

Protein C In Vitro Transcribed mRNA-LNP

Catalog Number:SG-MRNA-LNP-1872

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

thrombin/thrombomodulin-complex on the endothelial cell surface to Activated Protein C (APC). Once in its activated form, APC functions as a serine protease with potent anticoagulant effects, especially in the presence of its cofactor protein S. APC exerts its effect by inactivating essential components of the coagulation cascade (specifically factors V and VIII), which leads to a decrease in thrombin formation, and therefore a reduction in clot formation.

Background

Protein C is an endogenously occurring plasma protein that plays a key role within the coagulation cascade. Protein C is a zymogen, or enzyme precursor, of a vitamin K-dependent anticoagulant glycoprotein (serine protease) that is synthesized in the liver. It is converted by the