COL6A2 siRNA – Collagen Alpha-2(vi) Chain (Mouse)

PRODUCT OVERVIEW

Product Name	COL6A2, siRNA
Full Product Name	COL6A2 siRNA (Mouse)
Product Gene Name	COL6A2 sirna
Product Synonym Names	Collagen alpha-2(VI) chain
Host	Synthetic
Species Reactivity	Mouse
Form/Format	Lyophilized powder
Purity/Purification	> 97%
Specificity	COL6A2 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	110,334 Da
3D Structure	ModBase 3D Structure for Q02788
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 COL6A2 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 COL6A2 sirna	RNA Interference (RNAi)
Related Product Information for COL6A2 sirna	MBS8236441 is an siRNA targeting COL6A2. Also known as COL6A2 siRNA (Mouse). Reactive in Mouse. Host: Synthetic. siRNA to inhibit COL6A2 expression using RNA interference
Other Notes	Small volumes of COL6A2 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 COL6A2. It may not necessarily be applicable to this product.

NCBI GI #	22203747

NCBI GeneID	12834
NCBI Accession #	NP_666119.1
UniProt Primary Accession #	Q02788
UniProt Secondary Accession #	Q05505; Q8C972; Q8K229
UniProt Related Accession #	Q02788
GenBank Nucleotide #	NM_146007.2
NCBI Official Full Name	collagen alpha-2(VI) chain
NCBI Official Synonym Full Names	collagen, type VI, alpha 2
NCBI Official Symbol	Col6a2
NCBI Official Synonym Symbols	Col6a-2
UniProt Protein Name	Collagen alpha-2(VI) chain
Protein Family	Collagen
UniProt Gene Name	Col6a2
UniProt Entry Name	CO6A2_MOUSE
NCBI Protein Information	collagen alpha-2(VI) chain
UniProt Comments for COL6A2	COL6A2: Collagen VI acts as a cell-binding protein. Defects in COL6A2 are a cause of Bethlem myopathy (BM). BM is a rare autosomal dominant proximal myopathy characterized by early childhood onset (complete penetrance by the age of 5) and joint contractures most frequently affecting the elbows and ankles. Defects in COL6A2 are a cause of Ullrich congenital muscular dystrophy (UCMD); also known as Ullrich scleroatonic muscular dystrophy. UCMD is an autosomal recessive congenital myopathy characterized by muscle weakness and multiple joint contractures, generally noted at birth or early infancy. The clinical course is more severe than in Bethlem myopathy. Defects in COL6A2 are the cause of myosclerosis autosomal recessive (MYOSAR); also known as myosclerotic myopathy or congenital myosclerosis of Lowenthal. A condition characterized by chronic inflammation of skeletal muscle with hyperplasia of the interstitial connective tissue. The clinical picture includes slender muscles with firm 'woody' consistency and restriction of movement of many joints because of muscle contractures. Belongs to the type VI collagen family. 3 isoforms of the human protein are produced by alternative splicing. Protein type: Secreted, signal peptide; Secreted; Extracellular matrix Cellular Component: extracellular matrix; extracellular space; proteinaceous extracellular matrix; collagen; protein complex; membrane; extracellular region; vesicle; sarcolemma Biological Process: cell adhesion
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
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