

PARP-3 (m3): 293T Lysate: sc-122389

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 3p21.1, 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.
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/>

CHROMOSOMAL LOCATION

Genetic locus: Parp3 (mouse) mapping to 9 F1.

PRODUCT

PARP-3 (m3): 293T Lysate represents a lysate of mouse PARP-3 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

RESEARCH USE

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

APPLICATIONS

PARP-3 (m3): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive PARP-3 antibodies. Recommended use: 10-20 µl per lane.

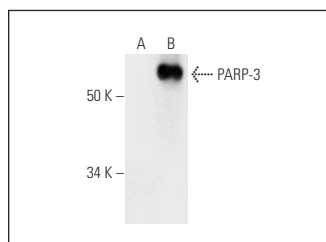
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

PARP-3 (B-7): sc-390771 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse PARP-3 expression in PARP-3 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

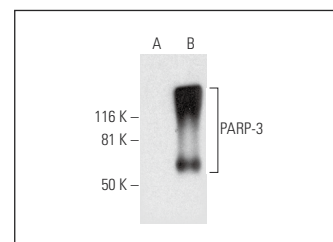
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



PARP-3 (B-7): sc-390771. 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 (C-1): sc-390758. 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.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

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