

MAGE-1 Circular RNA for Cancer Vaccine Research

Catalog Number:CVAC-ORNA-0462

DESCRIPTION	
Product Name	MAGE-1 Circular RNA for Cancer Vaccine Research
Gene Name	MAGE-1
Source	In vitro transcribed mRNA was further circularized to make this product as a circular RNA.
Alternative names	Tetraivalent RNA-lipoplex Cancer Vaccine
SPECIFICATIONS	
Cap	
5'-UTR	5' -untranslated region derived from human alpha-globin RNA with an optimized Kozak sequence
ORF	MAGE-1
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	Tetraivalent RNA-lipoplex Cancer Vaccine

cytoplasm and translated into the four tumor-associated proteins. The expressed proteins are processed and the human leukocyte antigen (HLA)-peptide complexes are presented to the immune system. This induces antigen-specific CD8+ and CD4+ T-cell responses against the four selected MAAs. (NCIT_C122396).

Background

Description: A RNA-lipoplex (RNA-LP)-based cancer vaccine containing four naked ribonucleic acid (RNA)-drug products (DPs) RBL001.1, RBL002.2, RBL003.1, and RBL004.1 encoding melanoma-associated antigens (MAAs) encapsulated in liposomes, with potential antineoplastic activity. Upon intravenous administration of the tetravalent RNA-lipoplex cancer vaccine, the liposomes protect the RNA from degradation in the bloodstream, travel to the spleen and are taken up by antigen-presenting cells (APCs); RNA is translocated to the