

## Melan-A (26-35)/Melan-A (31-96)/tyrosinase (1-9)/tyrosinase (369-377) Circular RNA for Cancer Vaccine Research

Catalog Number:CVAC-ORNA-0449

Circular RNA for Cancer Vaccine ResearchGene NameMelan-A (26-35)/Melan-A (31-96)/tyrosinase (1-9)/tSourceIn vitro transcribed mRNA was further circularized to make thas a circular RNA.Alternative namesSynchrovax SEM Plasmid DNA VaccineSPECIFICATIONSSCap5'-untranslated region derived from human alpha-globin RN optimized Kozak sequenceORFMelan-A (26-35)/Melan-A (31-96)/tyrosinase (1-9)/tyrosinase3'-UTR3' UTR comprising two sequence elements derived from the aminoterminal enhancer of split (AES) mRNA and the mitoch encoded 12S ribosomal RNAPoly(A) Tail1,2-distearoyl-sn-glycero-3-phosphocholine (DSPC)CholesterolCholesterolLonizable Lipid1,2-dimyristoyl-rac-glycero-3-methoxypolyethylene glycol-2C (PEG2000-DMG)PEG-lipidHeptadecan-9-yl 8-((2-hydroxyethyl)(8-(nonyloxy)- 8-oxoctyl)amino)octanoate)(SM-102)Storage-80 °CBufferPBS, pH7.5CryoprotectantTrehalose	DESCRIPTION	
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as a circular RNA.         Alternative names       Synchrovax SEM Plasmid DNA Vaccine         SPECIFICATIONS         Cap       -         S'-UTR       5' -untranslated region derived from human alpha-globin RN. optimized Kozak sequence         ORF       Melan-A (26-35)/Melan-A (31-96)/tyrosinase (1-9)/tyrosinase         3'-UTR       3' UTR comprising two sequence elements derived from the aminoterminal enhancer of split (AES) mRNA and the mitoch encoded 12S ribosomal RNA         Poly(A) Tail       1.2-distearoyl-sn-glycero-3-phosphocholine (DSPC)         Cholesterol       Cholesterol         Lonizable Lipid       1.2-dimyristoyl-rac-glycero-3-methoxypolyethylene glycol-20 (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	ene Name	Melan-A (26-35)/Melan-A (31-96)/tyrosinase (1-9)/t
SPECIFICATIONS         Cap         5'-UTR       5' -untranslated region derived from human alpha-globin RN optimized Kozak sequence         ORF       Melan-A (26-35)/Melan-A (31-96)/tyrosinase (1-9)/tyrosinase         3'-UTR       3' UTR comprising two sequence elements derived from the aminoterminal enhancer of split (AES) mRNA and the mitoch encoded 12S ribosomal RNA         Poly(A) Tail       Modifications         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-20 (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	ource	In vitro transcribed mRNA was further circularized to make this product as a circular RNA.
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aminoterminal enhancer of split (AES) mRNA and the mitoch encoded 12S ribosomal RNAPoly(A) TailModificationsN1-methyl-pseudouridineNeutral Lipid1,2-distearoyl-sn-glycero-3-phosphocholine (DSPC)CholesterolCholesterolLonizable Lipid1,2-dimyristoyl-rac-glycero-3-methoxypolyethylene glycol-2C (PEG2000-DMG)PEG-lipidHeptadecan-9-yl 8-((2-hydroxyethyl)(8-(nonyloxy)- 8-oxooctyl)amino)octanoate)(SM-102)Storage-80 °CBufferPBS, pH7.5CryoprotectantTrehalose	RF	Melan-A (26-35)/Melan-A (31-96)/tyrosinase (1-9)/tyrosinase (369-377)
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Neutral Lipid1,2-distearoyl-sn-glycero-3-phosphocholine (DSPC)CholesterolCholesterolLonizable Lipid1,2-dimyristoyl-rac-glycero-3-methoxypolyethylene glycol-20 (PEG2000-DMG)PEG-lipidHeptadecan-9-yl 8-((2-hydroxyethyl)(8-(nonyloxy)- 8-oxooctyl)amino)octanoate)(SM-102)Storage-80 °CBufferPBS, pH7.5CryoprotectantTrehalose	oly(A) Tail	
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8-oxooctyl)amino)octanoate)(SM-102)       Storage       -80 °C       Buffer       PBS, pH7.5       Cryoprotectant       Trehalose	onizable Lipid	1,2-dimyristoyl-rac-glycero-3-methoxypolyethylene glycol-2000 (PEG2000-DMG)
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Cryoprotectant Trehalose BACKGROUND	torage	-80 °C
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(1-9), and tyrosinase (369-377). Both Melan-A and tyrosinase are tumor antigens associated with melanoma. Vaccination with this plasmid DNA vaccine may induce both humoral and cytotoxic lymphocyte (CTL) responses against cells expressing either or both of these antigens, resulting in decreased tumor growth. (NCIT\_C28549).
 Background Description: A bivalent DNA vaccine encoding epitopes for both Melan-A (MART-1) and tyrosinase with potential antineoplastic activity. Synchrovax SEM plasmid DNA vaccine contains a plasmid pSEM that encodes 4 epitopes: Melan-A (26-35), Melan-A (31-96), tyrosinase