

Supporting Information

Cargo Delivery to Adhering Myoblast Cells from Liposome-Containing Poly(dopamine) Composite Coatings

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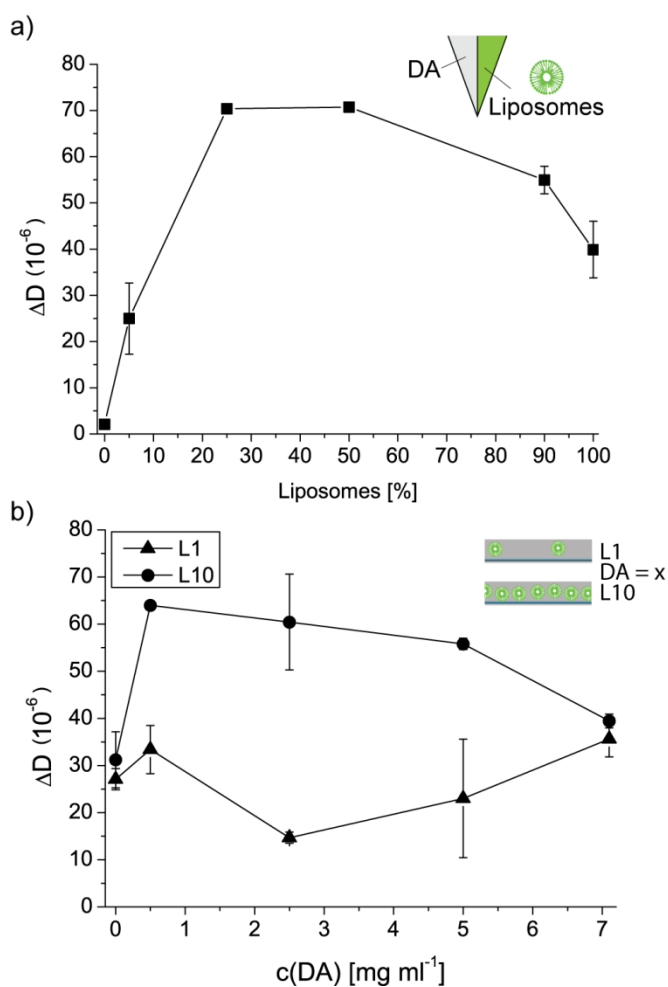


Figure S1. Liposome/PDA film assembly. a) Change in dissipation ΔD of PLL pre-coated QCM crystals upon binding of different volume mixtures of DA/liposomes. b) Change in dissipation ΔD of PLL pre-coated QCM crystals upon deposition of mixtures between L1 or L10 and different concentrations of DA.

