

## cdsR Circular RNA for Cancer Vaccine Research

Catalog Number:CVAC-ORNA-0473

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

EGFR-Ras pathway. Addition of the CD gene to the viral genome allows control of oncolytic viral infection through the administration of the prodrug 5-fluorocytosine (5-FC), converted by CD to the antimetabolite 5-fluorouracil (5-FU) in cells infected with this agent. Addition of the SR gene allows anatomical localization of vaccinia virus (vvDD-CDSR) through the use of octreotide scintigraphy. (NCIT\_C74089).

**Background**

Description: A highly tumor-selective vaccinia virus (vv) with an engineered double deletion (DD) of the thymidine kinase (tk) and vaccinia growth factor genes and additions of both a cytosine deaminase (CD) gene and a somatostatin receptor (SR) gene with potential oncolytic viral activity. The tk and vaccinia growth factor gene deletions in intratumorally administered vaccinia virus (vvDD-CDSR) help to restrict its replication and cytolytic activity to tumor cells with large nucleotide pools and tumor cells with activation of the