

## Becaplermin In Vitro Transcribed mRNA-LNP

Catalog Number:SG-MRNA-LNP-1898

DESCRIPTION	
Product Name	Becaplermin In Vitro Transcribed mRNA-LNP
Gene Name	PDGF
Source	The ORF of Becaplermin 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	Becaplermin
SPECIFICATIONS	
Cap	m7GpppN
5'-UTR	5' -untranslated region derived from human alpha-globin RNA with an optimized Kozak sequence
ORF	Becaplermin
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
Ionizable 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	Becaplermin

derived growth factor (PDGF) receptor, a tyrosine kinase receptor. PDGF is known to exist as a dimer, and activates its signaling pathway by a ligand induced receptor dimerization and autophosphorylation. PDGF receptors also contain many auto-phosphorylation sites, which serve to mediate binding of SH2 sites and subsequently signal corresponding pathways. There are five different isoforms of PDGF that activate through two different receptors (alpha and beta).

#### Background

Becaplermin is a recombinant form of human platelet-derived growth factor. Becaplermin has a molecular weight of approximately 25 KD and is a homodimer composed of two identical polypeptide chains that are bound together by disulfide bonds. Binds to the beta platelet-