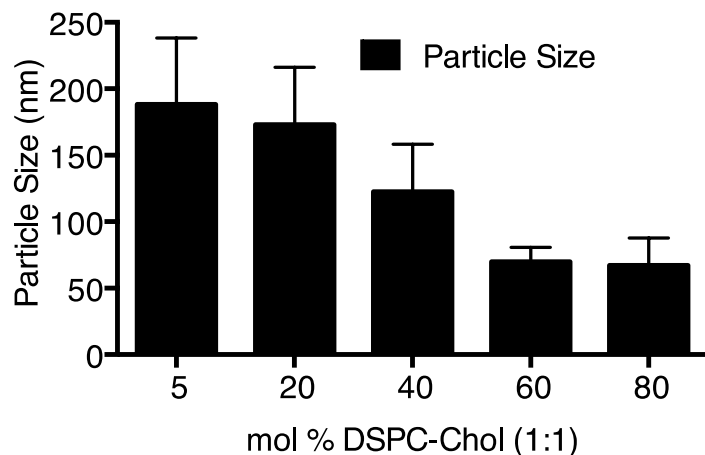
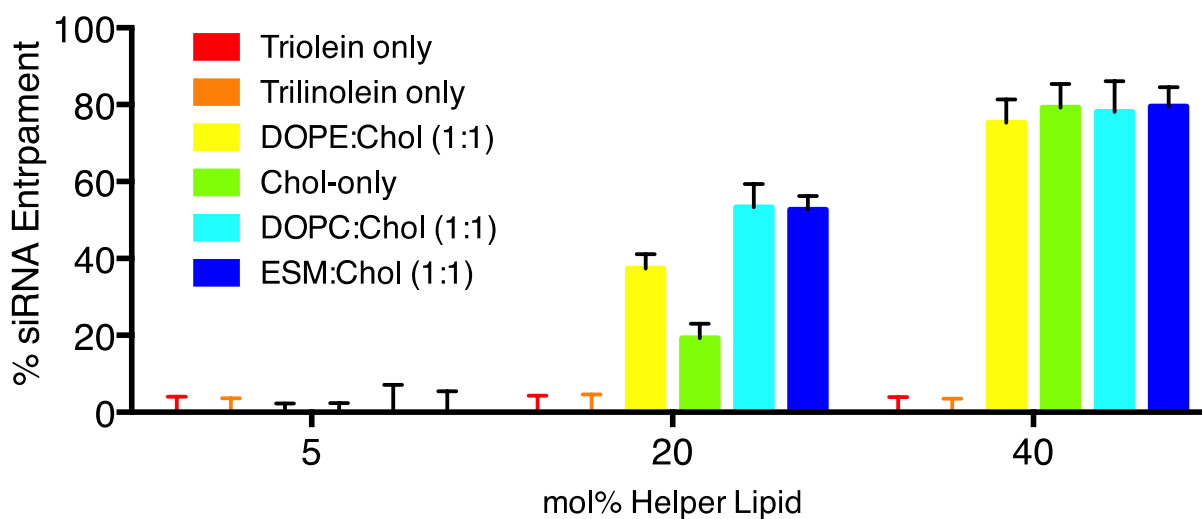


SUPPORTING INFORMATION



Supporting Figure 1. Number-weighted particle sizing data for LNP-siRNA systems. LNP formulations composed of KC2/DSPC/Chol/PEG-lipid were prepared with siRNA at N/P ratio of 1 in pH 4 buffer and dialyzed into PBS, pH 7.4. All formulations contained DSPC-Chol at a 1:1 mol ratio and 1 mol% PEG-lipid. The combined DSPC-Chol (1:1 mol) content was 5, 20, 40, 60, and 80 mol%. Results represent mean \pm standard deviation of the LNP population as measured by DLS.



Supporting Figure 2. Amphipathic helper lipids can support stable entrapment. LNP-siRNA formulations composed of KC2/helper lipid/PEG-lipid (94-X / X / 1 mol%) were prepared at N/P = 1. The helper lipids used in this study include DOPE, DOPC, ESM, and cholesterol as amphipathic lipids, and triolein and trilinolein as non-polar lipids. Formulations were prepared by mixing lipids using the two-phase mixing procedure and dialysed into PBS pH 7.4. The formulations were subsequently analysed by RiboGreen assay. Results represent average \pm standard deviation (n = 6).