

## Electronic Supplementary Information

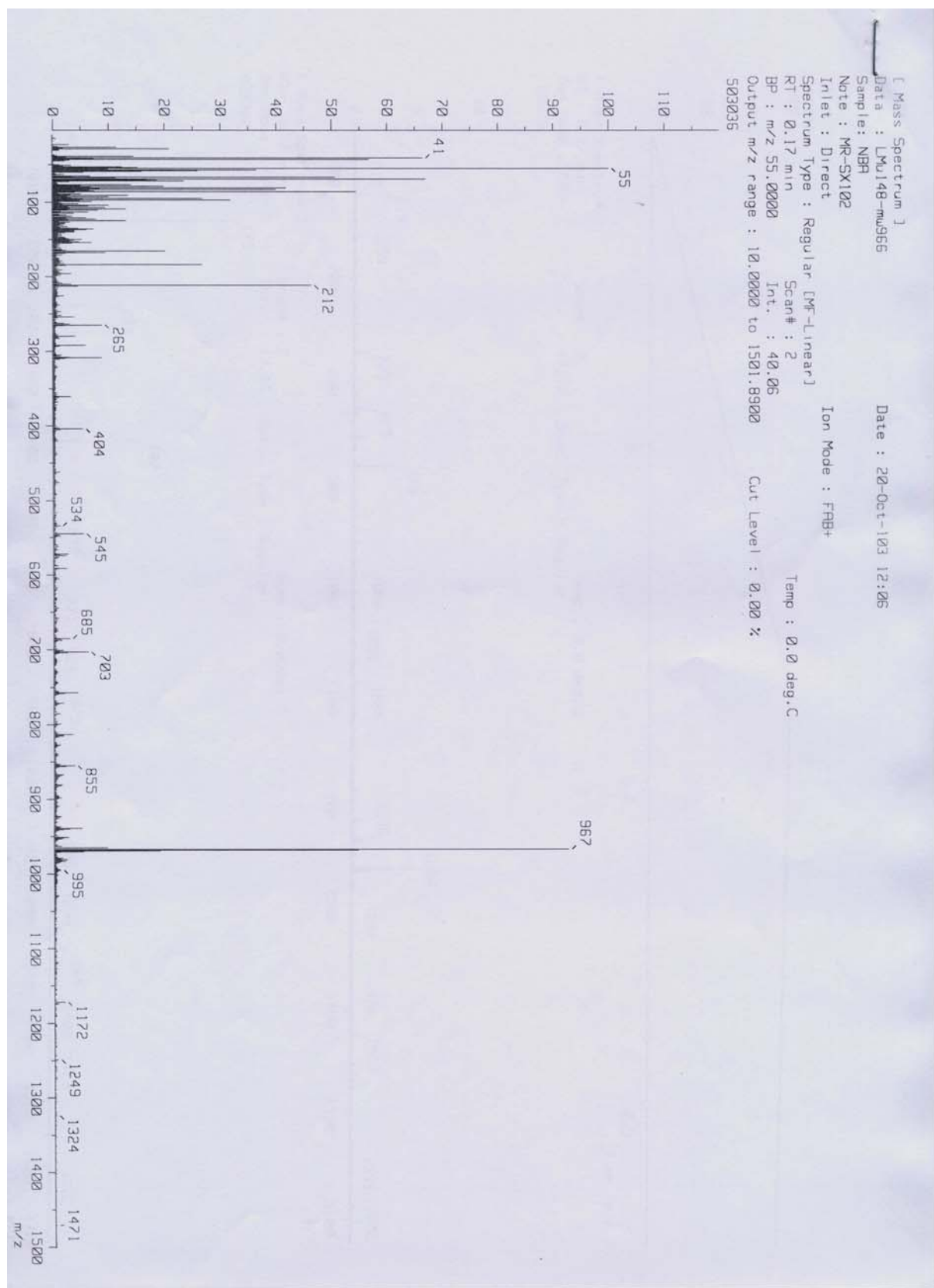
### Nucleoside Phosphocholine Amphiphile for *in vitro* DNA transfection

