

SVN53-67/M57-KLH Circular RNA for Cancer Vaccine Research

Catalog Number: CVAC-ORNA-0447

DESCRIPTION	
Product Name	SVN53-67/M57-KLH Circular RNA for Cancer Vaccine Research
Gene Name	SVN53-67/M57-KLH
Source	In vitro transcribed mRNA was further circularized to make this product as a circular RNA.
Alternative names	SVN53-67/M57-KLH Peptide Vaccine
SPECIFICATIONS	
Cap	
5'-UTR	5' -untranslated region derived from human alpha-globin RNA with an optimized Kozak sequence
ORF	SVN53-67/M57-KLH
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	
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	-80 °C
Buffer	PBS, pH7.5
Cryoprotectant	Trehalose
BACKGROUND	
Gene Accession	
Gene Alias	SVN53-67/M57-KLH Peptide Vaccine

mount a cytotoxic T-lymphocyte (CTL) as well as a T-helper cell response against survivin-expressing cancer cells. This may result in decreased tumor cell proliferation and ultimately tumor cell death. Survivin, a member of the inhibitor of apoptosis (IAP) family, expressed during embryonic development while absent in most normal adult cells, is upregulated in a variety of human cancers; its expression in tumors is associated with a more aggressive phenotype, decreased survival, and increased resistance to chemotherapy. KLH may enhance immune recognition and may promote an enhanced response. As SVN53-67 is weakly immunogenic in humans, the M57 alteration may lead to greater affinity towards HLA-A*0201 and thus an enhanced antitumor immune response. (NCIT_C95705).

Background

Description: A peptide vaccine containing a 15-mer peptide (DLAQMFFCFKELEGW), with C to M alteration at amino acid position 57, derived from the anti-apoptosis protein survivin, and conjugated with keyhole limpet hemocyanin (KLH), with potential immunopotentiating and antineoplastic activities. Upon subcutaneous administration of SVN53-67/M57-KLH peptide vaccine, this peptide is able to bind both HMC class I and II molecules and may activate the immune system to