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

Supporting Information for

Lyophilization Enabled Disentanglement of Polyethylenimine on Rambutan-like Silica Nanoparticles for Enhanced Plasmid DNA Delivery

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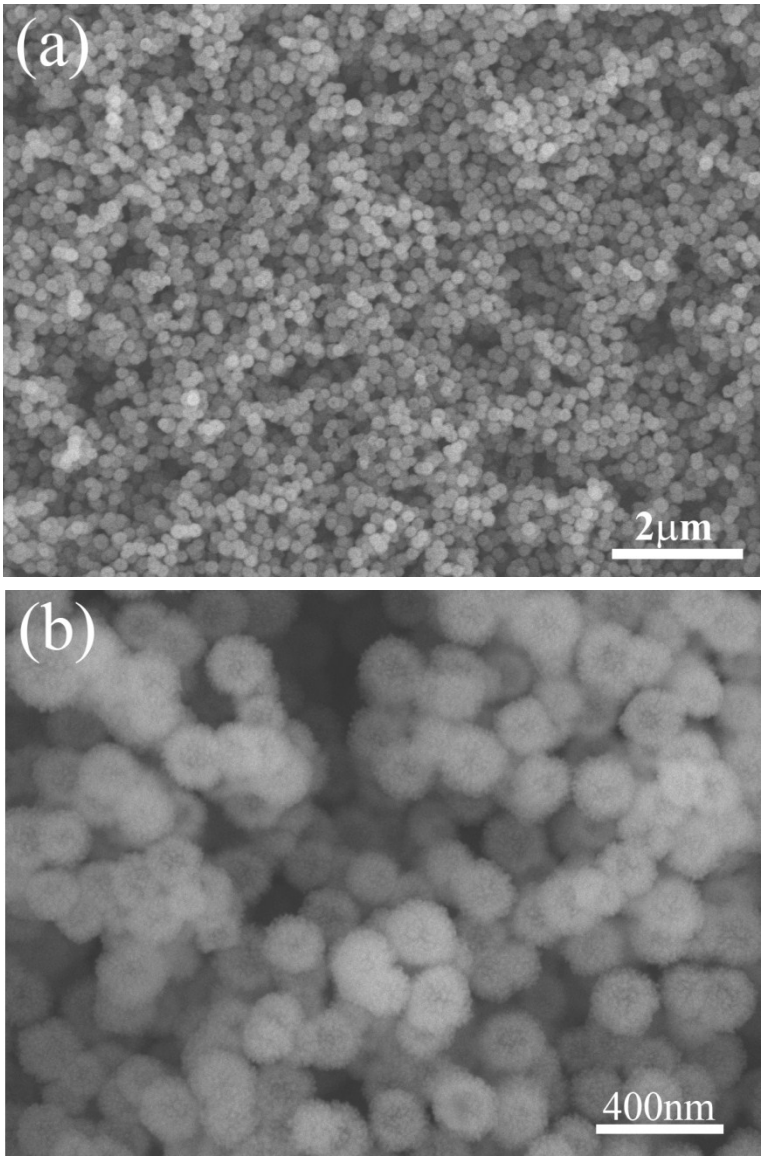

Figure S1. The SEM images of RNPs.

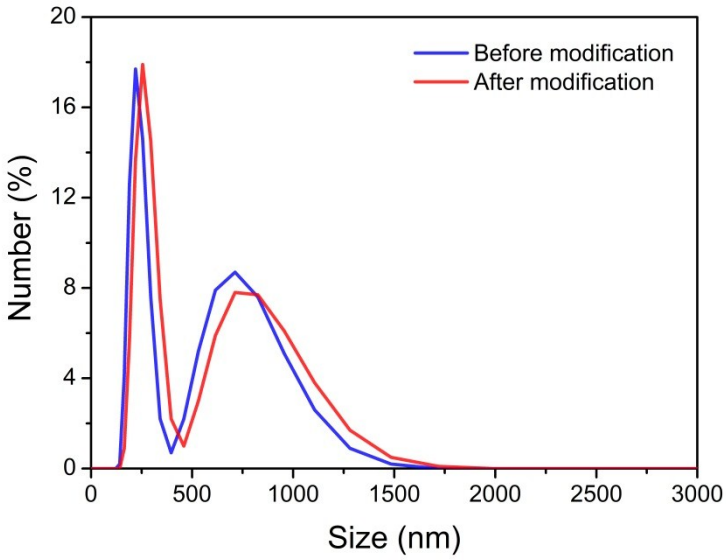

Figure S2. DLS profiles of RNPs before and after surface modification with PEI.