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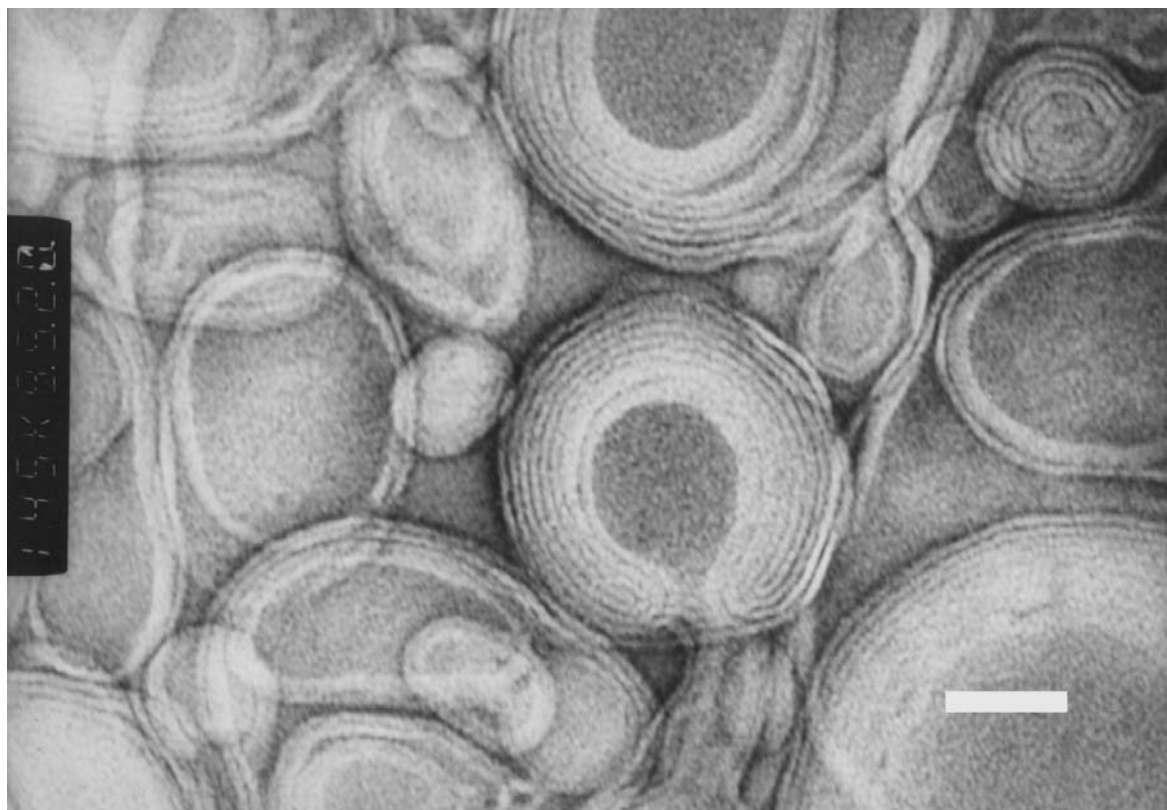
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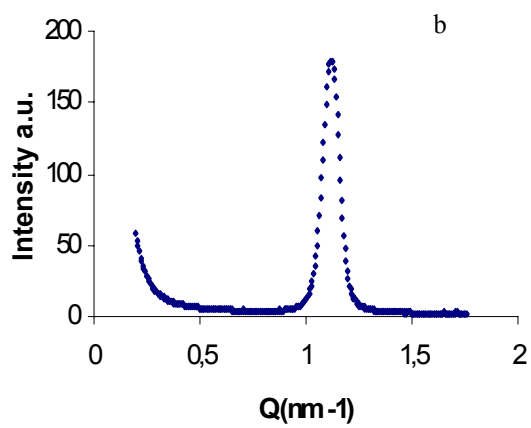
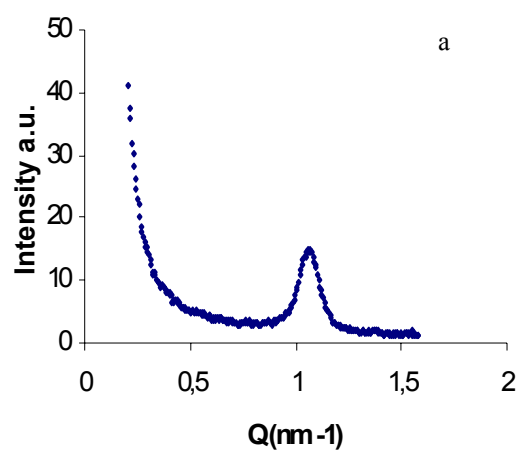
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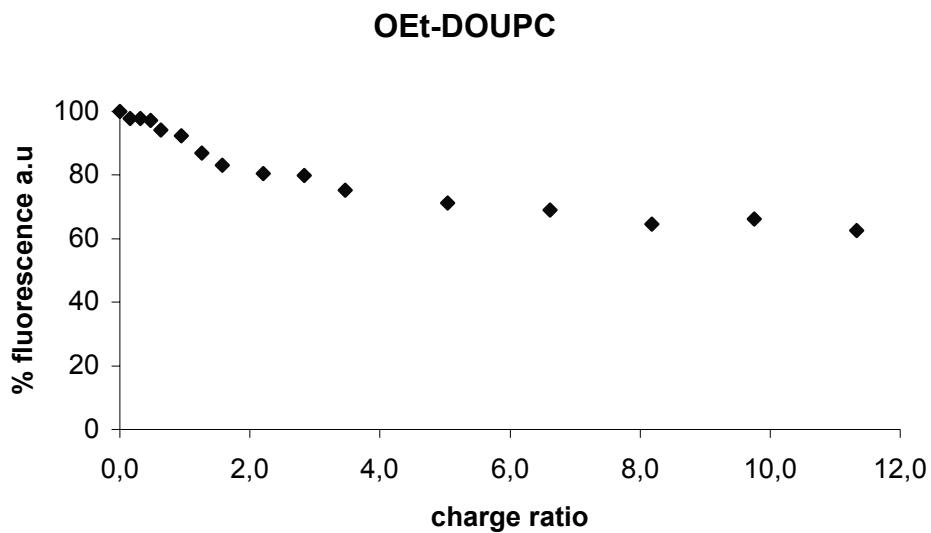
MS FAB<sup>+</sup> of O-Ethyl-bis-(2',3'-oleoyl)-5'-(phosphocholine)-uridine (O-Ethyl DOUPC)



Example of high-resolution TEM images of vesicle of O-Ethyl DOUPC in the presence of Plasmid. Bars = 100 nm



SAXS profiles of a) CT-DNA/DOTAP and b) poly A/DOTAP complexes showing Bragg peaks at  $q$  ( $0.1061 \text{ \AA}^{-1}$ ) and  $q$  ( $0.1131 \text{ \AA}^{-1}$ ), and corresponding lamellar repeat distances  $d$  of 5.92 nm and 5.66 nm, respectively.



EB exclusion assays with O-Ethyl DOUPC in the presence of CT-DNA (Fluorescence intensity versus charge ratio). The residual fluorescence intensity of 70 % is observed.