Electronic Supplementary Material (ESI) for RSC Advances.

Supporting information

Polyurea dendrimer for efficient cytosolic siRNA delivery

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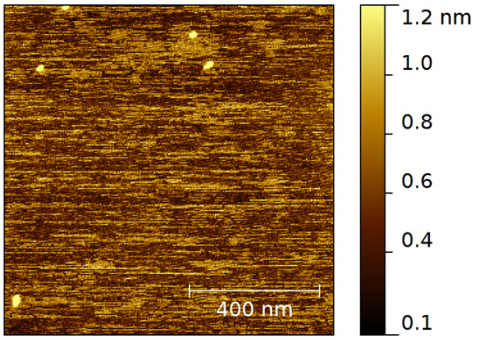

Figure S1. AFM topographical non-contact image of a PURE-G4 dendrimer on a mica surface (scan area 1x1 μm).

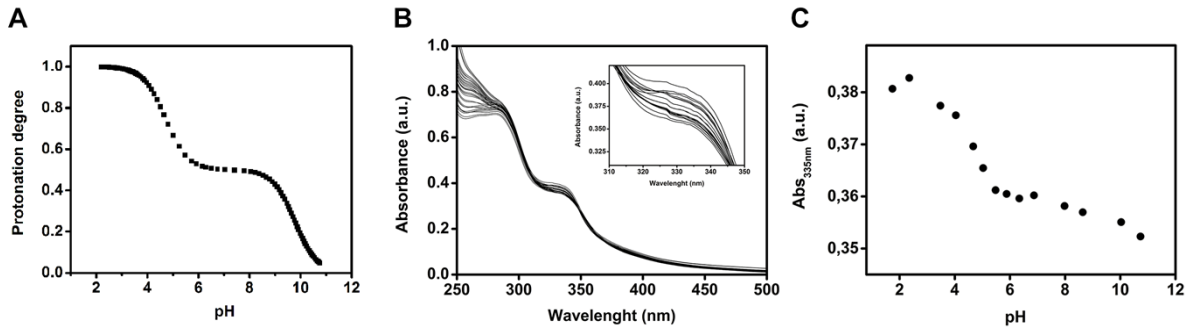

Figure S2. (A) Protonation degree of PURE-G4 versus pH (A). (B) Absorption spectra of PURE-G4 aqueous solutions at different pHs (the inset shows a magnification of the absorbance spectra at λ_{max}= 335 nm. (C) Plot of the pH dependence of the absorbance at 335 nm.

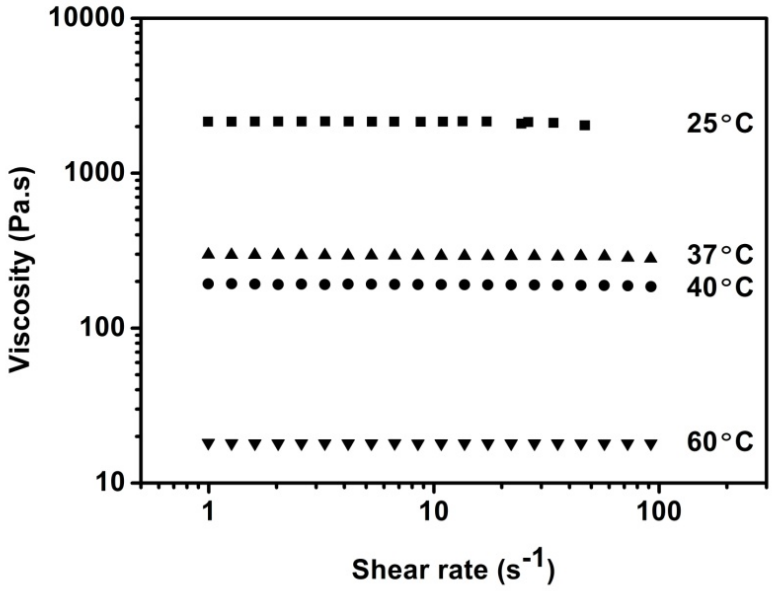

Figure S3. Viscosity of PURE-G4 *versus* the shear rate measured at different temperatures (25, 37, 40 and 60 ºC).