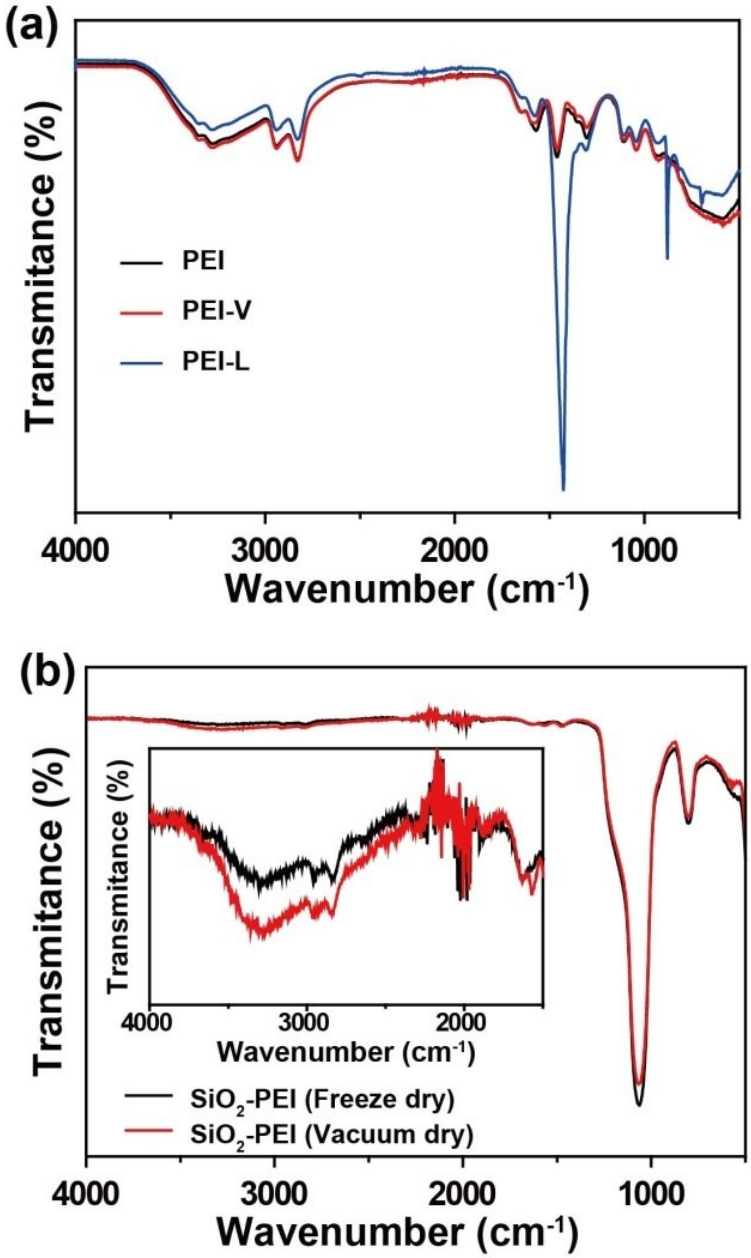

Figure S3. (a) Comparison of FT-IR profiles of PEI, PEI-L and PEI-V and (b) Comparison of FT-IR profiles of SiO_2-PEI conjugates obtained by freeze drying and vacuum drying.

