

## VEGFR-2 (VXM01) Circular RNA for Cancer Vaccine Research

Catalog Number:CVAC-ORNA-0477

DESCRIPTION	
Product Name	VEGFR-2 (VXM01) Circular RNA for Cancer Vaccine Research
Gene Name	VEGFR-2 (VXM01)
Source	In vitro transcribed mRNA was further circularized to make this product as a circular RNA.
Alternative names	VEGFR-2 DNA Vaccine VXM01
SPECIFICATIONS	
Cap	
5'-UTR	5' -untranslated region derived from human alpha-globin RNA with an optimized Kozak sequence
ORF	VEGFR-2 (VXM01)
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	VEGFR-2 DNA Vaccine VXM01

as CD25, interleukin-2, the early T-cell activation antigen CD69 and the lymphocyte function-associated antigen LFA-2. The immune response targets the fast growing VEGFR-2 expressing endothelial cells found in the tumor vasculature, thereby blocking angiogenesis which may ultimately inhibit tumor cell proliferation. VEGFR-2 is a receptor tyrosine kinase overexpressed on proliferating endothelial cells in the tumor vasculature. (NCIT\_C99378).

#### Background

Description: An orally available DNA cancer vaccine containing an attenuated strain of the bacterium *Salmonella typhimurium* encoding murine vascular endothelial growth factor receptor 2 (VEGFR-2) (VXM01), with potential immunomodulating, anti-angiogenic and antineoplastic activity. Upon oral administration and successful transduction, VEGFR-2 DNA vaccine VXM01 expresses VEGFR-2 in addition to inducing the expression of T-cell activation markers, such