

gp96-Ig Circular RNA for Cancer Vaccine Research

Catalog Number:CVAC-ORNA-0181

| DESCRIPTION | |
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| Product Name | gp96-Ig Circular RNA for Cancer Vaccine Research |
| Gene Name | gp96-Ig |
| Source | In vitro transcribed mRNA was further circularized to make this product as a circular RNA. |
| Alternative names | gp96-secreting Allogeneic Bladder Cancer Cell Vaccine HS-410 |
| SPECIFICATIONS | |
| Cap | |
| 5'-UTR | 5' -untranslated region derived from human alpha-globin RNA with an optimized Kozak sequence |
| ORF | gp96-Ig |
| 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 | gp96-secreting Allogeneic Bladder Cancer Cell Vaccine HS-410 |
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upon expansion, leads to the induction of a potent CTL response against the TAAs on the endogenous bladder cancer cells. This vaccine also induces a memory T cell response that could fight recurring cancer cells. gp96-Ig is constructed by replacing the KDEL endoplasmic reticulum (ER) retention sequence of gp96 with the Fc portion of the IgG1 protein. This allows for gp96, normally an ER-resident chaperone peptide, to be released from cells. (NCIT_C113653).

Background

Description: An allogeneic urothelial bladder cancer cell vaccine expressing a recombinant secretory form of the immunoadjuvant heat shock protein gp96 fused with an immunoglobulin Fc domain (gp96-Ig) protein, with potential antineoplastic activity. Upon administration of the gp96-Ig-secreting allogeneic bladder cancer cell vaccine HS-410, the live, irradiated tumor cells continuously secrete gp96-Ig along with its chaperoned tumor associated antigens (TAAs). This enhances antigen cross presentation to cytotoxic T-lymphocytes (CTLs) and,