

Renilla luciferase(Rluc)/Puromycin resistance (Puro) In Vitro Transcribed mRNA-LNP

Catalog Number:MRNA-TG-011

| DESCRIPTION | |
|-------------------|--|
| Product Name | Renilla luciferase(Rluc)/Puromycin resistance (Puro) In Vitro Transcribed mRNA-LNP |
| Gene Name | Renilla luciferase(Rluc)/Puromycin resistance (Puro) |
| 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 | Renilla luciferase(Rluc)/Puromycin resistance (Puro) |
| 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 | |
| | |

encoded by the S. Resistance to puromycin is conferred by the Pac gene encoding a puromycin N-acetyl-transferase.

Background

Renilla luciferase (RLuc) is commonly used as a reporter gene either on its own, or in conjunction with firefly and other beetle luciferases. Puromycin is an antibiotic derived from *Streptomyces alboniger* that induces chain termination during protein translation by releasing the ribosome. Puromycin is inactivated by puromycin N-Acetyltransferase