SANTA CRUZ BIOTECHNOLOGY, INC.

ODR4 siRNA (h): sc-88303

BACKGROUND

ODR4 (protein odr-4 homolog), also known as C1orf27, TTG1, TTG1A, LAG1-interacting protein or transactivated by transforming growth factor β protein 1, is a 454 amino acid multi-pass membrane protein containing a C-terminal transmembrane domain. Belonging to the ODR4 family, ODR4 may play a role in the trafficking of a subset of G protein-coupled receptors. ODR-4 is found on ER, Golgi and secretory vesicle membranes in chemosensory neurons and is ubiquitously expressed. Three isoforms of ODR4 are produced by alternative splicing events. The gene encoding ODR4 maps to human chromosome 1q31.1 and mouse chromosome 1 G1.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: C1orf27 (human) mapping to 1q31.1.

PRODUCT

ODR4 siRNA (h) 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 µM solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see ODR4 shRNA Plasmid (h): sc-88303-SH and ODR4 shRNA (h) Lentiviral Particles: sc-88303-V as alternate gene silencing products.

For independent verification of ODR4 (h) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-88303A, sc-88303B and sc-88303C.

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 µl of the RNAse-free water provided. Resuspension of the siRNA duplex in 330 µl of RNAse-free water makes a 10 µM solution in a 10 µM Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

APPLICATIONS

ODR4 siRNA (h) is recommended for the inhibition of ODR4 expression in human 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 µM in 66 µl. 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 ODR4 gene expression knockdown using RT-PCR Primer: ODR4 (h)-PR: sc-88303-PR (20 µl). 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.