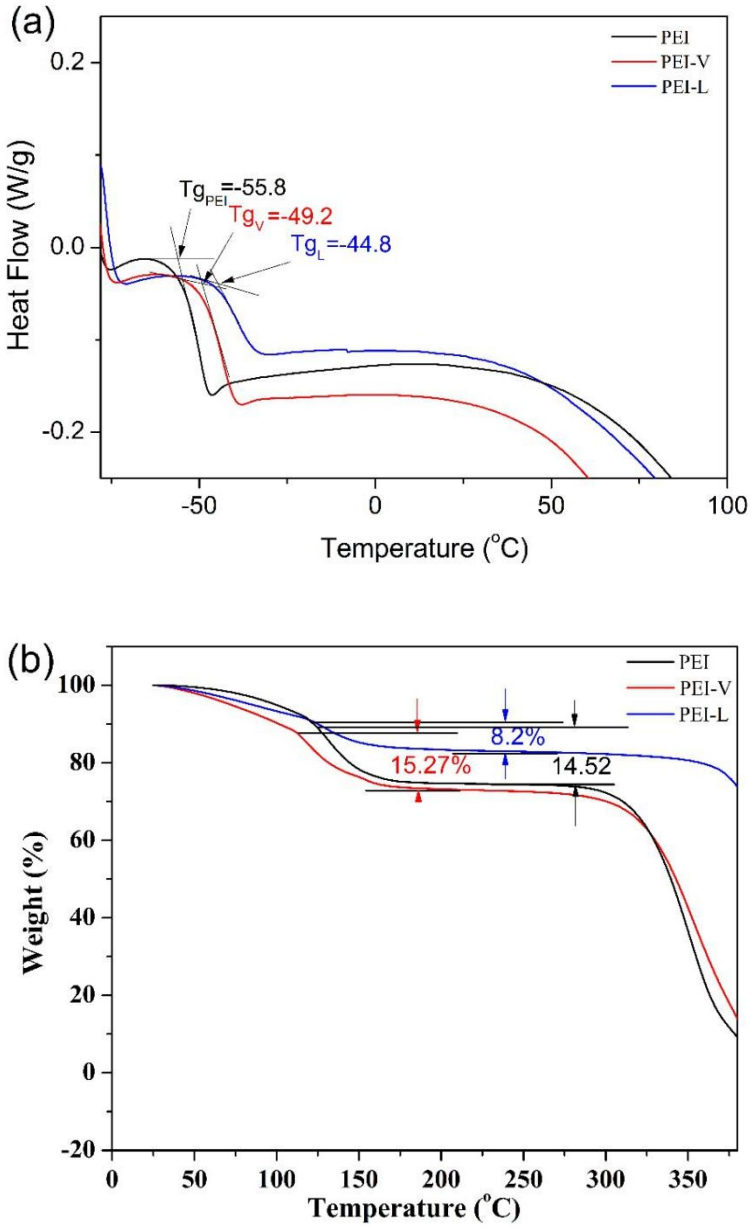

Figure S4. DSC thermograms (a) and TGA analysis (b) for PEI, PEI-V, and PEI-L.

