ECM1 siRNA – Extracellular Matrix Protein 1 Isoform 1 (Mouse)

PRODUCT OVERVIEW

Product Name	ECM1, siRNA
Full Product Name	ECM1 siRNA (Mouse)
Product Gene Name	ECM1 sirna
Product Synonym Names	Extracellular matrix protein 1; Secretory component p85
Host	Synthetic
Species Reactivity	Mouse
Form/Format	Lyophilized powder
Purity/Purification	> 97%
Specificity	ECM1 siRNA (Mouse) is a target-specific 19-23 nt siRNA oligo duplexes designed to knock down gene expression.
Preparation and Storage	Shipped at 4 degree C. Store at -20 degree C for one year.
Molecular Weight	48,357 Da
3D Structure	ModBase 3D Structure for Q61508
Negative Control	siRNA Negative Control (Catalog# MBS8241404) is a non-targeting 21 nt siRNA recommended as a negative control for experiments using targeted siRNA transfection.
Quality Control	Oligonucleotide synthesis is monitored base by base through trityl analysis to ensure appropriate coupling efficiency. The oligo is subsequently purified by affinity-solid phase extraction. The annealed RNA duplex is further analyzed by mass spectrometry to verify the exact composition of the duplex. Each lot is compared to the previous lot by mass spectrometry to ensure maximum lot-to-lot consistency.
Directions for Use	We recommends transfection with 100 nM siRNA 48 to 72 hours prior to cell lysis. Before resuspending, briefly centrifuge the tube to ensure the lyophilized siRNA is at the bottom of the tube. Resuspend the siRNA oligos to an appropriate concentration with DEPC water. For each vial, suitable for 250 transfections in 24 well plate (20 pmol for each well).
Components	We offer pre-designed sets of 3 different target-specific siRNA oligo duplexes of mouse ECM1 gene. Each vial contains 5 nmol of lyophilized siRNA. The duplexes can be transfected individually or pooled together to achieve knockdown of the target gene, which is most commonly assessed by qPCR or western blot. Our siRNA oligos are also chemically modified (2'-OMe) at no extra charge for increased stability and enhanced knockdown in vitro and in vivo.
Applications Tested/Suitable for ECM1 sirna	RNA Interference (RNAi)
Related Product Information for ECM1 sirna	MBS8213765 is an siRNA targeting ECM1. Also known as ECM1 siRNA (Mouse). Reactive in Mouse. Host: Synthetic. siRNA to inhibit ECM1 expression using RNA interference
Other Notes	Small volumes of ECM1 sirna vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for ECM1. It may not necessarily be applicable to this product.

NCBI GI #	170295832

NCBI GeneID	13601
NCBI Accession #	NP_031925.2
UniProt Primary Accession #	Q61508
UniProt Secondary Accession #	Q3U5Q5
UniProt Related Accession #	Q61508
GenBank Nucleotide #	NM_007899.2
NCBI Official Full Name	extracellular matrix protein 1 isoform 1
NCBI Official Synonym Full Names	extracellular matrix protein 1
NCBI Official Symbol	Ecm1
NCBI Official Synonym Symbols	p85; AI663821
UniProt Protein Name	Extracellular matrix protein 1
UniProt Synonym Protein Names	Secretory component p85
Protein Family	Extracellular matrix protein
UniProt Gene Name	Ecm1
UniProt Entry Name	ECM1_MOUSE
NCBI Protein Information	extracellular matrix protein 1
UniProt Comments for ECM1	ECM1: Involved in endochondral bone formation as negative regulator of bone mineralization. Stimulates the proliferation of endothelial cells and promotes angiogenesis. Inhibits MMP9 proteolytic activity. Defects in ECM1 are the cause of lipoid proteinosis (LiP); also known as lipoid proteinosis of Urbach and Wiethe or hyalinosis cutis et mucosae. LiP is a rare autosomal recessive disorder characterized by generalized thickening of skin, mucosae and certain viscera. Classical features include beaded eyelid papules and laryngeal infiltration leading to hoarseness. Histologically, there is widespread deposition of hyaline material and disruption/reduplication of basement membrane. 4 isoforms of the human protein are produced by alternative splicing. Protein type: Secreted, signal peptide; Secreted Cellular Component: extracellular matrix; extracellular space; proteinaceous extracellular matrix; extracellular region Molecular Function: protein C-terminus binding; signal transducer activity; enzyme binding; protease binding; interleukin-2 receptor binding; laminin binding Biological Process: ossification; positive regulation of I-kappaB kinase/NF-kappaB cascade; negative regulation of peptidase activity; signal transduction; regulation of transcription from RNA polymerase II promoter; negative regulation of bone mineralization; positive regulation of angiogenesis; biomineral formation; positive regulation of endothelial cell proliferation; negative regulation of cytokine and chemokine mediated signaling pathway; angiogenesis; inflammatory response; regulation of T-helper 2 type immune response; regulation of bone mineralization
Research Articles on ECM1	**1.** Retinoid signaling in the stroma activates expression of Ecm1, which in turn down-regulates Ret expression in the ureteric bud cleft, where bifurcation normally occurs and normal branching progresses.
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