

SUPPORTING INFORMATION

Synthesis and Bioactivity of a Novel Surfactin-Based Lipopeptide for mRNA Delivery

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Table S1: Physicochemical characterization of mRNA OleSurf-LNPs stored at 4°C for up to two months. Particle size and PDI were measured by DLS, while mRNA encapsulation efficiency and mRNA concentration were determined by the RiboGreen assay

Time (weeks)	Average size (nm) ± SD	PDI ± SD	[mRNA] mg/mL	EE (%) ± SD
0	84.91 ± 6.24	0.102 ± 0.025	0.48 ± 0.01	90.51 ± 3.72
1	85.26 ± 5.16	0.093 ± 0.013	0.45 ± 0.04	94.89 ± 1.59
2	84.79 ± 3.89	0.111 ± 0.018	0.49 ± 0.06	92.75 ± 3.85
4	87.79 ± 2.02	0.097 ± 0.014	0.48 ± 0.00	91.71 ± 4.92
8	85.21 ± 5.86	0.105 ± 0.017	0.44 ± 0.05	93.66 ± 2.01

DLS, Dynamic light scattering; PDI, polydispersity; EE, encapsulation efficiency.