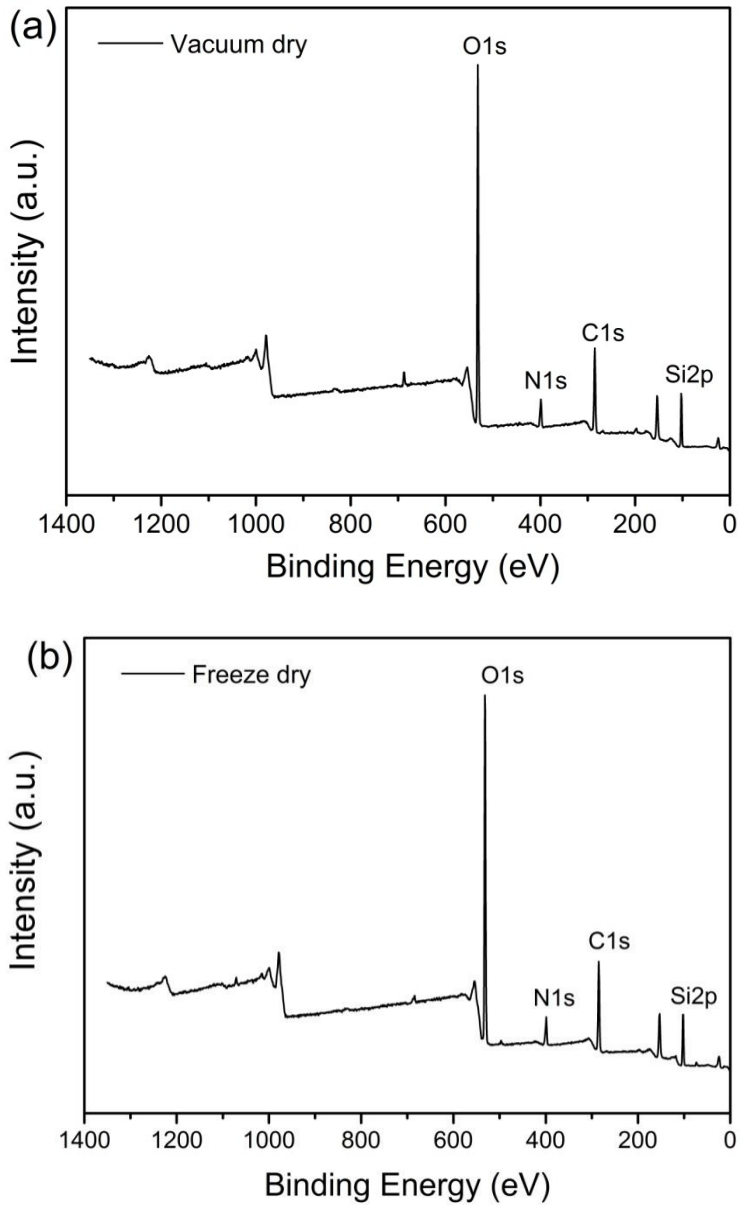

Figure S5. The survey XPS spectra of the vacuum drying sample (a) and freeze drying sample (b).

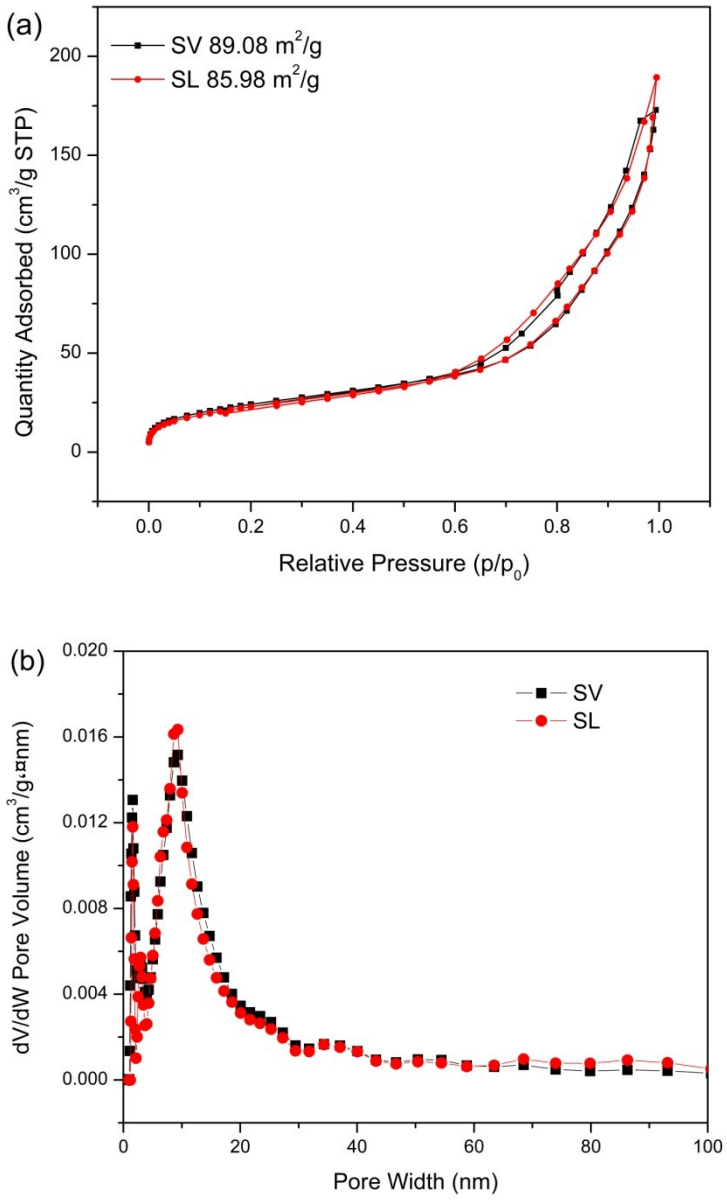

Figure S6. The N_2 isotherm sorption plots (a) and BJH pore size distribution (b) of SV and SL. The insets in (a) is the BET specific surface area.