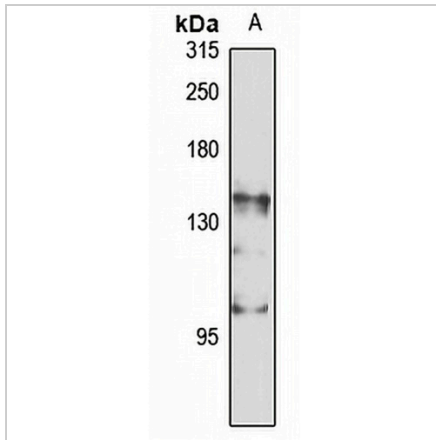
Description	Rabbit polyclonal antibody to DNA Polymerase gamma 1
Specificity	Recognizes endogenous levels of DNA Polymerase gamma 1 protein
Antibody Type	Primary antibody
Immunogen	Recombinant fusion protein of human DNA Polymerase gamma 1. The exact sequence is proprietary.
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 139 kD; Observed: 140 kD
Form/Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Alternative Names	MDP1; POLG1; POLGA; DNA polymerase subunit gamma-1; Mitochondrial DNA polymerase catalytic subunit; PolG-alpha
Gene Symbol	POLG
Entrez Gene	5428(Human)
SwissProt	P54098(Human)

*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact info@arexbio.com or your local distributor.

*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

DATASHEET**DNA Polymerase gamma 1 Rabbit Polyclonal Antibody**

CAT. NO. APA16542

DATA

Western blot analysis of DNA Polymerase gamma 1 expression in U87MG (A) whole cell lysates. (Predicted band size: 139 kD; Observed band size: 140 kD)

STORAGE

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

NOTE

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.