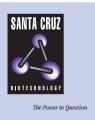
# SANTA CRUZ BIOTECHNOLOGY, INC.

# PARP-6 (B-23): sc-133888



# 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(ADPribose) 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, neurodegenerative and inflammatory disorders.

#### REFERENCES

- Hans, M.A., et al. 1999. Overexpression of dominant negative PARP interferes with tumor formation of HeLa cells in nude mice: evidence for increased tumor cell apoptosis *in vivo*. Oncogene 18: 7010-7015.
- Aguiar, R.C., et al. 2005. B-aggressive lymphoma family proteins have unique domains that modulate transcription and exhibit poly(ADP-ribose) polymerase activity. J. Biol. Chem. 280: 33756-33765.
- Chou, H.Y., et al. 2006. Cdk-dependent activation of poly(ADP-ribose) polymerase member 10 (PARP-10). J. Biol. Chem. 281: 15201-15207.
- Goenka, S., et al. 2007. Collaborator of Stat6 (CoaSt6)-associated poly (ADP-ribose) polymerase activity modulates Stat6-dependent gene transcription. J. Biol. Chem. 282: 18732-18739.
- 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.
- Elser, M., et al. 2008. Poly(ADP-ribose) polymerase 1 promotes tumor cell survival by coactivating hypoxia-inducible factor-1-dependent gene expression. Mol. Cancer Res. 6: 282-290.
- 7. Hassa, P.O., et al. 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: PARP6 (human) mapping to 15q23; Parp6 (mouse) mapping to 9 B.

#### SOURCE

PARP-6 (B-23) is an affinity purified rabbit polyclonal antibody raised against synthetic PARP-6 peptide of human origin.

# PRODUCT

Each vial contains 50  $\mu g$  IgG in 500  $\mu I$  PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

# **RESEARCH USE**

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

#### APPLICATIONS

PARP-6 (B-23) is recommended for detection of PARP-6 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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-6 siRNA (h): sc-76062, PARP-6 siRNA (m): sc-76063, PARP-6 shRNA Plasmid (h): sc-76062-SH, PARP-6 shRNA Plasmid (m): sc-76063-SH, PARP-6 shRNA (h) Lentiviral Particles: sc-76062-V and PARP-6 shRNA (m) Lentiviral Particles: sc-76063-V.

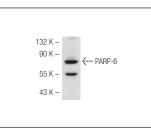
Molecular Weight of PARP-6 isoforms: 71/65/49 kDa.

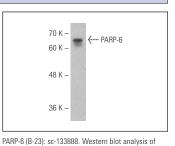
Positive Controls: Jurkat whole cell lysate: sc-2204 or Hep G2 cell lysate: sc-2227.

# **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<sup>™</sup> compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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<sup>™</sup> Mounting Medium: sc-24941. 4) Immuno-histochemistry: use ImmunoCruz<sup>™</sup>: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

#### DATA





PARP-6 expression in Hep G2 whole cell lysate

PARP-6 (B-23): sc-133888. Western blot analysis of PARP-6 expression in Jurkat whole cell lysate.

#### STORAGE

Store at 4° C, \*\*D0 NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

#### PROTOCOLS

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