

EXTL1 siRNA (h): sc-88349

BACKGROUND

EXTL1 (exostosin-like 1), also known as glucuronosyl-N-acetylglucosaminyl-proteoglycan 4- α -N-acetylglucosaminyltransferase or multiple exostosin-like protein, is a 676 amino acid single-pass type II membrane protein that localizes to the Endoplasmic reticulum membrane. Belonging to the glycosyltransferase 47 family, EXTL1 is highly homologous to family members EXTL2 and EXTL3, all of which may be potential candidates for mutations resulting in the development of benign multiple cartilaginous bone tumors, or exostoses. EXTL1 may have catalytic activity, acting as a glycosyltransferase essential for chain polymerization of heparan sulfate and heparin. The gene encoding EXTL1 maps to human chromosome 1p36; this region has been linked to a range of diseases including breast carcinoma, colorectal cancer and neuroblastoma.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: EXTL1 (human) mapping to 1p36.11.

PRODUCT

EXTL1 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 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see EXTL1 shRNA Plasmid (h): sc-88349-SH and EXTL1 shRNA (h) Lentiviral Particles: sc-88349-V as alternate gene silencing products.

For independent verification of EXTL1 (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-88349A, sc-88349B and sc-88349C.

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

APPLICATIONS

EXTL1 siRNA (h) is recommended for the inhibition of EXTL1 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 μ M in 66 μ 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 EXTL1 gene expression knockdown using RT-PCR Primer: EXTL1 (h)-PR: sc-88349-PR (20 μ l). 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.