

# LipidLaunch™ Research Tools for LNP Discovery



Cayman has pioneered the development of LipidLaunch™ research tools for lipid nanoparticle (LNP) research and development. Our LipidLaunch™ research-ready LNPs and reagent kits help researchers pursue LNPs for the delivery of nucleic acid therapies in untold health applications, from vaccine development to cancer and cell or gene therapies.

## LipidLaunch™ LNPs and Reagent Kits

Streamline selection of candidate ionizable lipids and benefit from research-ready LNPs and reagent kits for the delivery of nucleic acid therapies.

Available in multiple LNP & reporter formats

Easy to use & cost effective

Minimal hands-on time & expertise

Efficient transfection with low cytotoxicity



### Preloaded LNPs

Preformulated LNPs containing reporter gene mRNA



### Loadable LNPs

Cargo-ready, loadable LNPs for encapsulating cargo of choice



### Exploration Kits

Complete sets of lipid reagents for preparing LNPs of broad and current interest



### Uptake Kits

Complete sets of lipid reagents and a fluorescent tracer to visualize LNP cellular uptake

### Featured Collection

## SM-102

LipidLaunch™ research tools employ the same lipid formulations as LNPs of broad and current interest, including those used for mRNA-based COVID-19 vaccines.



Explore our LipidLaunch™ products for SM-102 LNPs at [www.caymanchem.com/sm-102-lipidlaunch](http://www.caymanchem.com/sm-102-lipidlaunch)

## Applicable for Every Step of Discovery

- Proof-of-Concept Studies
- Formulation Screening & Optimization
- Comparison to Benchmark Formulations
- Explorations on Uptake Mechanisms



View all LipidLaunch™ Research Tools at [www.caymanchem.com/lipidlaunch](http://www.caymanchem.com/lipidlaunch)

# Selecting the Right LipidLaunch™ Research Tool

From discovery to bioanalysis, we offer a range of purpose-built solutions to support your LNP expedition – whether just testing the waters or exploring the deep.

	 Preloaded LNPs	 Loadable LNPs	 LNP Exploration Kits	 LNP Uptake Kits
Ideal for LNP Screening	✓	✓	✓	
Features Reporter Readout	✓			✓
Custom Cargo Compatible		✓	✓	✓
Customizable LNP Formulation			✓	✓
Hands-On Time Required	+	++	+++	+++
Suggested Use	First choice for pilot studies and novice researchers	Preferred option for custom cargo and maximum ease-of-use	Top choice for preparing LNPs with custom cargo and formulation	Ideal for visualizing cellular uptake with custom LNPs
Available Formats	<a href="#">View Online</a> 	<a href="#">View Online</a> 	<a href="#">View Online</a> 	<a href="#">View Online</a> 

## Companion LipidLaunch™ Products

### LipidLaunch™ LNP Apparent $pK_a$ Assay Kit (TNS Method)

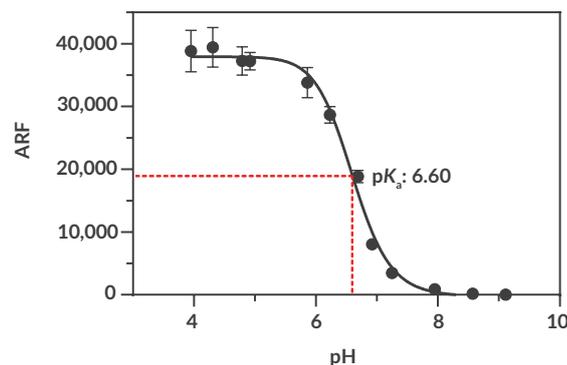
Item No. 702680

A convenient fluorometric method for determining the apparent  $pK_a$  of formulated LNPs.

### LipidLaunch™ LNP Formulation Buffer

Item No. 400813

An acidic aqueous buffer designed to optimally encapsulate nucleic acid cargo within LNPs.



## Simplify LNP Screening & Optimization

### LipidLaunch™ Ionizable Lipid LNP Screening Set

Item No. 42832

A set of 12 cationic and ionizable cationic lipids for screening in LNPs.

### LipidLaunch™ Helper Lipid Set

Item No. 42831

Includes 1,2-DSPC, cholesterol, and DMG-PEG(2000) for use in LNP formulations.

