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SANTA CRUZ BIOTECHNOLOGY, INC.

SULT1E1 siRNA (m): sc-153924

BACKGROUND

The soluble sulfotransferases contribute to the elimination of xenobiotics, the activation of procarcinogens and the regulation of hormones by catalyzing the sulfate conjugation of these substances. Members of the three groups comprising this superfamily (namely SULT1, SULT2 and SULT3) show selectivity to certain substrate compounds. SULT1 sulfotransferases exhibit N-sulfating activities of carcinogenic heterocyclic amines, and are selective toward phenols, whereas SULT2 enzymes prefer hydroxysteroids and SULT3 family members are selective for N-substituted aryl and alicyclic compounds. SULT1E1, also known as STE, is a 294 amino acid member of the SULT1 family. Localized to the cytoplasm and expressed in intestine, liver and kidney, SULT1E1 exists as a homodimer that is thought to control estrogen receptor (ER) levels by sulfurylating free estradiol. Defects in the gene encoding SULT1E1 are associated with an increased risk for endometrial cancer, suggesting a role for SULT1E1 in tumorigenesis.

REFERENCES

1. Nagata, K., et al. 1997. Arylamine activating sulfotransferase in liver. Mutat. Res. 376: 267-272.
2. Yamazoe, Y., et al. 1999. Sulfotransferase catalyzing sulfation of heterocyclic amines. Cancer Lett. 143: 103-107.
3. Engelke, C.E., et al. 2000. Association between functional genetic polymorphisms of human sulfotransferases 1A1 and 1A2. Pharmacogenetics 10: 163-169.
4. Meinl, W., et al. 2001. Structure and localization of the human SULT1B1 gene: neighborhood to SULT1E1 and a SULT1D pseudogene. Biochem. Biophys. Res. Commun. 288: 855-862.
5. Hou, M.F., et al. 2002. Sulfotransferase 1A2*2 is a risk factor for early-onset breast cancer. Int. J. Mol. Med. 10: 609-612.
6. Rebbeck, T.R., et al. 2006. Estrogen sulfation genes, hormone replacement therapy, and endometrial cancer risk. J. Natl. Cancer Inst. 98: 1311-1320.
7. Allali-Hassani, A., et al. 2007. Structural and chemical profiling of the human cytosolic sulfotransferases. PLoS Biol. 5: e97.

CHROMOSOMAL LOCATION

Genetic locus: Sult1e1 (mouse) mapping to 5 E1.

PRODUCT

SULT1E1 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 SULT1E1 shRNA Plasmid (m): sc-153924-SH and SULT1E1 shRNA (m) Lentiviral Particles: sc-153924-V as alternate gene silencing products.

For independent verification of SULT1E1 (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-153924A, sc-153924B and sc-153924C.

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

SULT1E1 siRNA (m) is recommended for the inhibition of SULT1E1 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.

GENE EXPRESSION MONITORING

SULT1E1 (E-12): sc-376009 is recommended as a control antibody for monitoring of SULT1E1 gene expression knockdown by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) or immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor SULT1E1 gene expression knockdown using RT-PCR Primer: SULT1E1 (m)-PR: sc-153924-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.

PROTOCOLS

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