

RASAL3 siRNA (m): sc-140643

BACKGROUND

RASAL3 (RAS protein activator like 3) is a 1,011 amino acid protein that contains a C2 domain, a PH domain and a Ras-GAP domain. It is suggested that RASAL3 functions as a Ras GTPase-activating protein. Existing as two alternatively spliced isoforms, the RASAL3 gene is conserved in canine, bovine, mouse and rat, and maps to human chromosome 19p13.12. Chromosome 19 consists of approximately 63 million bases and makes up over 2% of human genomic DNA. Chromosome 19 is recognized for having the greatest gene density of the human chromosomes and is the genetic home for a number of immunoglobulin superfamily members, including the killer cell and leukocyte Ig-like receptors, a number of ICAMs, the CEACAM and PSG family, and Fcγ receptors. Key genes for eye color and hair color also map to chromosome 19. Peutz-Jeghers syndrome, spinocerebellar ataxia type 6, the stroke disorder CADASIL, hypercholesterolemia and insulin-dependent diabetes have been linked to chromosome 19.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Rasal3 (mouse) mapping to 17 B1.

PROTOCOLS

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

PRODUCT

RASAL3 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 RASAL3 shRNA Plasmid (m): sc-140643-SH and RASAL3 shRNA (m) Lentiviral Particles: sc-140643-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

RASAL3 siRNA (m) is recommended for the inhibition of RASAL3 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.

RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor RASAL3 gene expression knockdown using RT-PCR Primer: RASAL3 (m)-PR: sc-140643-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.