SANTA CRUZ BIOTECHNOLOGY, INC.

SNIP1 siRNA (h): sc-61581

BACKGROUND

Members of the transforming growth factor-β (TGF-β) superfamily play critical roles in controlling cell growth and differentiation. Effects of TGF-β family ligands are mediated by Smad proteins. The Smad nuclear interacting protein (SNIP1) contains a forkhead-associated (FHA) domain and acts as a nuclear inhibitor of CBP/p300. SNIP1 potently inhibits the activity of NFκB, which binds the C/H1 domain of CBP/p300, by competing for the binding site. SNIP1 is also thought to induce expression of Cyclin D1 to promote cellular proliferation. SNIP1 is ubiquitously expressed with high expression in heart and skeletal muscle.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: SNIP1 (human) mapping to 1p34.3.

PRODUCT

SNIP1 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 SNIP1 shRNA Plasmid (h): sc-61581-SH and SNIP1 shRNA (h) Lentiviral Particles: sc-61581-V as alternate gene silencing products.

For independent verification of SNIP1 (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-61581A, sc-61581B and sc-61581C.

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

SNIP1 siRNA (h) is recommended for the inhibition of SNIP1 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.

RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor SNIP1 gene expression knockdown using RT-PCR Primer: SNIP1 (h)-PR: sc-61581-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.