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Vmn2r53 siRNA (m): sc-155173

BACKGROUND

Vomer nasal organ receptors commonly known as pheromone receptors are an essential part of the olfactory sensory system that play a role in the recognition and response to chemical communication. The three subfamilies of vomeronasal organ receptors include, V1R, V2R and V3R, each of which are comprised of potentially 100 or more family members, including several nonfunctional pseudogenes. Vmn2r53 (vomeronasal 2, receptor 53) is a putative pheromone receptor encoded by a gene located on mouse chromosome 7, which houses over 2,500 genes and consists of nearly 150 genes that have homologs to segments of human chromosome 10, 11, 15, 16 and 19.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Vmn2r53 (mouse) mapping to 7 A1.

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.

PRODUCT

Vmn2r53 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 Vmn2r53 shRNA Plasmid (m): sc-155173-SH and Vmn2r53 shRNA (m) Lentiviral Particles: sc-155173-V as alternate gene silencing products.

For independent verification of Vmn2r53 (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-155173A, sc-155173B and sc-155173C.

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

Vmn2r53 siRNA (m) is recommended for the inhibition of Vmn2r53 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 Vmn2r53 gene expression knockdown using RT-PCR Primer: Vmn2r53 (m)-PR: sc-155173-PR (20 μ l). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.