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## XBP1-US/XBP1-SP/CD138/CS1 Circular RNA for Cancer Vaccine Research

Catalog Number:CVAC-ORNA-0496

| DESCRIPTION       |   |
|-------------------|---|
| Product Name      | XBP1-US/XBP1-SP/CD138/CS1 Circular RNA for Cancer Vaccine Research  |
| Gene Name         | XBP1-US/XBP1-SP/CD138/CS1   |
| Source            | In vitro transcribed mRNA was further circularized to make this product as a circular RNA.  |
| Alternative names | XBP1-US/XBP1-SP/CD138/CS1 Multipeptide Vaccine PVX-410  |
| SPECIFICATIONS    |   |
| Cap               |   |
| 5'-UTR            | 5' -untranslated region derived from human alpha-globin RNA with an optimized Kozak sequence  |
| ORF               | XBP1-US/XBP1-SP/CD138/CS1   |
| 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        | XBP1-US/XBP1-SP/CD138/CS1 Multipeptide Vaccine PVX-410  |
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stimulate the immune system to induce a cytotoxic T-lymphocyte response against the four myeloma-specific antigens. The tumor associated antigens (TAAs) XBP1-US, XBP1-SP, CD138 and CS1, are overexpressed on the surface of multiple myeloma (MM) cells. (NCIT\_C103823).

## Background

Description: A cancer vaccine containing immunogenic, HLA-A2-specific epitopes derived from X-box-binding protein 1-unspliced (XBP1-US), XBP1-spliced (SP), syndecan-1 (CD138), and CS1 (CD2 subset 1, CRACC, SLAMF7, CD319) with potential immunomodulating and antineoplastic activities. Upon subcutaneous administration, XBP1-US/XBP1-SP/CD138/CS1 multipeptide vaccine PVX-410 may