

Nowak et al. Supplementary Information

| Sample | M_n | M_n (calc) | X_n | M_w/M_n | %K or E | %L or V |
|----------------------------------------|----------------------|-----------------------------|----------------------|------------------------------------|----------------|----------------|
| K ₁₆₀ L ₄₀ | 47,800 | 46,612 | 205 | 1.28 | 82.9 | 17.1 |
| K ₁₈₀ L ₂₀ | 50,300 | 49,534 | 204 | 1.20 | 91.5 | 8.5 |
| K ₁₆₀ (rac-L) ₄₀ | 48,100 | 46,612 | 206 | 1.15 | 81.7 | 18.3 |
| K ₉₀ L ₁₀ | 22,900 | 24,767 | 92 | 1.12 | 92.4 | 7.6 |
| K ₁₆₀ V ₄₀ | 48,400 | 45,930 | 211 | 1.30 | 81.9 | 18.1 |
| K ₁₈₀ V ₂₀ | 52,100 | 49,193 | 212 | 1.21 | 90.8 | 9.2 |
| E ₁₆₀ L ₄₀ | 38,200 | 39,732 | 192 | 1.29 | 79.4 | 20.6 |

Table S-1 Detailed compositional and molecular weight data for the copolypeptides in this study. **M_n**: number average molecular weights of side-chain protected copolymers as determined by size exclusion chromatography (SEC). **M_n (calc)**: predicted values. **X_n**: numbers of residues in the copolymer chains (derived from M_n). **M_w/M_n**: CLD or polydispersity index values for the copolymer samples, as determined using SEC. Partial aggregation in the SEC eluant (DMF) likely resulted in the higher values found for the 20 mol% hydrophobe samples. **% K or E** and **% L or V**: amino acid compositions (mol %) as determined using ¹H NMR spectroscopy in deuterated trifluoroacetic acid.