

PARP-3 (P-21): sc-130838

BACKGROUND

Poly(ADP-ribose) polymerase-3 (PARP-3) is part of the base excision repair (BER) pathway, catalyzing the poly(ADP-ribosylation) of nuclear proteins. Poly(ADP-ribosylation), a posttranslational modification following DNA damage, appears as an obligatory step in a detection/signaling pathway leading to the reparation of DNA strand breaks. PARP-3 is a nuclear, DNA-binding protein, which interacts with PARP-1. PARP-3 is present in actively dividing tissues with highest levels in the kidney, skeletal muscle, liver, heart and spleen. Human PARP-3 maps to chromosome 3p21.2, a gene region that undergoes alteration in solid malignant tumors.

REFERENCES

1. Ame, J.C., et al. 1999. PARP-2, a novel mammalian DNA damage-dependent poly(ADP-ribose) polymerase. *J. Biol. Chem.* 274: 17860-17868.
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3. Berghammer, H., et al. 1999. pADPRT-2: a novel mammalian polymerizing (ADP-ribosyl)transferase gene related to truncated pADPRT homologues in plants and *Caenorhabditis elegans*. *FEBS Lett.* 449: 259-263.
4. Glowacki, G., et al. 2001. Structure, chromosomal localization, and expression of the gene for mouse ecto-mono(ADP-ribosyl)transferase ART5. *Gene* 275: 267-277.
5. Schreiber, V., et al. 2002. Poly(ADP-ribose) polymerase-2 (PARP-2) is required for efficient base excision DNA repair in association with PARP-1 and XRCC1. *J. Biol. Chem.* 277: 23028-23036.
6. Augustin, A., et al. 2003. PARP-3 localizes preferentially to the daughter centriole and interferes with the G₁/S cell cycle progression. *J. Cell Sci.* 116: 1551-1562.
7. LocusLink Report (LocusID: 10039). <http://www.ncbi.nlm.nih.gov/LocusLink/>
8. SWISS-PROT/TrEMBL (Q9Y6F1). World Wide Web URL: <http://www.expasy.ch/sprot/sprot-top.html>

CHROMOSOMAL LOCATION

Genetic locus: PARP3 (human) mapping to 3p21.2; Parp3 (mouse) mapping to 9 F1.

SOURCE

PARP-3 (P-21) is a purified rabbit polyclonal antibody raised against a peptide mapping near the C-terminus of PARP-3 of mouse origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

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

APPLICATIONS

PARP-3 (P-21) is recommended for detection of PARP-3 of mouse 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for PARP-3 siRNA (h): sc-106357, PARP-3 siRNA (m): sc-152029, PARP-3 shRNA Plasmid (h): sc-106357-SH, PARP-3 shRNA Plasmid (m): sc-152029-SH, PARP-3 shRNA (h) Lentiviral Particles: sc-106357-V and PARP-3 shRNA (m) Lentiviral Particles: sc-152029-V.

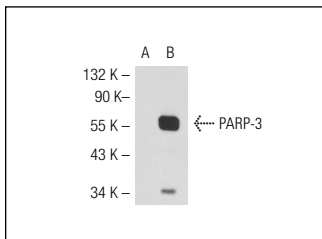
Molecular Weight of PARP-3: 60 kDa.

Positive Controls: PARP-3 (m3): 293T Lysate: sc-122389, mouse kidney extract: sc-2255 or mouse spleen extract: sc-2391.

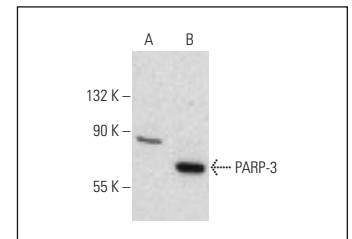
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



PARP-3 (P-21): sc-130838. Western blot analysis of PARP-3 expression in non-transfected: sc-117752 (A) and mouse PARP-3 transfected: sc-122389 (B) 293T whole cell lysates.



PARP-3 (P-21): sc-130838. Western blot analysis of PARP-3 expression in non-transfected: sc-117752 (A) and mouse PARP-3 transfected: sc-122388 (B) 293T whole cell lysates.

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.

MONOS
Satisfaction
Guaranteed

Try **PARP-3 (B-7): sc-390771** or **PARP-3 (C-1): sc-390758**, our highly recommended monoclonal alternatives to PARP-3 (P-21).