BACKGROUND
Sulfotransferase enzymes catalyze the sulfate conjugation of many hormones, neurotransmitters, drugs and xenobiotic compounds. These cytosolic enzymes differ in their tissue distributions and substrate specificity, but the gene structure (number and length of exons) is similar among family members. GalNAc4-sulfotransferase (GalNAc4ST-1), also designated carbohydrate sulfotransferase 8 (CHST8), is a member of a family of sulfotransferases that includes chondroitin-4-sulfotransferases-1-3, HNK-1 sulfotransferase and dermatan-4-sulfotransferase. The GalNAc4ST-1 protein displays 28% identity to chondroitin-4-sulfotransferase-1 (C4ST-1), 26% to chondroitin 4-sulfotransferase-2 (C4ST-2) and 23% identity to HNK-1ST. GalNAc4ST-1 transfers sulfate to the C-4 hydroxy group of nonreducing terminal GalNAc residues and shows higher expression in regions of the brain such as the pituitary and cerebellum.

REFERENCES

CHROMOSOMAL LOCATION
Genetic locus: Chst8 (mouse) mapping to 7 B1.

PRODUCT
GalNAc4ST-1 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 GalNAc4ST-1 shRNA Plasmid (m): sc-60692-SH and GalNAc4ST-1 shRNA (m) Lentiviral Particles: sc-60692-V as alternate gene silencing products.

For independent verification of GalNAc4ST-1 (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-60692A, sc-60692B and sc-60692C.

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