Electronic Supplementary Material (ESI) for Journal of Materials Chemistry B

ELECTRONIC SUPPLEMENTARY INFORMATION

Self-assembled amphiphilic phosphopyridoxyl-polyethylenimine polymers exhibit high cell viability and gene transfection efficiency in vitro and in vivo

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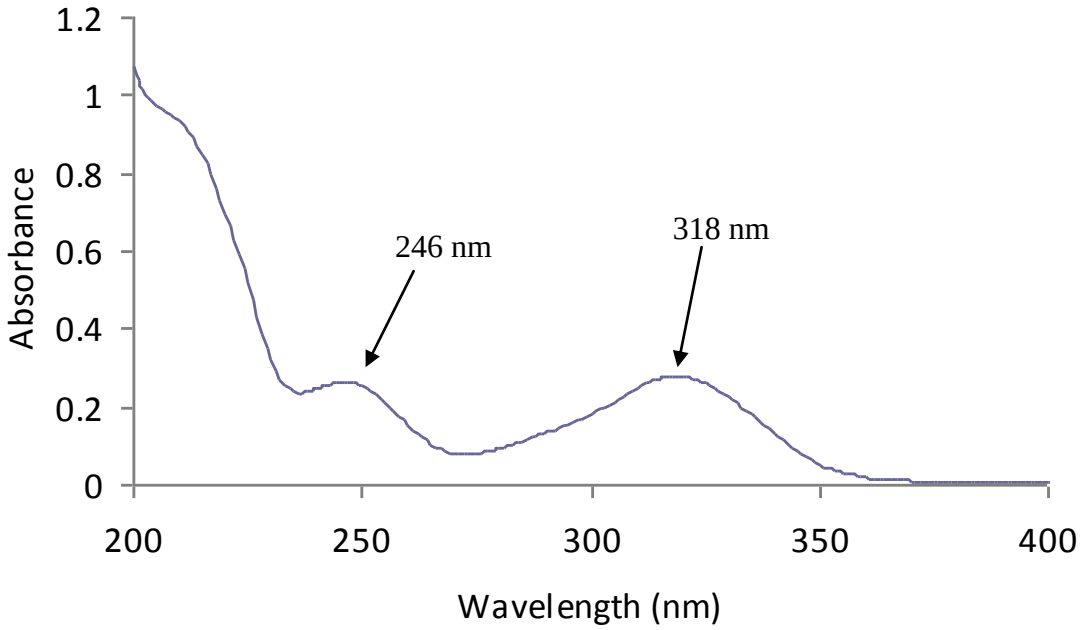
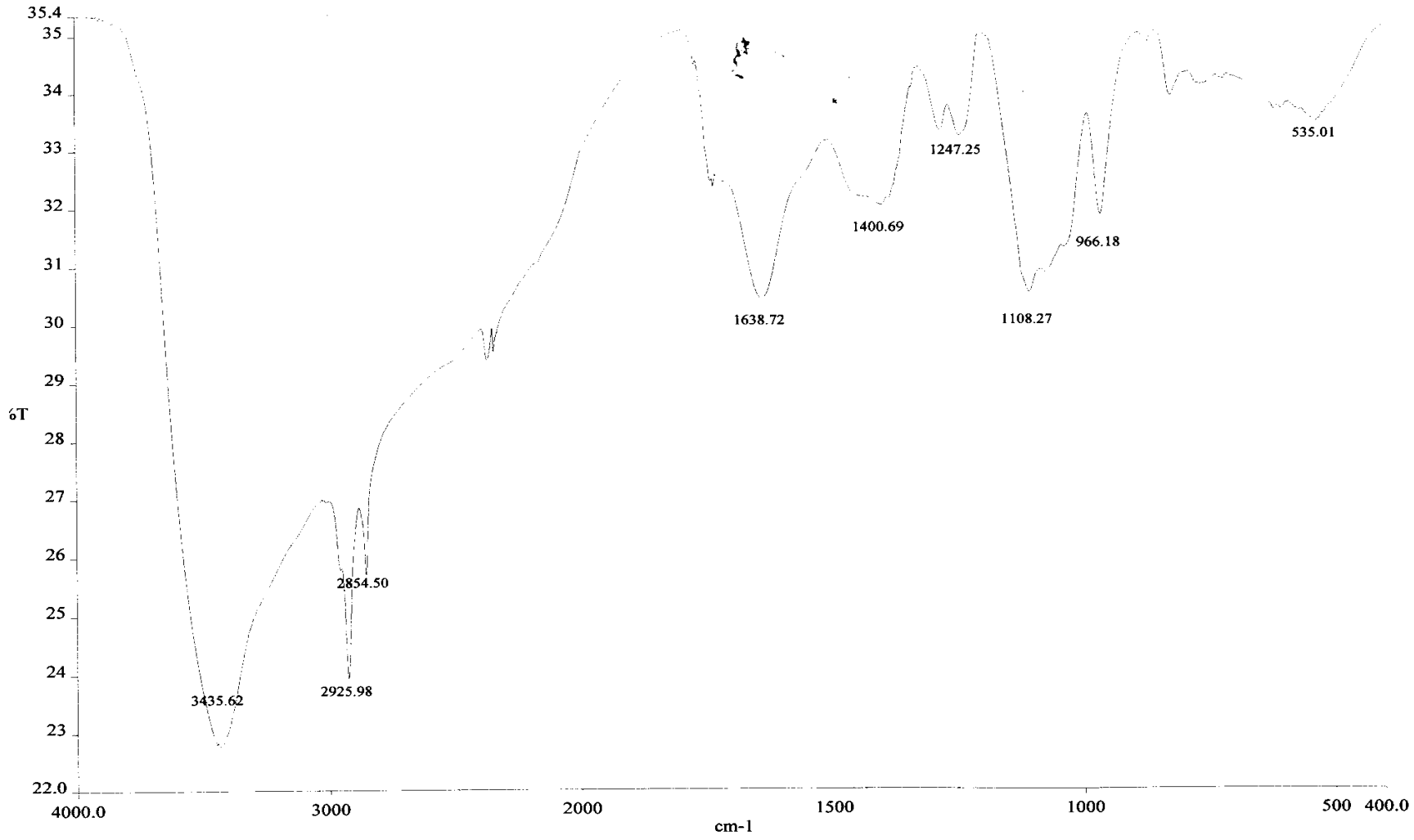
(**a**)



