SANTA CRUZ BIOTECHNOLOGY, INC.

ADAMTS-L5 siRNA (h): sc-97258

BACKGROUND

ADAMTS (a disintegrin and metalloproteinase domain with thrombospondin type-1 modules) is a family of zinc-dependent proteases that are implicated in a variety of normal and pathological conditions, including arthritis and cancer. ADAMTS protein family members contain an amino-terminal propeptide domain, a metalloproteinase domain, a disintegrin-like domain and a carboxy-terminus that contains a varying number of thrombospondin type 1 (TSP-1) motifs. ADAMTS-L5 (ADAMTS-like protein 5), also known as thrombospondin type-1 domain-containing protein 6 or THSD6, is a 471 amino acid secreted protein. Encoded by a gene that maps to human chromosome 19p13.3, ADAMTS-L5 contains a single TSP-1 domain and participates in protein and zinc ion binding. Although strongly similar to members of the ADAMTS family, ADAMTS-L5 lacks the metalloprotease and disintegrin-like domains typical of the family.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: ADAMTSL5 (human) mapping to 19p13.3.

PROTOCOLS

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

PRODUCT

ADAMTS-L5 siRNA (h) is a pool of 2 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 ADAMTS-L5 shRNA Plasmid (h): sc-97258-SH and ADAMTS-L5 shRNA (h) Lentiviral Particles: sc-97258-V as alternate gene silencing products.

For independent verification of ADAMTS-L5 (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-97258A and sc-97258B.

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

ADAMTS-L5 siRNA (h) is recommended for the inhibition of ADAMTS-L5 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 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 ADAMTS-L5 gene expression knockdown using RT-PCR Primer: ADAMTS-L5 (h)-PR: sc-97258-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.