

# ECM2 siRNA (m): sc-143287

## BACKGROUND

ECM2 (extracellular matrix protein 2), also known as matrix glycoprotein SC1/ECM2, is a 699 amino acid secreted protein belonging to the small leucine-rich proteoglycan (SLRP) family and SLRP class I subfamily. ECM2 is expressed abundantly in adipose tissue, as well as female-specific organs including mammary gland, ovary, and uterus. Containing 13 LRR (leucine-rich repeats), one LRRNT domain, and one VWFC domain, ECM2 shares a wide range of similarities to known extracellular matrix proteins, including proteoglycan, keratocan, and decorin. ECM2 promotes cell adhesion and matrix assembly, and may function in cell-cell or cell-ECM recognition processes. Existing as two alternatively spliced isoforms, the gene encoding ECM2 maps to human chromosome 9q22.31. Chromosome 9 consists of about 145 million bases and 4% of the human genome and encodes nearly 900 genes.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: Ecm2 (mouse) mapping to 13 A5.

## PROTOCOLS

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

## PRODUCT

ECM2 siRNA (m) is a target-specific 19-25 nt siRNA 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 ECM2 shRNA Plasmid (m): sc-143287-SH and ECM2 shRNA (m) Lentiviral Particles: sc-143287-V as alternate gene silencing products.

## 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

ECM2 siRNA (m) is recommended for the inhibition of ECM2 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  $\mu$ 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 ECM2 gene expression knockdown using RT-PCR Primer: ECM2 (m)-PR: sc-143287-PR (20  $\mu$ 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.