(b)



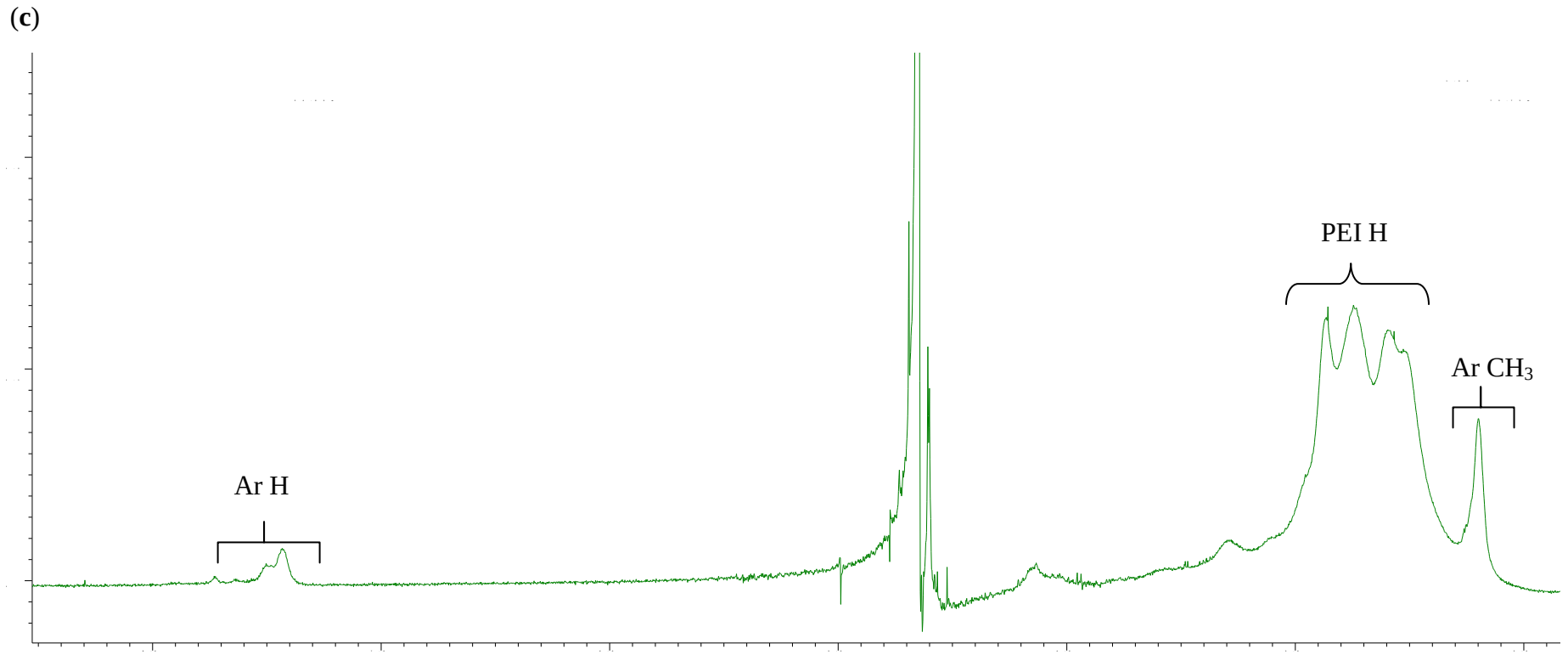


Figure S1: Characterization of PPyP-3 by (a) UV-VIS, (b) FTIR and (c) ^{1}H-NMR (D_2O).

