DNA-like Structures from Deoxynucleophosphates and Polylysine by Ionic Self-Assembly

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Supplementary Material:

Elemental Analyses:

Calc (Degree of complexation: 80%)

- PL-G: C 35.34 H 4.96 N 17.67 (calc) C 35.58 H 5.97 N 17.92 (found)
- PL-C: C 36.38 H 5.42 N 14.15 (calc) C 36.50 H 6.73 N 13.97 (found)
- PL-A: C 36.57 H 5.14 N 18.28 (calc) C 41.18 H 7.41 N 18.04 (found)
- PL-T: C 37.14 H 5.75 N 11.14 (calc) C 39.09 H 6.65 N 10.65 (found)



Sign of the structure factors F_{hk} as a function of the interferences at positions s_{hk} , as used for the calculation of the electron density map in Fig. 3.





Electron density map for the 2D hexagonal structure obtained for the sample. Such structural changes were not observed by DSC, and are assumed to be happening on a much longer time scale than that probed by the thermal measurements.

SAXS: Vacuum-dried PL-G



SAXS: Complexes with pDADMAC





IR: Double-stranded PL-G:C and comparisons

Ethidium Bromide and Coommasie-stained gels:



Wells are from left to right: 1) C, 2) G, 3) PL, 4) PL-C, 5) PL-G, 6) G+C mixture, 7) G:C, 8) PL-G + PL-C mixture, 9) PL-G:C complex

The top image represent the full gel ran with all the possible blanks (For G and C) and then stained with ethidium bromide. Only the last lane (containing the PL-G:C complex) was stained.

In the bottom image, the same gel was used to stain with Coomassie Blue. Here only wells 3, 4, 5, 8 and 9 containing the peptide are stained.