

Sec6 siRNA (h): sc-106816

BACKGROUND

Sec 6 is one of eight protein subunits composing the mammalian exocyst complex (Sec3, Sec5, Sec6, Sec8, Sec10, Sec15, Exo70, and Exo84). The mammalian exocyst complex (Sec 6/8) is essential for targeting exocytic vesicles to specific docking sites on the plasma membrane. Sec6/8 regulates polarized secretion in a GTP-dependent manner. Human Sec6 maps to chromosome 5p15.33.

REFERENCES

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3. Vik-Mo, E.O., et al. 2003. Sec6 is localized to the plasma membrane of mature synaptic terminals and is transported with secretogranin II-containing vesicles. *Neuroscience* 119: 73-85.
4. Yeaman, C., et al. 2004. Mechanism of recruiting Sec6/8 (exocyst) complex to the apical junctional complex during polarization of epithelial cells. *J. Cell Sci.* 117: 559-570.
5. Hsu, S.C., et al. 2004. The exocyst complex in polarized exocytosis. *Int. Rev. Cytol.* 233: 243-265.
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8. Beronja, S., et al. 2005. Essential function of *Drosophila* Sec6 in apical exocytosis of epithelial photoreceptor cells. *J. Cell Biol.* 169: 635-646.
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CHROMOSOMAL LOCATION

Genetic locus: EXOC3 (human) mapping to 5p15.33.

PRODUCT

Sec6 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 Sec6 shRNA Plasmid (h): sc-106816-SH and Sec6 shRNA (h) Lentiviral Particles: sc-106816-V as alternate gene silencing products.

For independent verification of Sec6 (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-106816A, sc-106816B and sc-106816C.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

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

Sec6 siRNA (h) is recommended for the inhibition of Sec6 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.

GENE EXPRESSION MONITORING

Sec6 (H-5): sc-374054 is recommended as a control antibody for monitoring of Sec6 gene expression knockdown by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) or immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor Sec6 gene expression knockdown using RT-PCR Primer: Sec6 (h)-PR: sc-106816-PR (20 μ l). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.

PROTOCOLS

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