

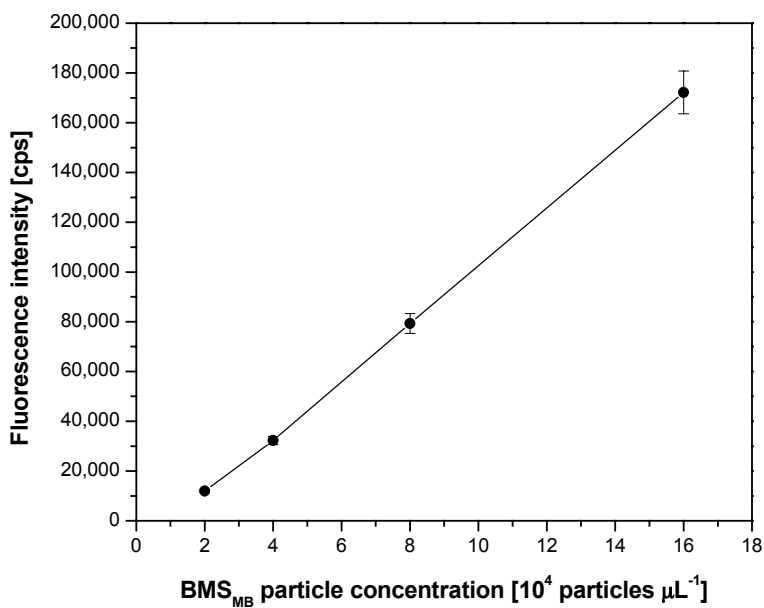
# Supporting Information

## Probing the Permeability of Polyelectrolyte Multilayer Capsules via a Molecular Beacon Approach

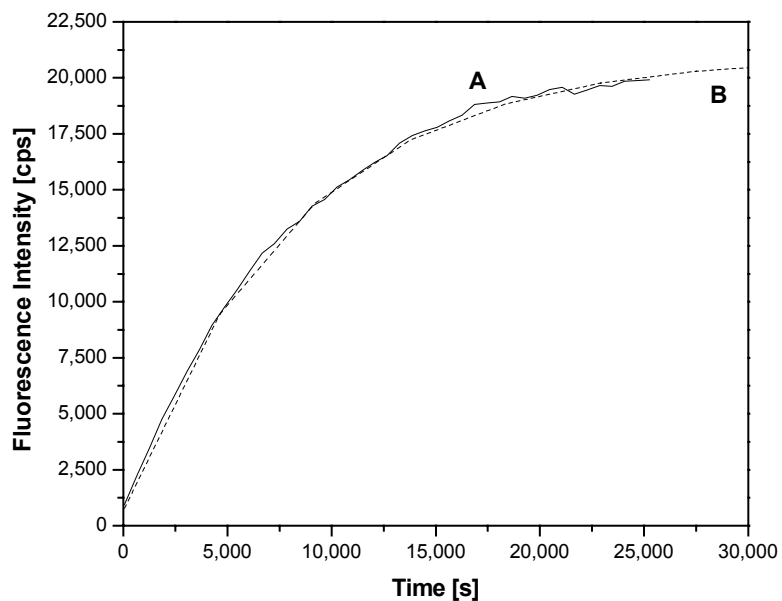
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**Figure S1.** Variation in MB fluorescence with BMS<sub>MB</sub> particle concentration. Assay conditions: MB:BMS ratio, 1:1; DNA target concentration, 4  $\mu\text{M}$ ; DNA target size, 35 b; pH, 7; NaCl concentration, 0.5 M; incubation time, 48 h.



**Figure S2.** Variation in MB fluorescence with time for  $BMS_{MB}$  particles encapsulated within  $PSS/(PAH/PSS)_3$ : (A) experimental data; (B) curve fit by Equation 1. Assay conditions:  $BMS_{MB}$  particle concentration,  $6 \times 10^4$  particles  $\mu L^{-1}$ ; MB:BMS ratio, 1:1; DNA target concentration, 3  $\mu M$ ; DNA target size, 20 b; pH, 7; NaCl concentration, 0.5 M.