

REEP3 siRNA (m): sc-152792

BACKGROUND

Members of the REEP (receptor expression enhancing protein) family contain a TB2/DP1 and HVA22 domains, which are involved in intracellular trafficking and secretion. REEP3 (receptor expression-enhancing protein 3), also known as receptor accessory protein 3, is a 255 amino acid multi-pass membrane protein belonging to the DP1 family. REEP3 may enhance the cell surface expression of odorant receptors and may be a regulator of cellular vesicle trafficking between the endoplasmic reticulum and the Golgi network. The gene encoding REEP3 is located on human chromosome 10, which houses over 1,200 genes and comprises nearly 4.5% of the human genome. Mutations in the gene encoding REEP3 cause defects in neural development. Two isoforms of REEP3 are produced due to alternative splicing events.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Reep3 (mouse) mapping to 10 B5.1.

PRODUCT

REEP3 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 REEP3 shRNA Plasmid (m): sc-152792-SH and REEP3 shRNA (m) Lentiviral Particles: sc-152792-V as alternate gene silencing products.

For independent verification of REEP3 (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-152792A, sc-152792B and sc-152792C.

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

REEP3 siRNA (m) is recommended for the inhibition of REEP3 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 contains 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 REEP3 gene expression knockdown using RT-PCR Primer: REEP3 (m)-PR: sc-152792-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.