

VPS37C siRNA (m): sc-155221

BACKGROUND

Vacuolar sorting proteins (VPSs) are required for proper trafficking of endocytic and biosynthetic proteins to the vacuole and play an important role in the budding process of cells. VPS37C (vacuolar protein sorting 37 homolog C) is a 355 amino acid peripheral membrane protein and is a member of the VPS37 family. VPS37C is a component of the ESCRT-I complex, which is known to regulate vesicular trafficking. VPS37B is required for the sorting of endocytic ubiquitinated cargo into multivesicular bodies and may be involved in cell growth and differentiation. VPS37C contains a VPS37 C-terminal domain and is encoded by a gene located on human chromosome 11q12.2. Chromosome 11 comprises approximately 4% of human genomic DNA and is considered a gene and disease association dense chromosome.

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CHROMOSOMAL LOCATION

Genetic locus: Vps37c (mouse) mapping to 19 A.

PRODUCT

VPS37C 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 VPS37C shRNA Plasmid (m): sc-155221-SH and VPS37C shRNA (m) Lentiviral Particles: sc-155221-V as alternate gene silencing products.

For independent verification of VPS37C (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-155221A, sc-155221B and sc-155221C.

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

VPS37C siRNA (m) is recommended for the inhibition of VPS37C 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 VPS37C gene expression knockdown using RT-PCR Primer: VPS37C (m)-PR: sc-155221-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.