## SUPPORTING INFORMATION

## Targeted drug delivery utilizing protein-like molecular architecture

Evonne M. Rezler, David R. Khan, Janelle Lauer-Fields, Diane Baronas-Lowell, and Gregg B. Fields

Department of Chemistry & Biochemistry and Center for Molecular Biology & Biotechnology, Florida Atlantic University, 777 Glades Road, Boca Raton, FL 33431 U.S.A. Phone 561-297-2093, Fax 561-297-2759, e-mail <u>fieldsg@fau.edu</u>

Liposome Formulation	Liposome		
	Diameter (nm)		
	4 °C	25 °C	37 °C
DSPG:DSPC:Cholesterol (1:4:5)	$125 \pm 17$	115 ± 5	124 ± 9
DSPG:DPPC:Cholesterol (1:4:5)	118 ± 8	$126 \pm 13$	$119 \pm 7$
DSPG:DSPC:Cholesterol:PA (1:4:5:0.1)	$128 \pm 5$	$125 \pm 11$	$117 \pm 9$
DSPG:DPPC:Cholesterol:PA (1:4:5:0.1)	117 ± 15	$120 \pm 7$	$130 \pm 10$

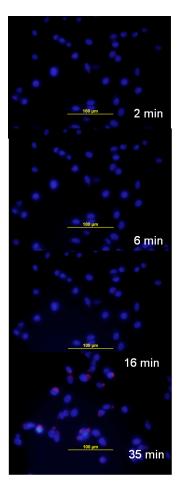
Supporting Information Table. Liposome sizes after 30 days.

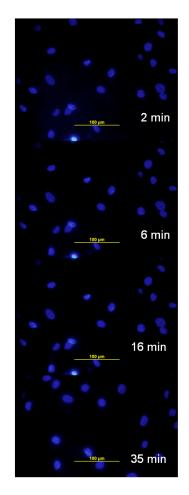
## SUPPORTING INFORMATION FIGURE LEGENDS

**Figure S1.** Microscope images of cellular fluorophore accumulation based on non-targeted liposome delivery. Delivery of rhodamine was monitored as a function of time for (left panel) human metastatic melanoma cells (M14#5), (middle panel) normal fibroblasts from a metastatic melanoma patient (Hs895Sk), and (right panel) normal foreskin fibroblasts (BJ).

**Figure S2.** Microscope images of inhibition of rhodamine incorporation into normal foreskin fibroblasts (BJ). Cells were initially treated with 0 (far left panel), 25 (second from left panel), 50 (second from right panel), or 100 (far right panel)  $\mu$ M exogenous  $\alpha$ 1(IV)1263-1277 THP for 30 min, followed by treatment with  $\alpha$ 1(IV)1263-1277 PA liposomes.

**Figure S3.** Microscope images of inhibition of rhodamine incorporation into fibroblasts from a metastatic melanoma patient (Hs895Sk). Cells were initially treated with 0 (far left panel), 25 (second from left panel), 50 (second from right panel), or 100 (far right panel)  $\mu$ M exogenous  $\alpha$ 1(IV)1263-1277 THP for 30 min, followed by treatment with  $\alpha$ 1(IV)1263-1277 PA liposomes.





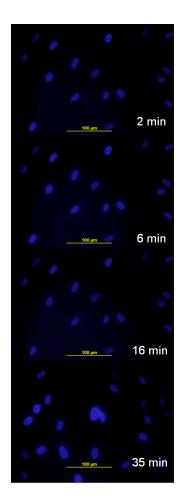


Figure S1

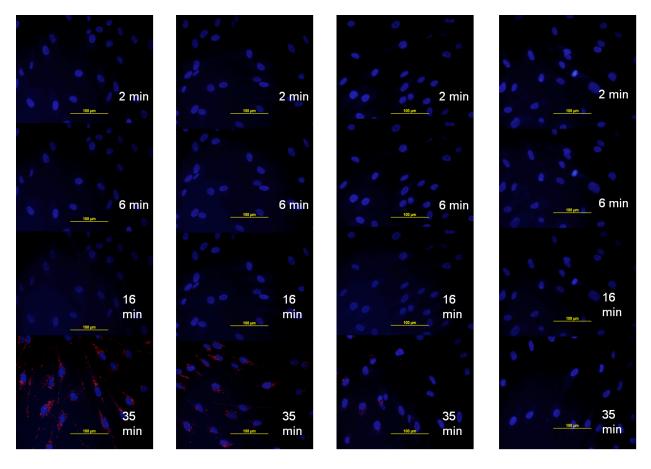


Figure S2

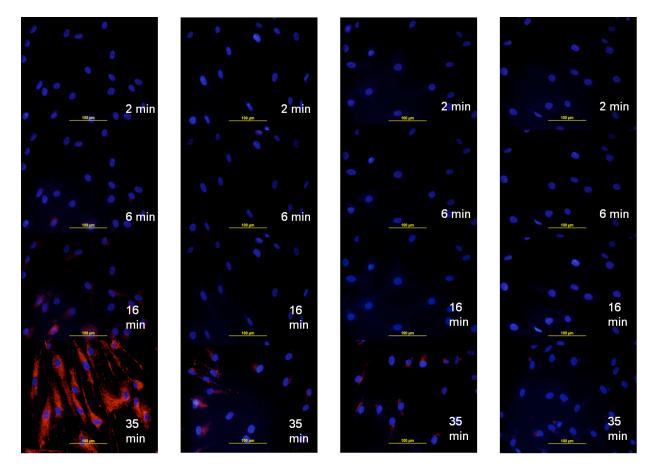


Figure S3