SANTA CRUZ BIOTECHNOLOGY, INC.

iASPP siRNA (h): sc-72100

BACKGROUND

Apoptosis stimulating protein of p53 (ASPP) is a family of proteins that act as regulators of apoptosis via their interactions with p53. ASPP1 and ASPP2 are both members of the ASPP family that regulate p53 by enhancing its transactivation function and binding to proapoptotic genes. iASPP, is the third member of the ASPP family and is considered inhibitory as it negatively regulates p53. iASPP is the most evolutionarily conserved inhibitor of p53 induced apoptosis. Expression of iASPP is upregulated in human breast carcinomas that express wildtype p53. Overexpression of iASPP may play a role in leukemogenesis and progression of acute leukemia. Inhibiting iASPP may be an effective strategy for treating tumors expressing wildtype p53.

REFERENCES

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4. Slee, E.A., Gillotin, S., Bergamaschi, D., Royer, C., Llanos, S., Ali, S., Jin, B., Trigiante, G. and Lu, X. 2004. The N-terminus of a novel isoform of human iASPP is required for its cytoplasmic localization. Oncogene 23: 9007-9016.
5. Zhang, X., Wang, M., Zhou, C., Chen, S. and Wang, J. 2004. The expression of iASPP in acute leukemias. Leuk. Res. 29: 179-183.
6. Bergamaschi, D., Samuels, Y., Zhong, S. and Lu, X. 2005. MDM2 and MDMX prevent ASPP1 and ASPP2 from stimulating p53 without targeting p53 for degradation. Oncogene 24: 3836-3841.

CHROMOSOMAL LOCATION

Genetic locus: PPP1R13L (human) mapping to 19q13.32.

PRODUCT

iASPP siRNA (h) is a pool of 3 target-specific 19-25 nt siRNAs 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 iASPP shRNA Plasmid (h): sc-72100-SH and iASPP shRNA (h) Lentiviral Particles: sc-72100-V as alternate gene silencing products.

For independent verification of iASPP (h) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-72100A, sc-72100B and sc-72100C.

RESEARCH USE

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

STORAGE 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

iASPP siRNA (h) is recommended for the inhibition of iASPP expression in human 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

iASPP (A-2): sc-398566 is recommended as a control antibody for monitoring of iASPP 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).

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. 2) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor iASPP gene expression knockdown using RT-PCR Primer: iASPP (h)-PR: sc-72100-PR (20 µl, 577 bp). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.

PROTOCOLS

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