



LNP 2.0 platform for RNA Technology

PRODUCT DATA SHEET

Document No.: PDS-NV2004FK Revision: 1.0 Effective Date: JUL/2026

1 Product Identification

Company Logo &
Contact info



info@neovac.co.uk

Product Name: **LipTx™ NV2-004 Formulation Kit**

Catalog Number: **NV2004FK**

2 Product Description

2.1 Short summary

LipTx™ NV2-004 Formulation Kit is a research-use formulation kit designed to simplify the preparation of lipid nanoparticles (LNPs) for nucleic acid delivery. The kit contains LipTx™ NV2-004 ionizable lipid, helper lipid, and cholesterol supplied as high-purity stock solutions to enable rapid, reproducible, and scalable LNP formulation. Manufactured under stringent quality standards and accompanied by comprehensive technical documentation, the kit provides researchers with a reliable platform for formulation screening, process development, and preclinical evaluation of RNA-based therapeutics.

2.2 Intended use

For Research Use Only (RUO).

Not intended for any human use, therapeutic administration, diagnostic procedures, food, or veterinary use.



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2.3 Availability

Catalog Number	Quantity	Price [USD]
NV2004FK-2	2 mL	350
NV2004FK-5	5 mL	790
NV2004FK-10	10 mL	1,950

3 Storage and Stability

3.1 Shelf life and Storage

12 months when stored at -80°C in a properly closed container and handled according to the instructions. Avoid repeated freeze-thaw cycles.

4 Product Specification

4.1 Kit composition

Components: LipTx™ NV2-004 Ionizable lipid, Helper lipid, Cholesterol and PEG-lipid.

5 Material Required But Not Provided

5.1 List of equipment

- Microfluidic mixing device
- Heating block or oven capable of heating to 50°C
- Oven, capable of heating to 37°C
- UV spectrometer
- Vortex mixer
- Fluorescent plate reader for RiboGreen assay

5.2 List of consumables

- mRNA of interest

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- Formulation buffer - 50mM Citrate buffer pH4.5
- 10mM Tris (tris(hydroxymethyl)aminomethane) buffer pH 7.4
- Refrigerated centrifuge and swing bucket
- Bead bath or heat block for thawing kit components
- Conical centrifuge tubes: 15 and 50 mL
- 0.5 to 2 mL RNase free Eppendorf tubes
- Disposable syringe: 1, 3, 5, or 10 mL
- Micropipettes and RNase free pipette tips: 10, 20, 200 and 1000 µL
- Blunt needles
- Syringe filters: 13 mm, 0.2 µm, polyethersulfone (PES)
- Amicon 30 kDa molecular weight cut off (MWCO) centrifugal filters, 15 mL or
- 3mL dialysis tubes with 8-14kDa cut off filters
- Molecular grade water (RNase/DNase and endotoxin-free)
- 70% isopropanol or ethanol
- RNase decontamination solution
- RiboGreen Assay materials:
 - Quant-iT RiboGreen Assay Kit
 - Triton X-100
 - 96-well black bottom plates
 - 1X phosphate buffered saline (PBS), without calcium and magnesium

6 Troubleshooting Guide

6.1 Documentation

- Certificate of Analysis (CoA)
- Material Safety Data Sheet (MSDS)
- Instruction For Use (IFU)

6.2 Legal and Ordering information

This product is supplied for research and development use only. **NOT FOR CLINICAL USE.**

6.3 Disclaimer

NeoVac products are supplied For Research Use Only (RUO) and are not intended for use in humans or animals for therapeutic, diagnostic, or clinical purposes.



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These products are intended solely for laboratory research by qualified personnel using appropriate laboratory practices and in accordance with the applicable Instructions for Use (IFU), Material Safety Data Sheet (MSDS), and all relevant product documentation. Users are solely responsible for determining the suitability of the product for their intended research application and for ensuring compliance with all applicable laws, regulations, and institutional requirements.

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6.4 Contact and Technical support

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