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SANTA CRUZ BIOTECHNOLOGY, INC.

PARP-10 siRNA (m): sc-148948

BACKGROUND

Poly(ADP-ribose) polymerase-1 (PARP-1), also designated PARP, is a nuclear DNA-binding, zinc-finger protein that influences DNA repair, DNA replication, modulation of chromatin structure and apoptosis. In response to genotoxic stress, PARP-1 catalyzes the transfer of ADP-ribose units from NAD^+ to a number of acceptor molecules, including chromatin. PARP-1 recognizes DNA strand interruptions, can complex with RNA and negatively regulates transcription. Actinomycin D- and etoposide-dependent induction of caspases mediates cleavage of PARP-1 into a p89 fragment that traverses into the cytoplasm. PARP-10 is a PARP enzyme that is involved in the control of cell proliferation. PARP-10 localizes to the nuclear and cytoplasmic compartments, where it inhibits c-Myc- and E1A-mediated fibroblast cotransformation.

REFERENCES

1. Kaufmann, S.H., et al. 1993. Specific proteolytic cleavage of poly(ADP-ribose) polymerase: An early marker of chemotherapy-induced apoptosis. Cancer Res. 53: 3976-3985.
2. Lazebnik, Y.A., et al. 1994. Cleavage of poly(ADP-ribose) polymerase by a proteinase with properties like ICE. Nature 371: 346-347.
3. Darmon, A.J., et al. 1995. Activation of the apoptotic protease CPP32 by cytotoxic T-cell-derived granzyme B. Nature 377: 446-448.
4. Wang, Z.Q., et al. 1997. PARP is important for genomic stability but dispensable in apoptosis. Genes Dev. 11: 2347-2358.
5. Jeggo, P.A. 1998. DNA repair: PARP-another guardian angel? Curr. Biol. 8: R49-R51.
6. d'Adda di Fagagna, F., et al. 1999. Functions of poly(ADP-ribose) polymerase in controlling telomere length and chromosomal stability. Nat. Genet. 23: 76-80.
7. Beneke, R., et al. 2000. DNA excision repair and DNA damage-induced apoptosis are linked to Poly(ADP-ribosyl)ation but have different requirements for p53. Mol. Cell. Biol. 20: 6695-6703.
8. Vispe, S., et al. 2000. A cellular defense pathway regulating transcription through poly(ADP-ribosyl)ation in response to DNA damage. Proc. Natl. Acad. Sci. USA 97: 9886-9891.
9. Herceg, Z. and Wang, ZQ. 2001. Functions of poly(ADP-ribose) polymerase (PARP) in DNA repair, genomic integrit and cell death. Mutat. Res. 477: 97-110.

CHROMOSOMAL LOCATION

Genetic locus: Parp10 (mouse) mapping to 15 D3.

PRODUCT

PARP-10 siRNA (m) is a target-specific 19-25 nt siRNA designed to knock down gene expression. Each vial contains 3.3 nmol of lyophilized siRNA, sufficient for a 10 µM solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see PARP-10 shRNA Plasmid (m): sc-148948-SH and PARP-10 shRNA (m) Lentiviral Particles: sc-148948-V as alternate gene silencing products.

SSTORAGE AND RESUSPENSION

Store lyophilized siRNA duplex at -20° C with desiccant. Stable for at least one year from the date of shipment. Once resuspended, store at -20° C, avoid contact with RNAses and repeated freeze thaw cycles.

Resuspend lyophilized siRNA duplex in 330 µl of the RNAse-free water provided. Resuspension of the siRNA duplex in 330 µl of RNAse-free water makes a 10 µM solution in a 10 µM Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

APPLICATIONS

PARP-10 siRNA (m) is recommended for the inhibition of PARP-10 expression in mouse cells.

SUPPORT REAGENTS

For optimal siRNA transfection efficiency, Santa Cruz Biotechnology's siRNA Transfection Reagent: sc-29528 (0.3 ml), siRNA Transfection Medium: sc-36868 (20 ml) and siRNA Dilution Buffer: sc-29527 (1.5 ml) are recommended. Control siRNAs or Fluorescein Conjugated Control siRNAs are available as 10 µM in 66 µl. Each contain a scrambled sequence that will not lead to the specific degradation of any known cellular mRNA. Fluorescein Conjugated Control siRNAs include: sc-36869, sc-44239, sc-44240 and sc-44241. Control siRNAs include: sc-37007, sc-44230, sc-44231, sc-44232, sc-44233, sc-44234, sc-44235, sc-44236, sc-44237 and sc-44238.

GENE EXPRESSION MONITORING

PARP-10 (5H11): sc-53858 is recommended as a control antibody for monitoring of PARP-10 gene expression knockdown by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) or immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor PARP-10 gene expression knockdown using RT-PCR Primer: PARP-10 (m)-PR: sc-148948-PR (20 µl). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.

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.