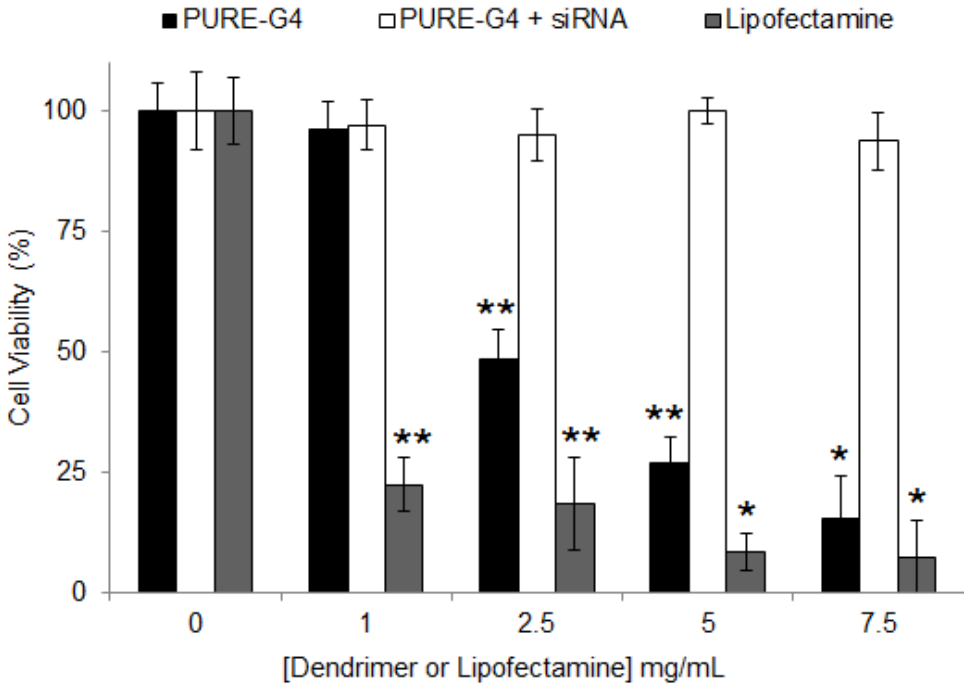

Figure S4. Cell viability via the MTT assay of PURE-G4 (1, 2.5, 5 and 7.5 mg/mL) and PURE-G4 complexed with siRNA (1, 2.5, 5 and 7.5 mg/mL of dendrimer pre-incubated with 10 μM of siRNA), compared with the commercial delivery vector Lipofectamine. All the assays were performed in HepG2 cells at 48 hours of exposure (*, $P<0.05$; **, $P<0.001$).

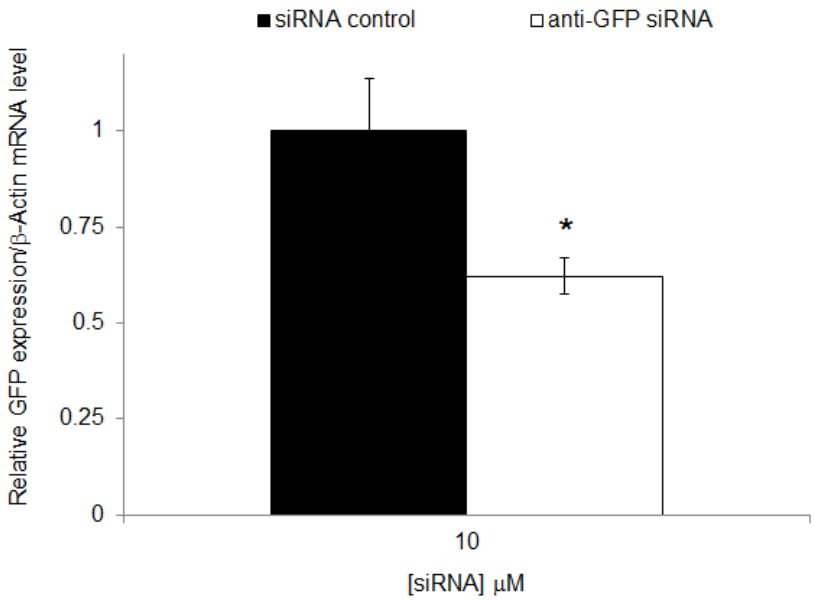

Figure S5. GFP silencing was compared using the same siRNA concentration (10 μM) on PURE-G4-siRNA dendriplexes with a commercially transfection agent – Lipofectamine 2000® (1.5 mg) by Real-Time PCR. β-Actin was used a reference gene. All the assays were performed in HepG2 cells at 48 hours of exposure (*, $P<0.05$).