

## iCasp9 In Vitro Transcribed mRNA-LNP

Catalog Number:MRNA-TG-021

DESCRIPTION	
Product Name	iCasp9 In Vitro Transcribed mRNA-LNP
Gene Name	iCasp9
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	iCasp9
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	

promising killing strategies in cancer therapies and adoptive cell therapies.

#### Background

Inducible Caspase9 (iCasp9) is a cellular suicide gene that allows conditional cell elimination. It comprises a human Caspase9 fused with an inducer-binding domain which could be dimerized by the Chemical Inducer of Dimerization (CID), AP20187, or AP1903. iCasp9 is dimerized and activated by induced proximity of the inducer-binding domain, leading to activation of the apoptosis pathway. Due to the efficient induction of cell death, iCasp9 has been used as one of the most