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VPS26B siRNA (m): sc-155219

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. VPS26B (vacuolar protein sorting 26 homolog B), also known as Pep8b, is a 336 amino acid peripheral membrane protein that forms a retromer complex with VPS29 and VPS35. Specifically, the retromer complex is responsible for the retrograde transport of proteins from endosomes to the *trans*-Golgi network. VPS26B is highly similar to VPS26A and both have structural homology to the Arrestin family of proteins involved in endocytosis of activated G protein-coupled receptors (GPCRs) at the plasma membrane. VPS26B may be phosphorylated upon DNA damage by Atm or ATR.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: *Vps26b* (mouse) mapping to 9 A4.

PRODUCT

VPS26B siRNA (m) 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 VPS26B shRNA Plasmid (m): sc-155219-SH and VPS26B shRNA (m) Lentiviral Particles: sc-155219-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

VPS26B siRNA (m) is recommended for the inhibition of VPS26B 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 VPS26B gene expression knockdown using RT-PCR Primer: VPS26B (m)-PR: sc-155219-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.