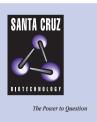
SANTA CRUZ BIOTECHNOLOGY, INC.

PARP-15 (D-20): sc-82973



BACKGROUND

Poly(ADP-ribosylation) is a method of DNA damage-dependent posttranslational modification that helps to rescue injured proliferating cells from cell death. The PARP (poly(ADP-ribose) polymerase) proteins comprise a superfamily of enzymes that functionally modify histones and other nuclear proteins, thereby preventing cell death. PARPs use NAD+ as a substrate to catalytically transfer ADP-ribose residues onto protein acceptors; a process that, when repeated multiple times, leads to the formation of poly(ADP-ribose) chains on the protein. The presence of these chains alters the function of the target protein and promotes cell survival. PARP proteins are implicated in a variety of diseases, including cancer and both neurodegenerative and inflammatory disorders. PARP-15, also known as BAL3, is a 656 amino acid nuclear protein containing two macro domains and a PARP catalytic domain. Considered a transcriptional repressor, PARP-15 exists as two isoforms produced by alternative splicing events.

REFERENCES

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- Liu, X., et al. 2008. Poly(ADP-ribose) polymerase activity regulates apoptosis in HeLa cells after alkylating DNA damage. Cancer Biol. Ther. 7: 934-941.
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- Hassa, P.O. and Hottiger, M.O. 2008. The diverse biological roles of mammalian PARPS, a small but powerful family of poly-ADP-ribose polymerases. Front. Biosci. 13: 3046-3082.

CHROMOSOMAL LOCATION

Genetic locus: PARP15 (human) mapping to 3q21.1.

SOURCE

PARP-15 (D-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of PARP-15 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 lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-82973 P, (100 μ g 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-82973 X, 200 μ g/0.1 ml.

APPLICATIONS

PARP-15 (D-20) is recommended for detection of PARP-15 of 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); non cross-reactive with other PARP family members.

Suitable for use as control antibody for PARP-15 siRNA (h): sc-76058, PARP-15 shRNA Plasmid (h): sc-76058-SH and PARP-15 shRNA (h) Lentiviral Particles: sc-76058-V.

PARP-15 (D-20) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of PARP-15: 73 kDa.

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) Immunofluo-rescence: 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.

PROTOCOLS

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