

HPV 16 E6/E7 Circular RNA for Cancer Vaccine Research

Catalog Number:CVAC-ORNA-0452

DESCRIPTION	
Product Name	HPV 16 E6/E7 Circular RNA for Cancer Vaccine Research
Gene Name	HPV 16 E6/E7
Source	In vitro transcribed mRNA was further circularized to make this product as a circular RNA.
Alternative names	Synthetic Long E6/E7 Peptides Vaccine HPV-01
SPECIFICATIONS	
Cap	
5'-UTR	5' -untranslated region derived from human alpha-globin RNA with an optimized Kozak sequence
ORF	HPV 16 E6/E7
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
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	-80 °C
Buffer	PBS, pH7.5
Cryoprotectant	Trehalose
BACKGROUND	
Gene Accession	
Gene Alias	Synthetic Long E6/E7 Peptides Vaccine HPV-01

lymphocyte (CTL) and helper T cell responses against HPV E6/E7-expressing tumor cells. This results in the destruction of tumor cells and leads to decreased tumor growth. The E6 and E7 oncoproteins are implicated in the tumorigenesis in a variety of cancers. The SLPs allow for optimal presentation by antigen-presenting cells. (NCIT_C111037).

Background

Description: A therapeutic peptide vaccine consisting of thirteen synthetic long peptides (SLPs), which are 25-35 amino acids in size, derived from the human papillomavirus (HPV) type 16 oncoproteins E6 and E7, with potential immunostimulating and antitumor activities. Upon administration, synthetic long E6/E7 peptides vaccine HPV-01 is taken up and degraded into small pieces by dendritic cells. The processed viral epitopes are presented by dendritic cells, which may stimulate the host immune system to mount both cytotoxic T-cell