

# Alpha-N-acetylgalactosamine (Tn) Circular RNA for Cancer Vaccine Research

Catalog Number: CVAC-ORNA-0464

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

contains the Tn epitope cluster (c) that is synthesized by linking 3 copies of the Tn epitope on a threonine backbone to achieve the essential immunogenic structure. KLH is a hapten carrier and serves as an immunostimulant to improve immune recognition. Vaccination with Tn(c)-KLH vaccine may produce antibodies and elicit a cytotoxic T lymphocyte (CTL) response against those tumor cells expressing Tn antigen, resulting in decreased tumor growth. (NCIT\_C2474).

**Background**

**Description:** A vaccine containing a clustered pancreatic carcinoma carbohydrate antigen conjugated with keyhole limpet hemocyanin (KLH) with potential antineoplastic activity. Alpha-N-acetylgalactosamine (Tn) is a monosaccharide usually O-linked to serine or threonine residues of mucins found on most epithelial cancers with the highest expression on prostate cancer. This vaccine