SANTA CRUZ BIOTECHNOLOGY, INC.

GLT8D2 siRNA (h): sc-95692

BACKGROUND

GLT8D2 (glycosyltransferase 8 domain-containing protein 2), also known as GALA4A, is a 349 amino acid single-pass type II membrane protein. A member of the glycosyltransferase 8 family, GLT8D2 is encoded by a gene that maps to human chromosome 12q23.3. Encoding over 1,100 genes within 132 million base pairs, chromosome 12 makes up about 4.5% of the human genome. A number of skeletal deformities are linked to chromosome 12, including hypochondrogenesis, achondrogenesis, Noonan syndrome, Kniest dysplasia and trisomy 12p. Chromosome 12 is also home to a homeobox gene cluster, which encodes crucial transcription factors for morphogenesis, as well as the natural killer complex gene cluster, which encodes C-type lectin proteins that mediate the NK cell response to MHC I interaction.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: GLT8D2 (human) mapping to 12q23.3.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PRODUCT

GLT8D2 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 GLT8D2 shRNA Plasmid (h): sc-95692-SH and GLT8D2 shRNA (h) Lentiviral Particles: sc-95692-V as alternate gene silencing products.

For independent verification of GLT8D2 (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-95692A, sc-95692B and sc-95692C.

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

GLT8D2 siRNA (h) is recommended for the inhibition of GLT8D2 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 GLT8D2 gene expression knockdown using RT-PCR Primer: GLT8D2 (h)-PR: sc-95692-PR (20 µl). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.

PROTOCOLS

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