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Interferon-γ1b In Vitro Transcribed mRNA-LNP

Catalog Number:SG-MRNA-LNP-1889

DESCRIPTION	
Product Name	Interferon-γ1b In Vitro Transcribed mRNA-LNP
Gene Name	IFN-g1b
Source	The ORF of Interferon-γ1b 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	Interferon-γ1b
SPECIFICATIONS	
Cap	m7GpppN
5'-UTR	5' -untranslated region derived from human alpha-globin RNA with an optimized Kozak sequence
ORF	Interferon-γ1b
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
Lonizable 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	Interferon-γ1b

	complex of IFNGR1 and IFNGR2. This activates JAK1 and JAK2 kinases which form a STAT1 docking site. This leads to STAT1 phosphorylation, nuclear translocation and initiation of gene transcription of multiple immune-related genes.
Background	Interferon gamma-1b is a form of recombinant human interferon used to treat infections associated with chronic granulomatous disease and to slow the progression of severe malignant osteopetrosis. Binds directly to the type II interferon gamma receptor IFNGR1, leading to a