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Supplementary information

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Supplementary Information

for

Preparation of selective organ targeting (SORT) lipid nanoparticles (LNPs) using multiple technical methods for tissue-specific mRNA delivery

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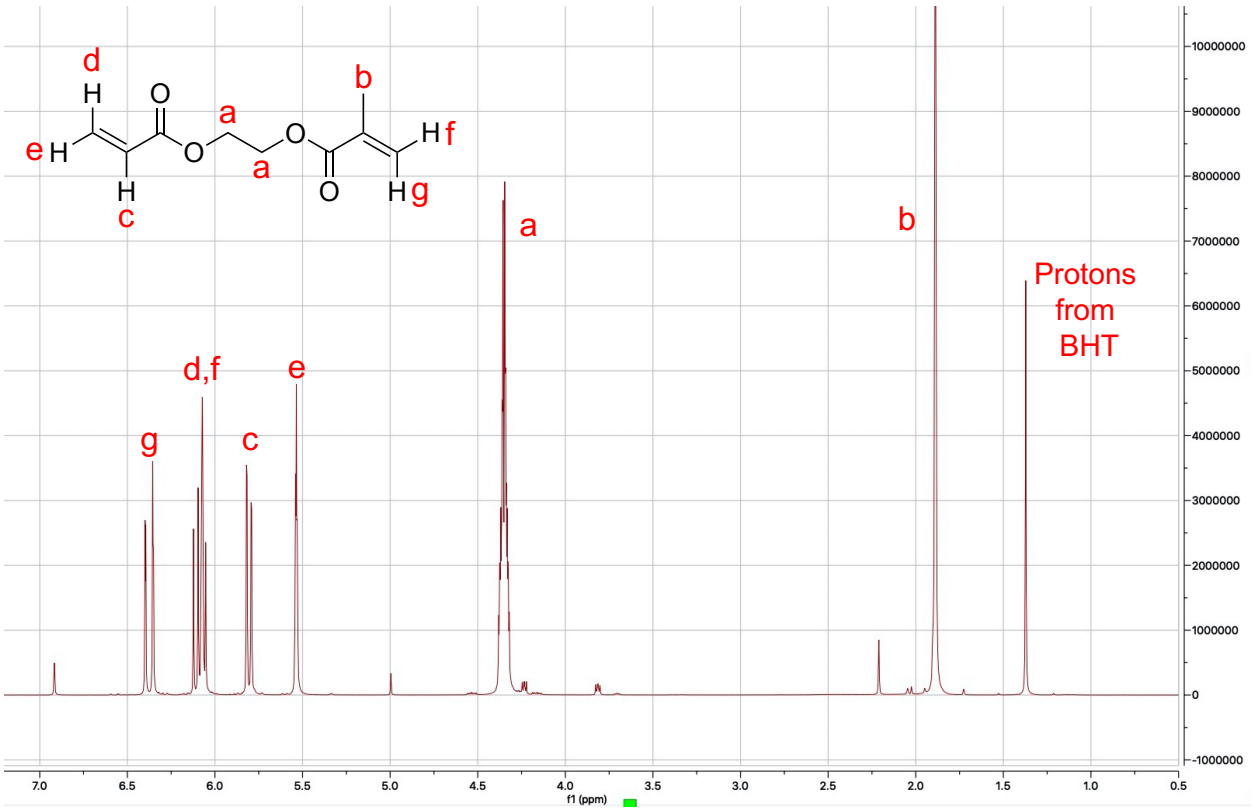
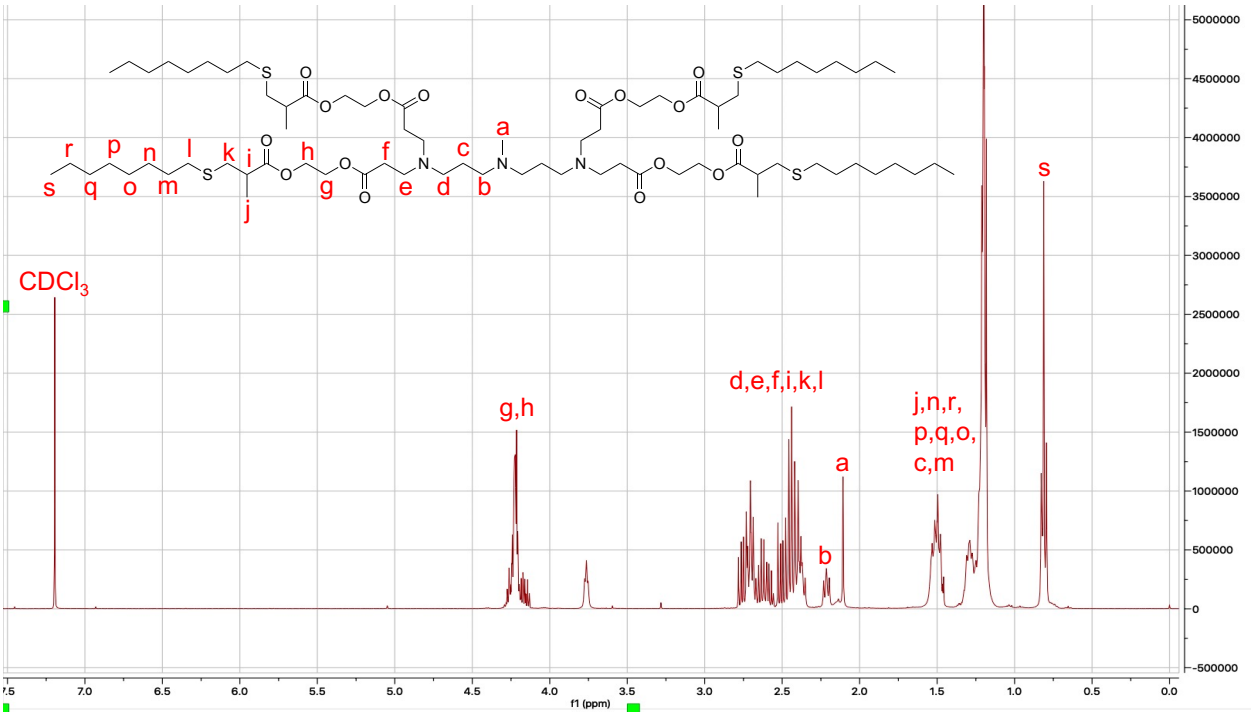
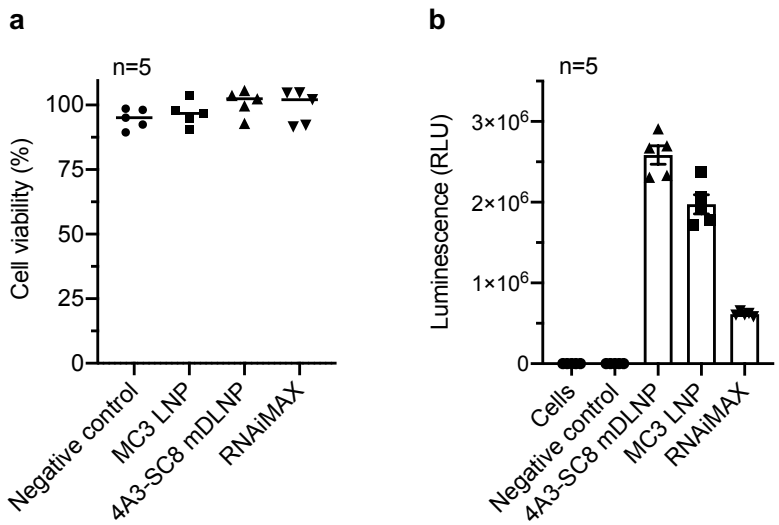


