

Diphtheria toxin A In Vitro Transcribed mRNA-LNP

Catalog Number:MRNA-TG-022

DESCRIPTION	
Product Name	Diphtheria toxin A In Vitro Transcribed mRNA-LNP
Gene Name	Diphtheria toxin A
Source	In vitro transcribed mRNA encapsulated with LNP
Alternative names	
SPECIFICATIONS	
Cap	Cap 1
5'-UTR	5' -untranslated region derived from human alpha-globin RNA with an optimized Kozak sequence
ORF	Diphtheria toxin A
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	

blocking of cellular protein synthesis.

Background

Diphtheria toxin (DT) is one of the most extensively studied bacterial toxins with intracellular action. It is produced by toxigenic strains of *Corynebacterium diphtheriae* and is responsible for the symptoms of diphtheria. The toxin was isolated in 1888. DT contains three structural domains, each carrying a distinct biological function implicated in the intoxication of the cell: cell-surface binding and internalization into endosomes, crossing of the endosome membrane into the cytosol and