Interaction study of PPyP-3 polymer - eosin

Eosin loaded self-assembled nanostructures were prepared by mixing a solution of PPyP-3 polymer (5.37 µg/ml) with 0.2 µl of eosin solution (173 µg/ml) on a continuous vortexing. Subsequently, the solution was transferred to a quartz cell and absorption spectra were recorded in the range 450-600 nm at different time intervals. Change in color of the solution of the complex, PPyP-3-Eosin, was captured by a digital camera.

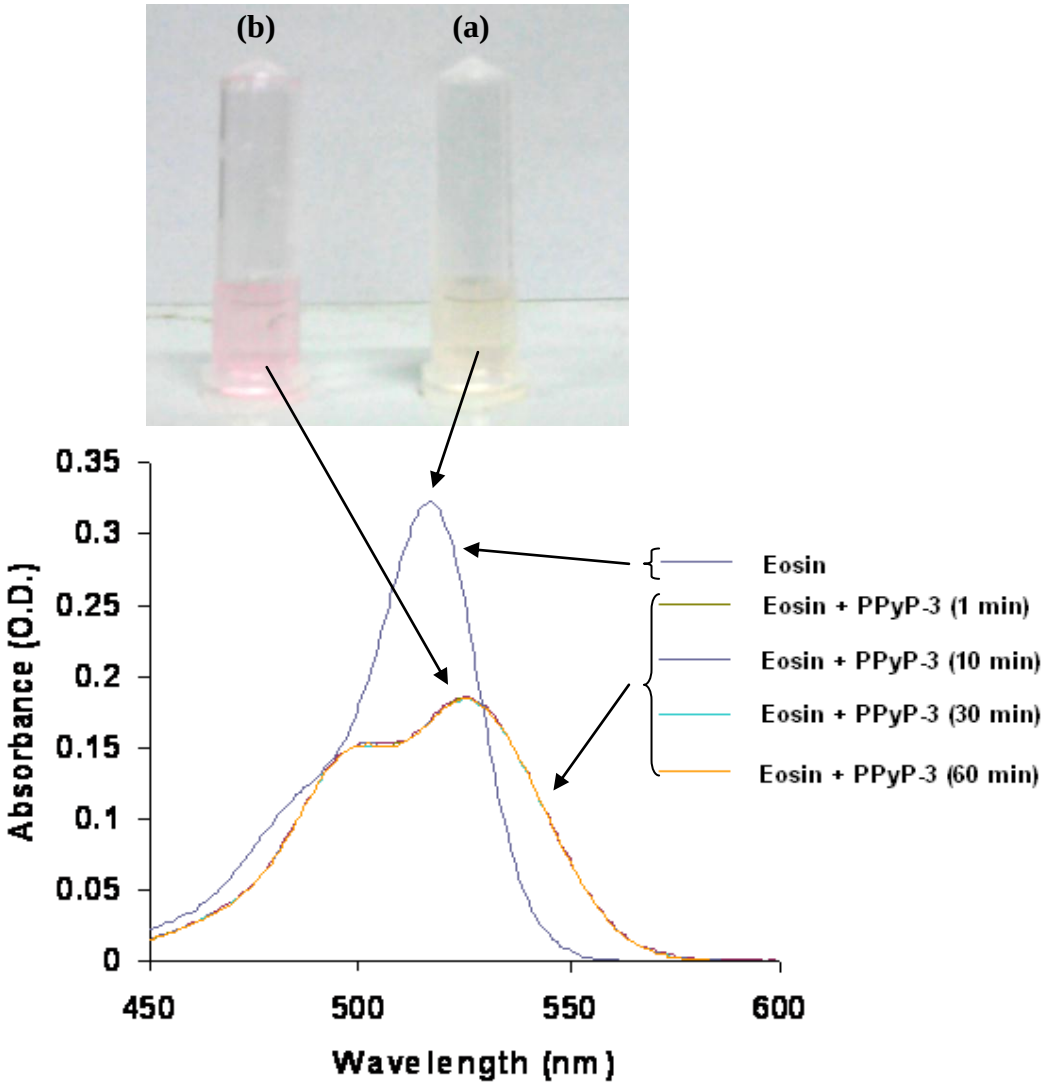


Figure S2: Absorption spectra showing loading of eosin in self-assembled nanostructures of PPyP-3 polymer. Absorption spectra were monitored in the range 450-600 nm at different time intervals. Top image : (a) Eosin solution, and (b) PPyP-3 + Eosin complex solution.

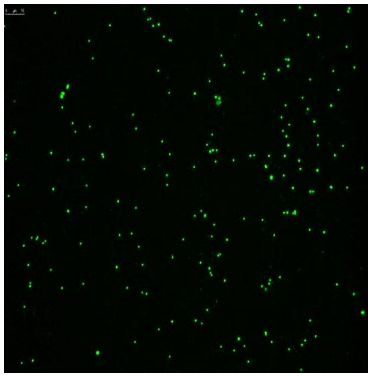
(a)  (b) 

Figure S3: Fluorescence microscopic image of transfected human peripheral blood dendritic cells using PPyP-3/pDNA complex, (a) in the absence of serum, and (b) in the presence of serum.