

## **Collagenase In Vitro Transcribed mRNA-LNP**

Catalog Number:SG-MRNA-LNP-1917

DESCRIPTION	
Product Name	Collagenase In Vitro Transcribed mRNA-LNP
Gene Name	Collagenase
Source	The ORF of Collagenase was cloned in our IVT vector and mRNA was prepared through in vitro transcription and purification. The purified mRNA was further encapsulated with LNP(DSPC:Cholesterol:DMG- PEG:SM102).
Alternative names	Collagenase
SPECIFICATIONS	
Сар	m7GpppN
5'-UTR	5' -untranslated region derived from human alpha-globin RNA with an optimized Kozak sequence
ORF	Collagenase
3'-UTR	3' UTR comprising two sequence elements derived from the aminoterminal enhancer of split (AES) mRNA and the mitochondrial encoded 12S ribosomal RNA
Poly(A) Tail	A 110-nucleotide poly(A)-tail consisting of a stretch of 30 adenosine residues, followed by a 10-nucleotide linker sequence and another 70 adenosine residues.
Modifications	N1-methyl-pseudouridine
Neutral Lipid	1,2-distearoyl-sn-glycero-3-phosphocholine (DSPC)
Cholesterol	Cholesterol
Lonizable Lipid	1,2-dimyristoyl-rac-glycero-3-methoxypolyethylene glycol-2000 (PEG2000-DMG)
PEG-lipid	Heptadecan-9-yl 8-((2-hydroxyethyl)(8-(nonyloxy)– 8-oxooctyl)amino)octanoate)(SM-102)
Storage	-20 °C
Buffer	PBS, pH7.4
Cryoprotectant	Trehalose
BACKGROUND	
Gene Accession	
Gene Alias	Collagenase



plaques associated with several conditions. On a molecular level, collagenases cleave polypeptide chains that make up the collagen triple helix structure at various loci, leading to solubilization from the collagen fibril.

Background

Collagenase clostridium histolyticum is an enzyme produced by the bacterium Clostridium histolyticum. These enzymes are proteinases acting to hydrolyze collagen's triple-helical conformation, resulting in the lysis of collagen deposits and relief from the necrotic tissue and