SANTA CRUZ BIOTECHNOLOGY, INC.

TAAR8 siRNA (h): sc-63105

BACKGROUND

TAAR8 (trace amine-associated receptor 8), also known as TaR-8 (trace amine receptor 8), TaR-5 (trace amine receptor 5), TRAR5 or GPR102 (G protein-coupled receptor 102), is a 342 amino acid multi-pass membrane protein that belongs to the G protein-coupled receptor 1 family. TAAR3 is considered an orphan receptor since its endogenous ligand is unknown. TAAR8 may be a receptor for trace amines, which are biogenic amines present in very low levels in mammalian tissues. Although some trace amines have clearly defined roles as neurotransmitters in invertebrates, the extent to which they function as true neurotransmitters in vertebrates has remained speculative. Expressed in kidney and amygdala, TAAR8 is encoded by a gene that contains approximately 1,029 bases and maps to human chromosome 6q23.2.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: TAAR8 (human) mapping to 6q23.2.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

PRODUCT

TAAR8 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 TAAR8 shRNA Plasmid (h): sc-63105-SH and TAAR8 shRNA (h) Lentiviral Particles: sc-63105-V as alternate gene silencing products.

For independent verification of TAAR8 (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-63105A, sc-63105B and sc-63105C.

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

TAAR8 siRNA (h) is recommended for the inhibition of TAAR8 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 TAAR8 gene expression knockdown using RT-PCR Primer: TAAR8 (h)-PR: sc-63105-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.