

## Lutropin- $\alpha$ In Vitro Transcribed mRNA-LNP

Catalog Number:SG-MRNA-LNP-1880

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

(LH) developed for use in the stimulation of follicular development. Its pharmacological action mimics the biological activity of endogenous LH; an acute rise of LH, or LH surge, in females triggers ovulation and the development of the corpus luteum. In males, LH stimulates Leydig cell to produce testosterone.

**Background**

Lutropin alfa is a recombinant human luteinizing hormone with 2 subunits, alpha = 92 residues, beta = 121 residues. It is a heterodimeric glycoprotein made up of monomeric units. Lutropin alfa was the first and only recombinant human form of luteinizing hormone