



vanin-2 siRNA (h): sc-95407

BACKGROUND

The vanin gene family encodes secreted and membrane-bound ectoenzymes that convert pantetheine into pantothenic acid and cysteamine. Members of the vanin family include vanin-1, vanin-2 and vanin-3. Members of the vanin family catalyze the hydrolysis of pantetheine for vitamin B5 recycling. Vanin-2, also known as VNN2, FOAP-4 or GPI-80, is a 520 amino acid GPI-anchor protein that belongs to the CN hydrolase family and BTD/VNN subfamily. Widely expressed with high expression in spleen and blood, vanin-2 is suggested to be involved in thymus homing of bone marrow cells, regulation of Integrin β 2-mediated cell adhesion, and migration and motility of neutrophils. Vanin-2 exists as five alternatively spliced isoforms and is encoded by a gene mapping to human chromosome 6q23.2.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: VNN2 (human) mapping to 6q23.2.

PROTOCOLS

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

PRODUCT

vanin-2 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 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see vanin-2 shRNA Plasmid (h): sc-95407-SH and vanin-2 shRNA (h) Lentiviral Particles: sc-95407-V as alternate gene silencing products.

For independent verification of vanin-2 (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-95407A, sc-95407B and sc-95407C.

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 μ l of the RNase-free water provided. Resuspension of the siRNA duplex in 330 μ l of RNase-free water makes a 10 μ M solution in a 10 μ M Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

APPLICATIONS

vanin-2 siRNA (h) is recommended for the inhibition of vanin-2 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 μ M in 66 μ l. 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 vanin-2 gene expression knockdown using RT-PCR Primer: vanin-2 (h)-PR: sc-95407-PR (20 μ l). 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.