PRODUCT INFORMATION



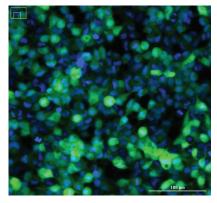
LipidLaunch[™] SM-102 LNP Plate (Loadable)

Item No. 502866

Overview and Properties

Storage:	-80°C (as supplied)
Stability:	≥6 months
Information represents	the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Image



HEK 293T cells were transfected with 12.5 ng EGFP mRNA for 48 hours as described in the product description. After staining with 4 μ M Hoechst 33342 (Item Nos. 15547 | 40797), cells were imaged using DAPI and GFP LED/filter sets.

Laboratory Procedures

For use, bring the LipidLaunch^M SM-102 Lipid Nanoparticle (LNP) Plate (Loadable) to room temperature in the foil packaging. Dilute RNA to approximately 1 µg/ml in nuclease-free water (range: 0.5-5 µg/ml). Add 25 µl of diluted RNA to each well, swirl gently, and incubate for approximately 5-10 minutes at room temperature. Add 75 µl per well of a complete culture medium appropriate for the cells, then add 100 µl of cell suspension. Cells should be between 5 x 10⁴ and 2.5 x 10⁵, to be determined empirically. Allow cells to settle for 20-30 minutes at room temperature, then transfer to the appropriate atmospheric conditions for the cells.

Description

LipidLaunch[™] SM-102 Lipid Nanoparticle (LNP) Plate (Loadable) is a black-walled, clear-bottom 96-well tissue culture plate with empty, loadable SM-102 LNPs lyophilized in every well. It can be used for testing different RNA cargoes or cell lines and is ideal for use with fluorescent protein-encoding mRNA and adherent cells. SM-102 LNPs typically show very low cytotoxicity and high transfection efficiency.¹

Reference

 Escalona-Rayo, O., Zeng, Y., Knol, R.A., et al. In vitro and in vivo evaluation of clinically-approved ionizable cationic lipids shows divergent results between mRNA transfection and vaccine efficacy. Biomed. Pharmacother. 165, 115065 (2023).

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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