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Lepirudin In Vitro Transcribed mRNA-LNP

Catalog Number:SG-MRNA-LNP-1900

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

	thrombin, forming a stable, irreversible and non-covalent complex. This blocks the protease activity of thrombin and inhibits the coagulation process. Each molecule of lepirudin binds to a single molecule of thrombin, and unlike heparin, it is able to inhibit thrombin in both its clot-bound or free states.
Background	Lepirudin is a recombinant hirudin formed by 65 amino acids that acts as a highly specific and direct thrombin inhibitor. Natural hirudin is an endogenous anticoagulant found in Hirudo medicinalis leeches. Lepirudin binds to the catalytic and substrate-binding sites of