

## Factor VIII In Vitro Transcribed mRNA-LNP

Catalog Number:SG-MRNA-LNP-1870

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

ineffective or contraindicated.<sup>1</sup> It is not indicated for patients with severe (i.e. type 3) von Willebrand Disease whom are undergoing major surgery.

**Background**

Factor VIII is indicated for the prevention and control of bleeding in patients with hemophilia A or acquired Factor VIII (FVIII) deficiency. It is also indicated for surgical/invasive procedures in adult and pediatric patients with von Willebrand Disease in who desmopression is either