SANTA CRUZ BIOTECHNOLOGY, INC.

2300002M23Rik siRNA (m): sc-108638

BACKGROUND

2300002M23Rik, also known as extracellular matrix protein with prion homology (Emprin) or STG, is a 349 amino acid secreted protein that has been found to bind to numerous extracellular matrix proteins. Based on sequence similarities, 2300002M23Rik is the murine homolog of the human protein STG. STG, also known as C6orf15 (chromosome 6 open reading frame 15), is a 325 amino acid protein that binds numerous extracellular matrix proteins and is expressed in taste buds, skin and tonsils. STG is a secreted protein that contains an N-terminal signal peptide, potential O-glycosylation sites and multiple tandem repeats. STG localizes to the extracellular matrix and likely plays a role in taste cell physiology. STG is encoded by a gene that maps to human chromosome 6p21.33, a region associated with lung cancer and follicular lymphoma susceptibility.

REFERENCES

1. Oka, A., et al. 1999. Association analysis using refined microsatellite markers localizes a susceptibility locus for psoriasis vulgaris within a 111 kb segment telomeric to the HLA-C gene. Hum. Mol. Genet. 8: 2165-2170.
2. Neira, M., et al. 2001. A new gene (rmSTG) specific for taste buds is found by laser capture microdissection. Mamm. Genome 12: 60-66.
3. Sánchez, F., et al. 2004. STG does not associate with psoriasis in the Swedish population. Exp. Dermatol. 13: 413-418.
4. Lazzell, D.R., et al. 2004. SV2B regulates synaptotagmin 1 by direct interaction. J. Biol. Chem. 279: 52124-52131.
5. Wang, Y., et al. 2008. Common 5p15.33 and 6p21.33 variants influence lung cancer risk. Nat. Genet. 40: 1407-1409.
6. Skibola, C.F., et al. 2009. Genetic variants at 6p21.33 are associated with susceptibility to follicular lymphoma. Nat. Genet. 41: 873-875.
7. Barcellos, L.F., et al. 2009. High-density SNP screening of the major histocompatibility complex in systemic lupus erythematosus demonstrates strong evidence for independent susceptibility regions. PLoS Genet. 5: e1000696.

CHROMOSOMAL LOCATION

Genetic locus: 2300002M23Rik (mouse) mapping to 17 B1.

PRODUCT

2300002M23Rik siRNA (m) is a target-specific 19-25 nt siRNA 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 2300002M23Rik shRNA Plasmid (m): sc-108638-SH and 2300002M23Rik shRNA (m) Lentiviral Particles: sc-108638-V as alternate gene silencing products.

PROTOCOLS

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

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

2300002M23Rik siRNA (m) is recommended for the inhibition of 2300002M23Rik 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 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 2300002M23Rik gene expression knockdown using RT-PCR Primer: 2300002M23Rik (m)-PR: sc-108638-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.