Electronics Supplementary Information (ESI)

Ultrasmall Polymersomes of Poly-α,β-(N-2-Hydroxyethyl L-Aspartamide)graft-Poly(L-Lactic Acid) Copolymers as a Potential Drug Carrier

Hyun Jin Lee,^a Seung-Hae Kwon^b and Kwang-Suk Jang*^c

^aDepartment of Chemical & Biomolecular Engineering, Korea Advanced Institute of Science and Technology, Daejeon 34141, Republic of Korea

^bDivision of Bio-imaging, Korea Basic Science Institute, Chun-Cheon 24341, Republic of Korea

^cDepartment of Chemical Engineering and Research Center of Chemical Technology, Hankyong National University, Anseong 17579, Republic of Korea

*E-mail: jang@hknu.ac.kr (K.-S.J.).



Fig. S1 Size distributions of PHEA-PLA1.4 and PHEA-PLA3.0 micelles measured by DLS.



Fig. S2 CLSM images of (a) integrin $\alpha_v\beta_3$ -overexpressing HeLa cells and (b) negative control 293T cells incubated with USP(DOX) and cRGD-USOP(DOX) for 0.5, 1.5 and 3.0 h at 37 °C. DOX concentration is 1.0 µg/mL. Concentrations of USP(DOX) and cRGD-USP(DOX) are 23 µg/mL and 22 µg/mL, respectively.

Fig. S3 (a) Cell viability of HeLa cells incubated with USP (PHEA-*g*-PLA DS 6.3) and cRGD-USP (PHEA-*g*-PLA-(cRGDfC)) for 24 h at 37 °C. (b) Cytotoxic effects of USP(DOX) and cRGD-USP(DOX) on HeLa cells after 24 h incubation at 37 °C. 5 μ M of DOX: 69.0 μ g/mL USP(DOX) or 65.9 μ g/mL cRGD-USP(DOX). 10 μ M of DOX: 138.1 μ g/mL USP(DOX) or 131.8 μ g/mL cRGD-USP(DOX).