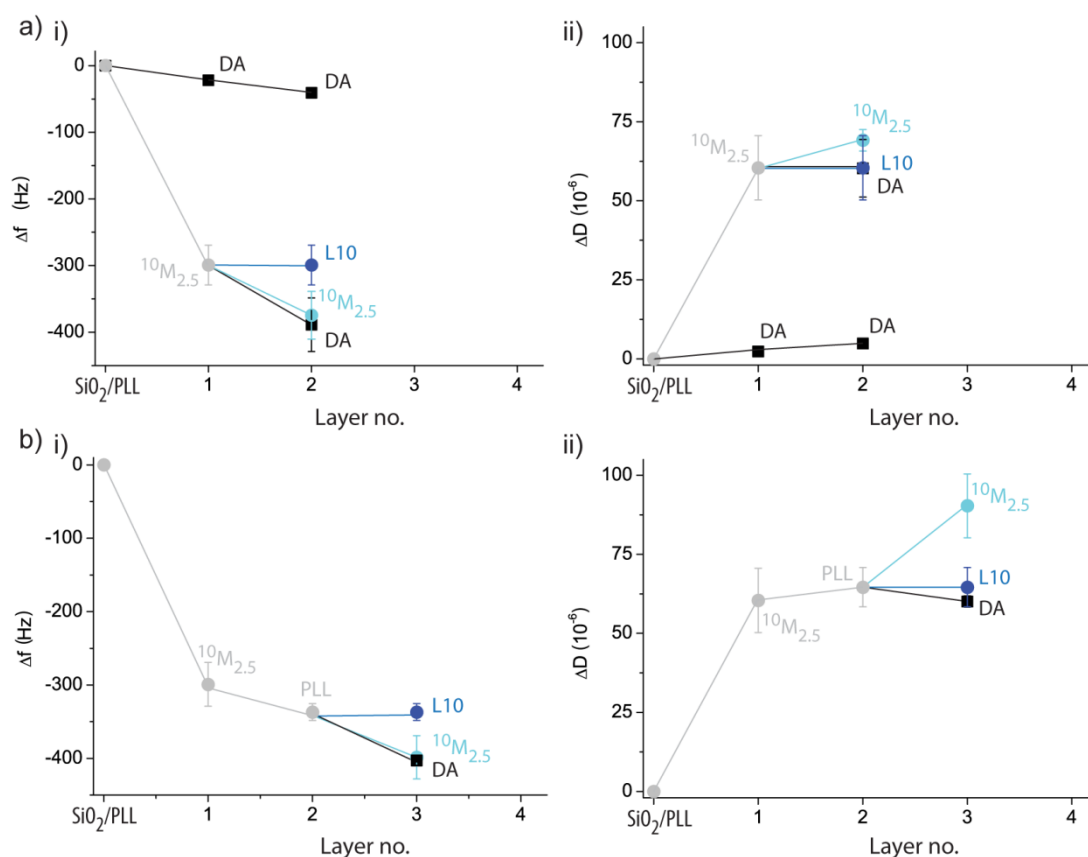
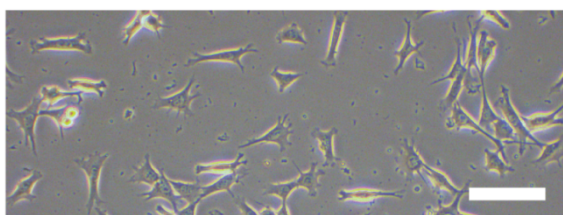


Figure S2. Second liposome deposition step. The change in frequency Δf (i) and change in dissipation ΔD (ii) of a PLL pre-coated QCM crystal upon deposition of different coatings is shown. a) $^{10}\text{M}_{2.5}$ deposition followed by the adsorption of DA, L10 or $^{10}\text{M}_{2.5}$. As comparison, Δf and ΔD of a silica crystal upon deposition of multiple DA steps is plotted. The adsorption of DA to silica and $^{10}\text{M}_{2.5}$ was found to be very similar. Further, there was no L10 adsorption observed to $^{10}\text{M}_{2.5}$ pre-coated crystals and only a minor amount of $^{10}\text{M}_{2.5}$ was deposited as it can be seen by the small Δf and ΔD . The larger ΔD for $^{10}\text{M}_{2.5}$ than for DA however suggests that some liposomes were immobilized in the film. b) $^{10}\text{M}_{2.5}$ /PLL deposition followed by the adsorption of DA, L10 or $^{10}\text{M}_{2.5}$.

