

Streptokinase In Vitro Transcribed mRNA-LNP

Catalog Number:SG-MRNA-LNP-1923

| DESCRIPTION | |
|-------------------|---|
| Product Name | Streptokinase In Vitro Transcribed mRNA-LNP |
| Gene Name | Streptokinase |
| Source | The ORF of Streptokinase 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 | Streptokinase |
| SPECIFICATIONS | |
| Cap | m7GpppN |
| 5'-UTR | 5' -untranslated region derived from human alpha-globin RNA with an optimized Kozak sequence |
| ORF | Streptokinase |
| 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 | Streptokinase |
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Plasmin breaks down fibrin clots created by the blood clotting cascade. Streptokinase forms a highly specific 1:1 enzymatic complex with plasminogen which converts inactive plasminogen molecules into active plasmin. Plasmin degrades fibrin clots as well as fibrinogen and other plasma proteins. This in turn leads to the degradation of blood clots.

Background

Streptokinase is a purified fibrinolytic bacterial protein used to breakdown thrombosis in myocardial infarction, pulmonary embolism, and venous thromboembolism. Plasminogen is an inactive molecule that becomes activated to plasmin when the Arg/Val bond is cleaved.