SANTA CRUZ BIOTECHNOLOGY, INC.

DNA pol ν (T-19): sc-160293

BACKGROUND

DNA replication, recombination and repair, all of which are necessary for genomic stability, require the presence of exonucleases. In DNA replication, these enzymes are involved in the processing of Okazaki fragments, whereas in DNA repair, they function to excise damaged DNA fragments and correct recombinational mismatches. These exonucleases include the family of DNA polymerases. DNA pol α, β, δ and ε are involved in DNA replication and repair. DNA pol ν (DNA polymerase nu), also known as POLN, is a 900 amino acid nuclear protein belonging to the DNA polymerase type-A family that is highly expressed in heart and testis with lower levels found in skeletal muscle. Existing as two alternatively spliced isoforms, DNA pol ν is involved in the repair of DNA cross-links and is encoded by a gene located on human chromosome 4.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: POLN (human) mapping to 4p16.3; Poln (mouse) mapping to 5 B2.

SOURCE

DNA pol ν (T-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of DNA pol ν 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.

RESEARCH USE

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

PRODUCT

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

Blocking peptide available for competition studies, sc-160293 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-160293 X, 200 µg/0.1 ml.

APPLICATIONS

DNA pol ν (T-19) is recommended for detection of DNA pol ν of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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); non cross-reactive with other DNA pol family members.

DNA pol ν (T-19) is also recommended for detection of DNA pol ν in additional species, including equine, bovine and porcine.

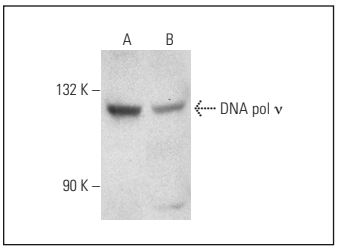
Suitable for use as control antibody for DNA pol ν siRNA (h): sc-89311, DNA pol ν siRNA (m): sc-143073, DNA pol ν shRNA Plasmid (h): sc-89311-SH, DNA pol ν shRNA Plasmid (m): sc-143073-SH, DNA pol ν shRNA (h) Lentiviral Particles: sc-89311-V and DNA pol ν shRNA (m) Lentiviral Particles: sc-143073-V.

DNA pol ν (T-19) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of DNA pol ν: 100 kDa.

Positive Controls: Sol8 nuclear extract: sc-2157 or F9 cell lysate: sc-2245.

DATA



DNA pol ν (T-19): sc-160293. Western blot analysis of DNA pol ν expression in Sol8 nuclear extract (**A**) and F9 whole cell lysate (**B**).

PROTOCOLS

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