SANTA CRUZ BIOTECHNOLOGY, INC.

GLT8D3 siRNA (m): sc-145438

BACKGROUND

GLT8D3 (glycosyltransferase 8 domain-containing protein 3), also known as GXYLT1 (glucoside xylosyltransferase 1), is a 440 amino acid single-pass type II membrane protein. Belonging to the glycosyltransferase 8 family, GLT8D3 is a xylosyltransferase which elongates the O-linked glucose attached to EGF-like repeats in the extracellular domain of Notch proteins by catalyzing the addition of xylose. GLT8D3 contains a short N-terminal cytoplasmic domain, followed by a transmembrane domain, a stem region and a large glycosyltransferase domain containing the conserved DxD motif. GLT8D3 exists as two alternatively spliced isoforms and is encoded by a gene that maps to human chromosome 12q12 and mouse chromosome 15 E3.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Gxylt1 (mouse) mapping to 15 E3.

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

GLT8D3 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 µM solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see GLT8D3 shRNA Plasmid (m): sc-145438-SH and GLT8D3 shRNA (m) Lentiviral Particles: sc-145438-V as alternate gene silencing products.

For independent verification of GLT8D3 (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-145438A, sc-145438B and sc-145438C.

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

GLT8D3 siRNA (m) is recommended for the inhibition of GLT8D3 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 GLT8D3 gene expression knockdown using RT-PCR Primer: GLT8D3 (m)-PR: sc-145438-PR (20 µl). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.