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Syntaxin 8 siRNA (m): sc-153995

BACKGROUND

Syntaxins, a family of proteins involved in the fusion of synaptic vesicles with the plasma membrane, display broad tissue distribution and contain C-terminal hydrophobic domains that direct them to their respective intracellular compartments. Syntaxin 8, also known as STX8 or CARB, is a 236 amino acid single-pass type IV membrane protein that contains one t-SNARE coiled-coil homology domain and belongs to the Syntaxin family. Highly expressed in liver, brain, kidney, lung, placenta, spleen, pancreas and skeletal muscle, Syntaxin 8 functions in the early secretory pathway as a vesicle trafficking protein that shuttles proteins from the *cis*-Golgi membrane to the endoplasmic reticulum (ER). In addition, Syntaxin 8 associates with Syntaxin 7, v-SNARE Vti1p and endobrevin to form a SNARE complex that plays a role in the homotypic fusion of late endosomes.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Stx8 (mouse) mapping to 11 B3.

RESEARCH USE

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

PRODUCT

Syntaxin 8 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 Syntaxin 8 shRNA Plasmid (m): sc-153995-SH and Syntaxin 8 shRNA (m) Lentiviral Particles: sc-153995-V as alternate gene silencing products.

For independent verification of Syntaxin 8 (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-153995A, sc-153995B and sc-153995C.

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

Syntaxin 8 siRNA (m) is recommended for the inhibition of Syntaxin 8 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.

GENE EXPRESSION MONITORING

Syntaxin 8 (48): sc-136092 is recommended as a control antibody for monitoring of Syntaxin 8 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).

RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor Syntaxin 8 gene expression knockdown using RT-PCR Primer: Syntaxin 8 (m)-PR: sc-153995-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.