SANTA CRUZ BIOTECHNOLOGY, INC.

Rab11-FIP5 siRNA (h): sc-94705

BACKGROUND

RAB11 is a GTPase that regulates endosomal trafficking to apical plasma membrane domains in polarized epithelial cells. Rab11-FIP5 (RAB11 family interacting protein 5 (class I)) is a 653 amino acid cytoplasmic protein that is a Rab effector involved in protein trafficking from apical recycling endosomes to the apical plasma membrane. Rab11-FIP5 forms an heterooligomeric complex with Rab11-FIP4, binds γ-SNAP and 60 kDa Ro/SSA, and binds Rab 11A that has been activated by GTP binding. Rab11-FIP5 is detected at low levels in heart, brain, placenta, lung, liver, adipocytes, kidney, spleen, skeletal muscle and pancreas, and contains one C2 domain and one FIP-RBD domain. The Rab11-FIP5 gene is conserved in canine, bovine, mouse, chicken and zebrafish, and maps to human chromosome 2p13.2.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: RAB11FIP5 (human) mapping to 2p13.2.

PROTOCOLS

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

PRODUCT

Rab11-FIP5 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 Rab11-FIP5 shRNA Plasmid (h): sc-94705-SH and Rab11-FIP5 shRNA (h) Lentiviral Particles: sc-94705-V as alternate gene silencing products.

For independent verification of Rab11-FIP5 (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-94705A, sc-94705B and sc-94705C.

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

Rab11-FIP5 siRNA (h) is recommended for the inhibition of Rab11-FIP5 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 Rab11-FIP5 gene expression knockdown using RT-PCR Primer: Rab11-FIP5 (h)-PR: sc-94705-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.