

**Supplementary Figure 2. SNALP Structure.** SNALP are comprised of a nucleic acid payload (siRNA in this work) fully encapsulated inside a lipid bilayer consisting of cationic lipid(s), neutral lipid(s) and diffusible PEG-lipid(s) fusion regulators. SNALP with a lipid composition of DLinDMA:DSPC:Chol: PEG-C-DMA (20:48:2:30 molar percent) were prepared using the spontaneous vesicle formation by ethanol dilution method [Jeffs et al. 2005].