PARP-11 (m): 293T Lysate: sc-122383



The Power to Question

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., Müller, M., Meyer-Ficca, M., Bürkle, A. and Küpper, J.H. 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., Takeyama, K., He, C., Kreinbrink, K. and Shipp, M.A. 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., Chou, H.T. and Lee, S.C. 2006. CDK-dependent activation of poly(ADP-ribose) polymerase member 10 (PARP-10). J. Biol. Chem. 281: 15201-15207
- Goenka, S., Cho, S.H. and Boothby, M. 2007. Collaborator of Stat6 (CoaSt6)associated poly(ADP-ribose) polymerase activity modulates Stat6-dependent gene transcription. J. Biol. Chem. 282: 18732-18739.
- Elser, M., Borsig, L., Hassa, P.O., Erener, S., Messner, S., Valovka, T., Keller, S., Gassmann, M. and Hottiger, M.O. 2008. Poly(ADP-ribose) polymerase 1 promotes tumor cell survival by coactivating hypoxia-inducible factor-1dependent gene expression. Mol. Cancer Res. 6: 282-290.
- 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.
- Liu, X., Luo, X., Shi, Y., Zhu, G.D., Penning, T., Giranda, V.L. and Luo, Y. 2008. Poly (ADP-ribose) polymerase activity regulates apoptosis in HeLa cells after alkylating DNA damage. Cancer Biol. Ther. 7: 934-941.

CHROMOSOMAL LOCATION

Genetic locus: Parp11 (mouse) mapping to 6 F3.

PRODUCT

PARP-11 (m): 293T Lysate represents a lysate of mouse PARP-11 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

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.

APPLICATIONS

PARP-11 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive PARP-11 antibodies. Recommended use: 10-20 μ l per lane

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

RESEARCH USE

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

PROTOCOLS

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

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