

VEGFR1-1084 Circular RNA for Cancer Vaccine Research

Catalog Number:CVAC-ORNA-0478

| DESCRIPTION | |
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| Product Name | VEGFR1-1084 Circular RNA for Cancer Vaccine Research |
| Gene Name | VEGFR1-1084 |
| Source | In vitro transcribed mRNA was further circularized to make this product as a circular RNA. |
| Alternative names | VEGFR1-1084 Peptide Vaccine |
| SPECIFICATIONS | |
| Cap | |
| 5'-UTR | 5' -untranslated region derived from human alpha-globin RNA with an optimized Kozak sequence |
| ORF | VEGFR1-1084 |
| 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 | VEGFR1-1084 Peptide Vaccine |
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cell proliferation. VEGFR1, a receptor tyrosine kinase, may be overexpressed on endothelial cells of the tumor microvasculature and is associated with tumor cell proliferation, invasion and tumor angiogenesis. HLA-A*2402 is an MHC class I molecule that presents antigenic peptides to CD8+ T cells; epitope design restricted to epitopes that bind most efficiently to HLA-A*2402 may improve antigenicity. (NCIT_C77895).

Background

Description: A peptide vaccine containing an HLA-A*2402-restricted epitope of vascular endothelial growth factor receptor 1 (VEGFR1 or Flt-1) with potential immunostimulating, antiangiogenic, and antineoplastic activities. Upon vaccination, VEGFR1-1084 peptide vaccine may stimulate a cytotoxic T lymphocyte (CTL) response against VEGFR1-expressing endothelial cells of the tumor microvasculature, which may inhibit tumor angiogenesis and tumor