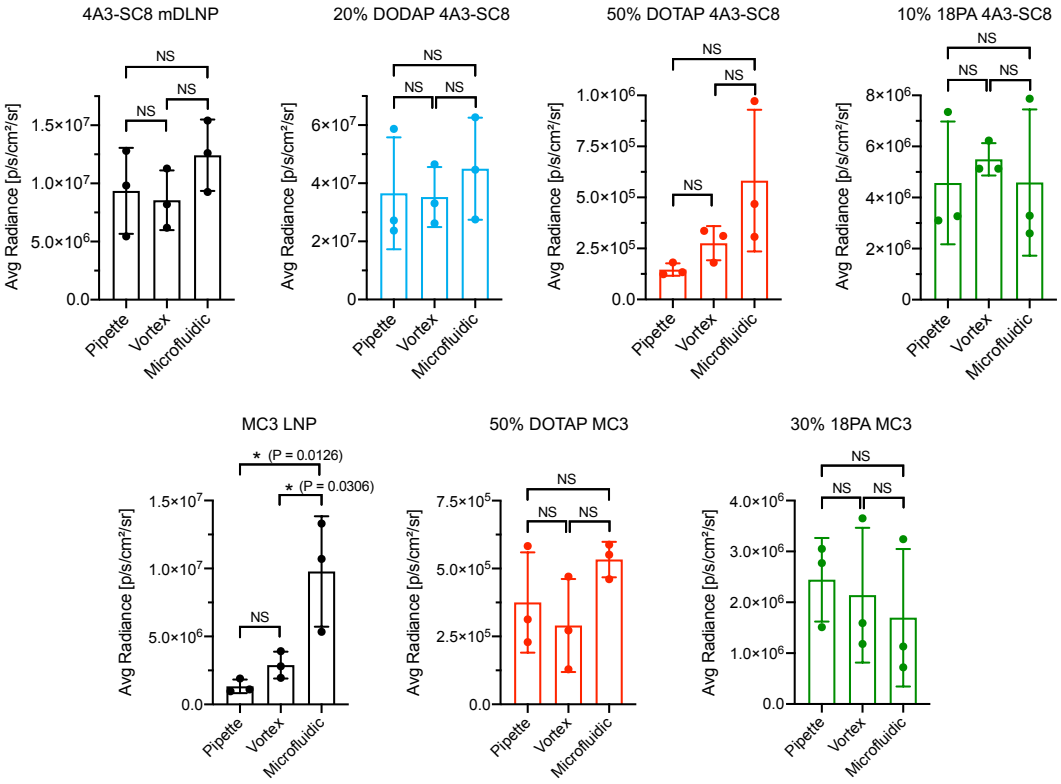
Supplementary Fig. 1 ^{1}H NMR spectrum of AEMA in $CDCl_3$.



Supplementary Fig. 2 ^{1}H NMR spectrum of 4A3-SC8 in $CDCl_3$.



Supplementary Fig. 3 *In vitro* evaluation of mRNA delivery to IGROV-1 cells. a, cell viability and **b**, *in vitro* luciferase expression following treatment of IGROV-1 cells with 4A3-SC8 mDLNP and MC3 LNPs prepared by the pipette mixing method (25 ng Luc-mRNA per well), measured by ONE-Glo + Tox luciferase reporter and cell viability assay. Data are presented as mean ± s.e.m. (n =5 biologically independent samples).



Supplementary Fig. 4 Statistical analysis of data in Figs. 4d-g and 5d-f. Data are presented as means ± s.e.m. and statistical significance was calculated using one-way ANOVA with Tukey's multiple comparisons testing ($^{****}P < 0.0001$, $^{***}P < 0.001$, $^{**}P < 0.01$, $^{*}P < 0.05$, NS: $P > 0.05$, no significant difference).