

# GLT6D1 siRNA (h): sc-92914

## BACKGROUND

GLT6D1 (glycosyltransferase 6 domain-containing protein 1), also known as GLTDC1 (galactosyltransferase family 6 domain-containing 1) or GT6M7, is a 308 amino acid single-pass type II membrane protein. A member of the glycosyltransferase 6 family, GLT6D1 is expressed in healthy and inflamed gingival tissue samples at similar levels, with higher expression in gingival connective tissue compared to gingival epithelium. GLT6D1 is also strongly expressed in testis and leukocytes. The GLT6D1 gene locus may contribute to a potential *trans*-acting regulatory mechanism involving chromatin-remodeling activity, leading to differential cytokine expression pattern in individuals affected with periodontitis. GLT6D1 is encoded by a gene that maps to human chromosome 9q34.3 and mouse chromosome 2 A3.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: GLT6D1 (human) mapping to 9q34.3.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.

## PRODUCT

GLT6D1 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  $\mu$ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see GLT6D1 shRNA Plasmid (h): sc-92914-SH and GLT6D1 shRNA (h) Lentiviral Particles: sc-92914-V as alternate gene silencing products.

For independent verification of GLT6D1 (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-92914A, sc-92914B and sc-92914C.

## 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  $\mu$ l of the RNase-free water provided. Resuspension of the siRNA duplex in 330  $\mu$ l of RNase-free water makes a 10  $\mu$ M solution in a 10  $\mu$ M Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

## APPLICATIONS

GLT6D1 siRNA (h) is recommended for the inhibition of GLT6D1 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  $\mu$ M in 66  $\mu$ l. 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 GLT6D1 gene expression knockdown using RT-PCR Primer: GLT6D1 (h)-PR: sc-92914-PR (20  $\mu$ l). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.