

DNA pol λ (N-12): sc-21530

BACKGROUND

DNA polymerase lambda (pol λ), also designated DNA polymerase κ or pol β 2, is a low-fidelity polymerase which plays a role in both spontaneous and DNA damage-induced mutagenesis. Encoded by the POLL gene, pol λ is a member of the DNA polymerase type-X family. Pol λ extends primer-terminal mismatches opposite nondamaged DNA templates, suggesting that it may assist in extending mismatched base pairs during normal DNA replication. In addition, pol λ may play a role in the mutagenic bypass of T-T dimers. Proliferating cell nuclear antigen (PCNA), a protein essential to DNA replication, interacts with pol λ and thus influences the ability of pol λ to synthesize DNA.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: POLL (human) mapping to 10q24.32; Poll (mouse) mapping to 19 C3.

SOURCE

DNA pol λ (N-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of DNA pol λ of human origin.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-21530 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

DNA pol λ (N-12) is recommended for detection of DNA pol λ of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

DNA pol λ (N-12) is also recommended for detection of DNA pol λ in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for DNA pol λ siRNA (h): sc-43729, DNA pol λ siRNA (m): sc-37788, DNA pol λ shRNA Plasmid (h): sc-43729-SH, DNA pol λ shRNA Plasmid (m): sc-37788-SH, DNA pol λ shRNA (h) Lentiviral Particles: sc-43729-V and DNA pol λ shRNA (m) Lentiviral Particles: sc-37788-V.

Molecular Weight of DNA pol λ : 68 kDa.

Positive Controls: MCF7 whole cell lysate: sc-2206, A549 cell lysate: sc-2413 or Hep G2 cell lysate: sc-2227.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **DNA pol λ (E-11): sc-373844**, our highly recommended monoclonal alternative to DNA pol λ (N-12).