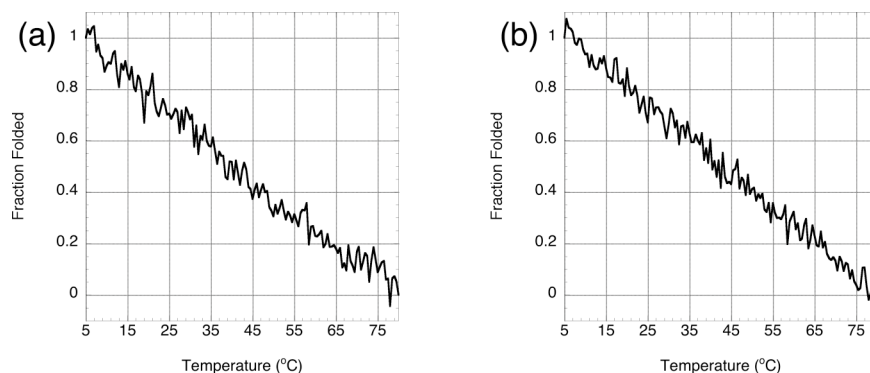# Self-Assembled Heterotrimeric Collagen Triple Helices Directed Through Electrostatic Interactions

Supporting Information

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Figure S1. Circular dichroism for homotrimeric triple helices of **D** and **K**. Thermal unfolding for (a) **D** and (b) **K** shows a linear decrease in ellipticity indicating that these peptides do not form triple helices.
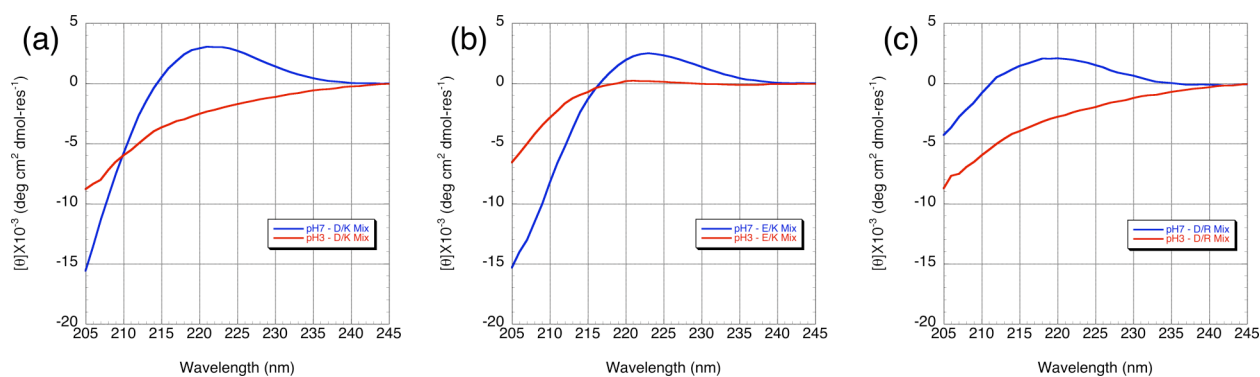

Figure S2. Circular dichroism analysis of peptide mixtures at pH7 and pH3. Triple helix formation is observed at pH7 and the assembly ceases to exist when the pH is lowered to 3. (a) **D**/**K** mixture. (b) **E**/**K** mixture. (c) **D**/**R** mixture.

All the peptides were purified by reverse phase HPLC using Microsorb C-18 column attached to a Varian Prostar system with a linear gradient of acetonitrile and water containing 0.5% TFA. Acetonitrile percent was increased at a rate of 3%/min. HPLC fractions were then analyzed by MALDI using Bruker autoflex II and a Prespotted Anchorchip PAC 384 HCCA (α-cyano-4-hydroxycinnamic acid). HPLC and MS data for **D** and **K** is presented here. The corresponding data for **E**, **R** and **O** has been reported previously. (Gauba and Hartgerink *J. Am. Chem. Soc.* **2007**, *129*, 2683-2690.)
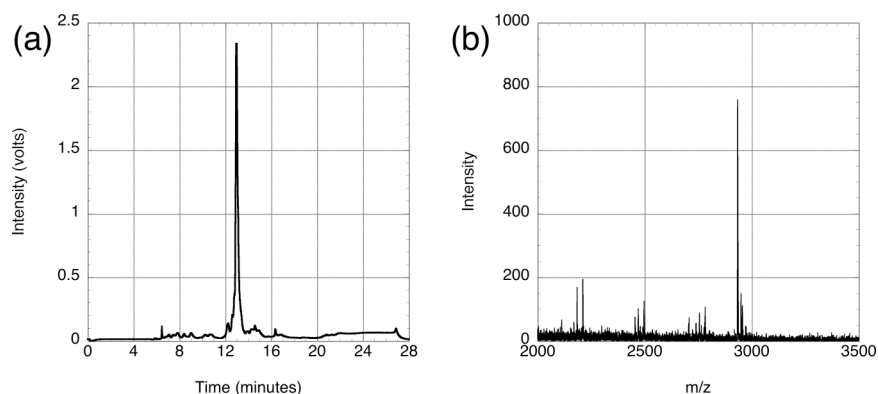
Figure S3. (a) HPLC and (b) MALDI-TOF MS data for **D**. Expected: 2932.98[Na$^+$], Observed: 2933.11[Na$^+$].
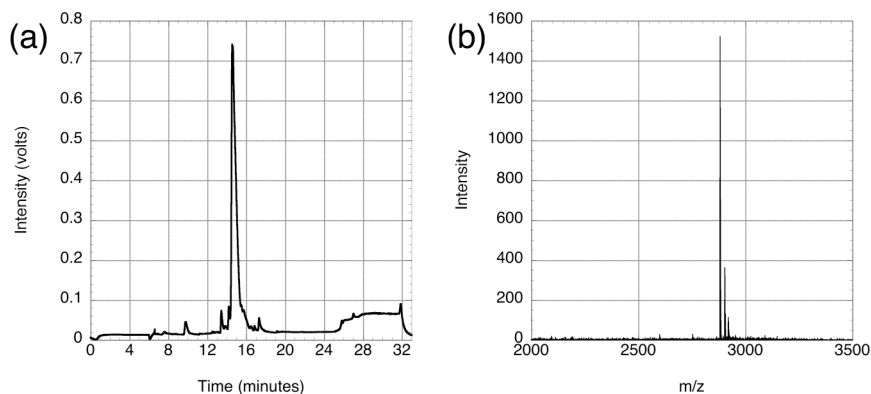
Figure S4. (a) HPLC and (b) MALDI-TOF MS data for **K**. Expected: 2881.73[H$^+$], Observed: 2881.79[H$^+$].