

FAM21A siRNA (h): sc-90808

BACKGROUND

Playing an essential role in the fission of tubules that serve as transport intermediates during endosome sorting, the WASH complex is present at the surface of endosomes and functions to recruit and activate the Arp2/3 complex for induction of Actin polymerization. FAM21, Putative WASH complex subunit FAM21, is a component of the WASH complex. Having undergone evolutionary duplication, two highly homologous family members exist including FAM21A and FAM21C. FAM21 links the WASH complex to endosomes and is required for WASM-dependent retromer-mediated sorting. Also, by directly interacting with CapZ, FAM21 inhibits its anti-capping activity, thereby regulating Actin dynamics.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: FAM21A (human) mapping to 10q11.23.

PRODUCT

FAM21A 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 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see FAM21A shRNA Plasmid (h): sc-90808-SH and FAM21A shRNA (h) Lentiviral Particles: sc-90808-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 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

FAM21A siRNA (h) is recommended for the inhibition of FAM21A 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 FAM21A gene expression knockdown using RT-PCR Primer: FAM21A (h)-PR: sc-90808-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.

PROTOCOLS

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