i) $^{10}\text{M}_{2.5}/\text{PLL}/\text{PMA}_c/^{10}\text{M}_{2.5}$



ii) $^{10}\text{M}_{2.5}/\text{PLL}/\text{PMA}_c/\text{L10}/\text{PDA}_{30}$

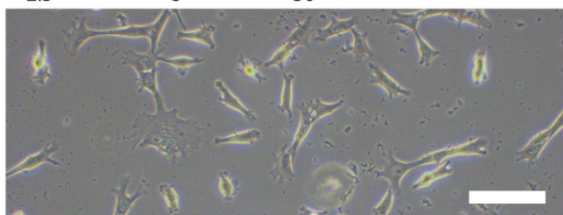


Figure S3. Myoblast adhesion to coatings with two liposome deposition steps. Representative microscopy images of myoblast cells allowed adhering to different coatings for 24 h: i) $^{10}\text{M}_{2.5}/\text{PLL}/\text{PMA}_c/^{10}\text{M}_{2.5}$ and $^{10}\text{M}_{2.5}/\text{PLL}/\text{PMA}_c/\text{L}/\text{PDA}_{30}$. The small black aggregates were always observed on coating with PMA_c and were attributed to polymer aggregates and not contamination of the cell culture. The scale bar is 100 μm .

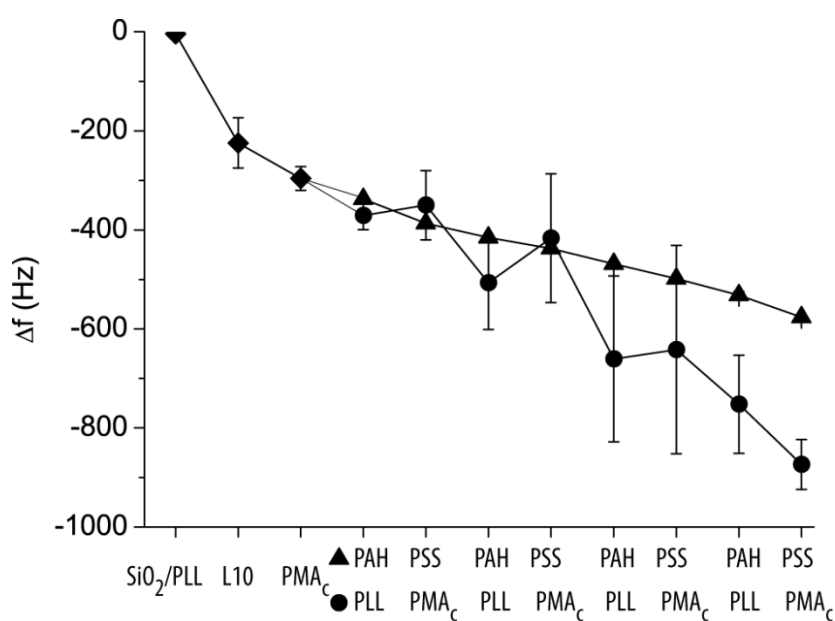


Figure S4. The change in frequency Δf of the entire film assembly is shown.

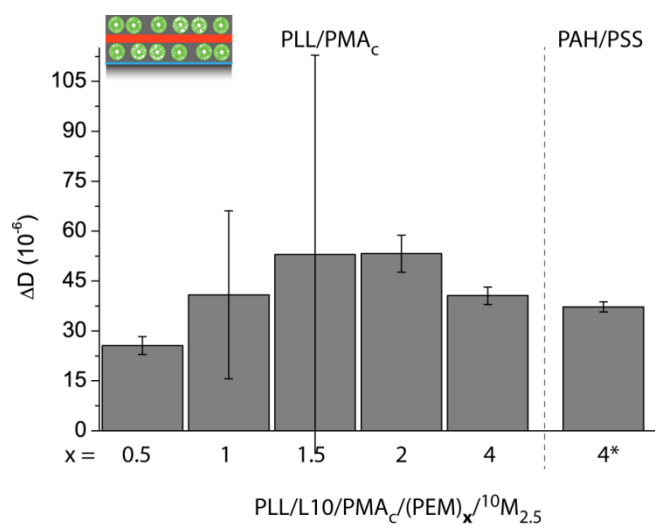


Figure S5. Separation layers. Change in dissipation ΔD of PLL/L10/PMA_c/(PEM)_x pre-coated QCM crystals upon binding of ¹⁰M_{2.5} depending on the number (x) and type of separation layers.