

Filgrastim In Vitro Transcribed mRNA-LNP

Catalog Number:SG-MRNA-LNP-1875

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

the production and release of neutrophils from the bone marrow. Filgrastim mimics the biological actions of G-CSF to increase the levels of neutrophils in the blood.

Background

Filgrastim is a short-acting recombinant, non-pegylated human granulocyte colony-stimulating factor (G-CSF) analog produced by recombinant DNA technology. It has an amino acid sequence identical to endogenous G-CSF. Human G-CSF is a glycoprotein that regulates