



Rab11-FIP4 siRNA (m): sc-152663

BACKGROUND

The Ras superfamily of GTPases can be subdivided into the Ras, Rho/Rac, Sar, Rab, Arf, Rap and Ran subfamilies, all of which control multiple aspects of cell function, including cytoskeletal rearrangement, nuclear signaling and cell growth. Members of the Ras protein superfamily are regulated by a variety of GTPase-interaction proteins that control GTPase function. Rab11-FIP4 (RAB11 family interacting protein 4 (class II)), also known as arfophilin-2, is a 637 amino acid peripheral membrane protein that localizes to the midbody and cleavage furrow during cytokinesis. Highly expressed in testis with weak expression found in other tissues, Rab11-FIP4 plays a role in endocytic trafficking and cytokinesis, and exists as a homodimer that forms a complex with ARF6 and Rab11. Rab11-FIP4 contains one EF-hand domain, an RBD-FIP domain and exists as two alternatively spliced isoforms.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Rab11fip4 (mouse) mapping to 11 B5.

PRODUCT

Rab11-FIP4 siRNA (m) 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 Rab11-FIP4 shRNA Plasmid (m): sc-152663-SH and Rab11-FIP4 shRNA (m) Lentiviral Particles: sc-152663-V as alternate gene silencing products.

For independent verification of Rab11-FIP4 (m) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-152663A, sc-152663B and sc-152663C.

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

Rab11-FIP4 siRNA (m) is recommended for the inhibition of Rab11-FIP4 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 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 Rab11-FIP4 gene expression knockdown using RT-PCR Primer: Rab11-FIP4 (m)-PR: sc-152663-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.