

PARP-3 (B-22): sc-133887

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 post-translational 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.
2. Still, I.H., et al. 1999. Identification of a novel gene (ADPRTL1) encoding a potential Poly(ADP-ribosyl)transferase protein. *Genomics* 62: 533-536.

CHROMOSOMAL LOCATION

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

SOURCE

PARP-3 (B-22) is an affinity purified rabbit polyclonal antibody raised against synthetic PARP-3 peptide of human origin.

PRODUCT

Each vial contains 50 µg IgG in 500 µl PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

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 (B-22) 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)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) 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.

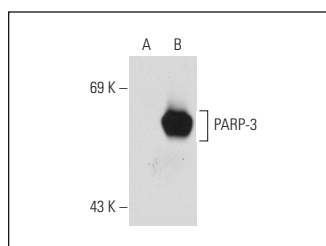
Molecular Weight of PARP-3: 60 kDa.

Positive Controls: PARP-3 (m3): 293T Lysate: sc-122389, mouse spleen extract: sc-2391 or Hep G2 cell lysate: sc-2227.

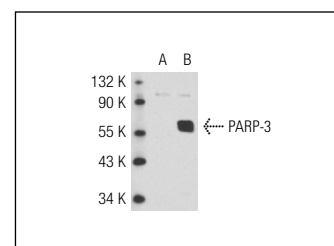
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use 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). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



PARP-3 (B-22): sc-133887. Western blot analysis of PARP-3 expression in non-transfected: sc-117752 (A) and mouse PARP-3 transfected: sc-122387 (B) 293T whole cell lysates.



PARP-3 (B-22): sc-133887. 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.

SELECT PRODUCT CITATIONS

1. Sun, X., et al. 2016. Sam68 is required for DNA damage responses via regulating poly(ADP-ribosylation). *PLoS Biol.* 14: e1002543.

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 **PARP-3 (B-7): sc-390771** or **PARP-3 (C-1): sc-390758**, our highly recommended monoclonal alternatives to PARP-3 (B-22).