

Metridia luciferase (MetLuc) In Vitro Transcribed mRNA-LNP

Catalog Number:MRNA-TG-008

DESCRIPTION	
Product Name	Metridia luciferase (MetLuc) In Vitro Transcribed mRNA-LNP
Gene Name	Metridia luciferase (MetLuc)
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	Metridia luciferase (MetLuc)
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	

property is well suited for development of high throughput screening technologies.

Background

Metridia luciferase is a secreted luciferase from a marine copepod and uses coelenterazine as a substrate to produce a blue bioluminescence ($\lambda_{\text{max}} = 480 \text{ nm}$). This luciferase has been successfully applied as a bioluminescent reporter in mammalian cells. The main advantage of secreted luciferase as a reporter is the capability of measuring intracellular events without destroying the cells or tissues and this