SUPPORTING INFORMATION

Folic Acid-Tethered Poly(N-isopropylacrylamide)–Phospholipid Hybrid Nanocarrier for Targeted Drug Delivery

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Figure S1. (a) $^1$H NMR, (b) $^{13}$C NMR and (c) FTIR spectra of alkyne terminated RAFT chain transfer agent.
Figure S2. (A) $^1$H NMR spectra of alkyne terminated p(NIPAM)$_n$ ($n = 25, 40, 60$) and (B) GPC curves of (a) p(NIPAM)$_{60}$, (b) p(NIPAM)$_{40}$ and (c) p(NIPAM)$_{25}$.

Figure S3. FT-IR spectra of lipids after azide functionalisation.
Figure S4. $^1$H NMR spectra of various phospholipids (DPPE, SPE and DCPE) before and after azide functionalization.

Figure S5. $^{13}$C NMR spectra of various phospholipids (DPPE, SPE and DCPE) before and after azide functionalization.
Figure S6. UV-visible spectra of PL-p(NIPAM)$_{25}$ before and after aminolysis. CTA-2 = alkyne-terminated 5-1-dodecyl-S'-(α,α'-dimethyl-α''-acetic acid) trithiocarbonate.

Figure S7. $^1$H NMR spectrum of allyl folic acid.
Figure S8. Temperature-dependent $^1$H NMR spectra of (a) DPPE-p(NIPAM)$_{40}$, SPE-p(NIPAM)$_{40}$, and DCPE-p(NIPAM)$_{40}$ in D$_2$O with a concentration of 70 mg mL$^{-1}$. The intensity of signals (b, b$\text{$_1$}$, b$\text{$_2$}$, d, d$\text{$_1$}$, d$\text{$_2$}$) assigned to p(NIPAM) block decreases with increasing temperature while the intensity of signals (a, a$\text{$_1$}$, a$\text{$_2$}$) assigned to triazole remains unchanged.

Figure S9. CLSM images of KB cells following incubation with Dox-loaded PNCs of DPPE–p(NIPAM)$_{25}$/DPPE–p(NIPAM)$_{25}$–FA mixture: images of FA (-) (without folic acid treatment) and FA (+) (with folic acid treatment) cells incubated at 37 °C, 20 °C and 4 °C.
Figure S10. CLSM images of KB cells following incubation with Dox-loaded PNCs of DPPE–p(NIPAM)$_{40}$/DPPE–p(NIPAM)$_{40}$–FA mixture: images of FA (-) (without folic acid treatment) and FA (+) (with folic acid treatment) cells incubated at 37 °C, 20 °C and 4 °C.