SANTA CRUZ BIOTECHNOLOGY, INC.

RNase 8 siRNA (h): sc-92151

BACKGROUND

RNase 8 (ribonuclease-like protein 8) is a 154 amino acid ribonuclease that belongs to the pancreatic ribonuclease family, which itself is included in the RNase A superfamily. Gene products belonging to the Ribonuclease A superfamily are pancreatic ribonucleases that cleave single-stranded RNA. RNase 8 is a secreted protein that likely plays a role in host immunological defense. RNase 8 shows strong expression in lung, heart, placenta, kidney, pancreas, liver, brain and skeletal muscle. RNase 8 is also expressed in monocytes and neutrophils. The RNase 8 gene is conserved in chimpanzee, canine, bovine, mouse and rat, and maps to human chromosome 14q11.2, where it is linked to seven other RNase A superfamily genes. The entire RNase A cluster spans 368 kb.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: RNASE8 (human) mapping to 14q11.2.

PROTOCOLS

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

PRODUCT

RNase 8 siRNA (h) 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 RNase 8 shRNA Plasmid (h): sc-92151-SH and RNase 8 shRNA (h) Lentiviral Particles: sc-92151-V as alternate gene silencing products.

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

RNase 8 siRNA (h) is recommended for the inhibition of RNase 8 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.

RESEARCH USE

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