

Appendix B

ADDITIONAL FIGURES

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B.1 Lower Critical Solution Temperature (LCST) Measurement

aECM-RGD:
 M-MASMTGGQQMG-HHHHHHHH-DDDDDK(LD-YAVTGRGDSPASSKPIA((VPGIG)₂VPGKG(VPGIG)₂)₄VP)₃-LE
 T7 tag His tag Cleavage site RGD cell-binding domain Elastin-like domain

Figure B.1.1 Amino acid sequence of aECM-RGD.

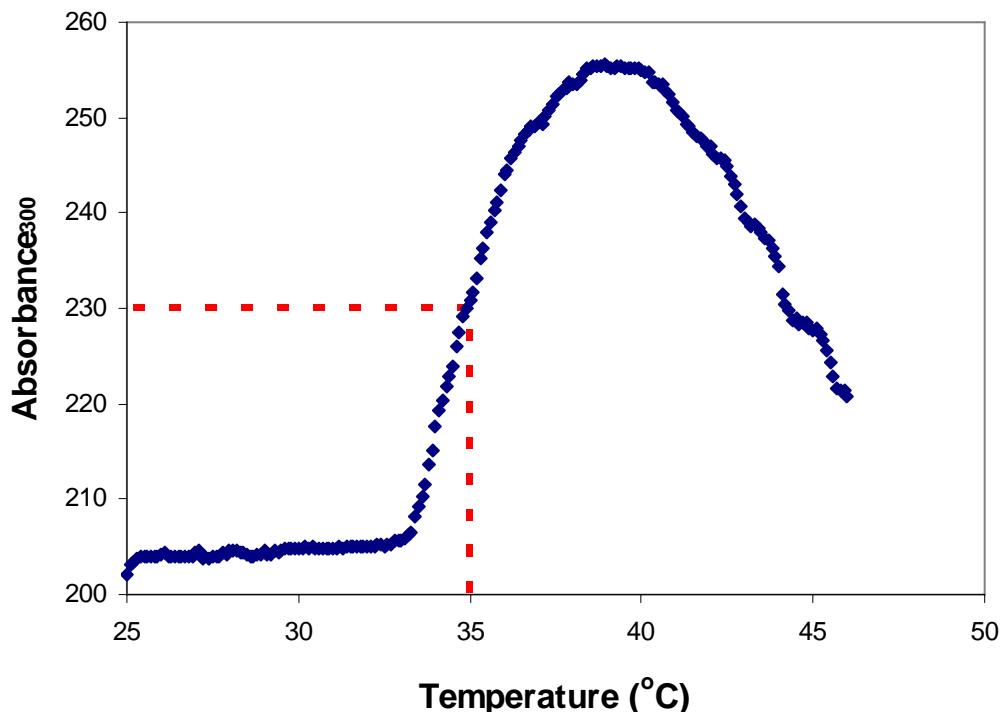


Figure B.1.2 The LCST of a 10 mg/mL solution of aECM-RGD in phosphate-buffered saline (PBS), pH 7.3 was determined to be 35 °C by measuring the percent transmission at 300 nm on an Aviv model 62DS spectrophotometer (Lakewood, NJ).

B.2 Cell Migration on aECM-RGD and aECM-CS5

aECM-RGD:
 M-MASMTGGQQMG-HHHHHHH-DDDDK(LD-YAVTGRGDSPASSKPIA((VPGIG)₂VPGKG(VPGIG)₂)₄VP)₃-LE
 T7 tag His tag Cleavage site RGD cell-binding domain Elastin-like domain

aECM-CS5:
 M-MASMTGGQQMG-HHHHHHH-DDDDK(LD-EEIQIGHIPREDVDYHLYPG((VPGIG)₂VPGKG(VPGIG)₂)₄VP)₃-LE
 T7 tag His tag Cleavage site CS5 cell-binding domain Elastin-like domain

Figure B.2.1 Amino acid sequences of aECM-RGD and aECM-CS5.

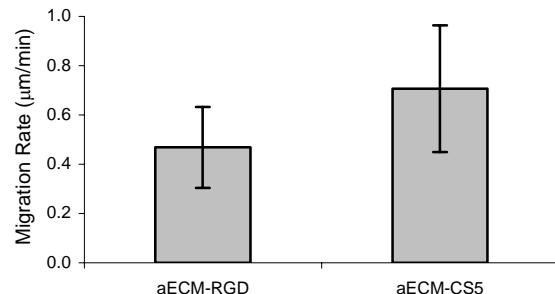


Figure B.2.2 HUVEC migration on aECM substrates. Cells migrate more quickly on aECM-CS5 ($0.71 \pm 0.26 \mu\text{m}/\text{min}$) than aECM-RGD ($0.47 \pm 0.16 \mu\text{m}/\text{min}$). Cells were fully spread on aECM-RGD but were not always well-spread on aECM-CS5. A minimum of 80 cells were tracked every 15 min for at least 8 h. Error bars represent one standard deviation.