SUPPORTING INFORMATION

YVEFGLGAGAPGEPGNPGSPGNQGQPGNKGSPGNPGQPGNEGQPGQPGQNGQPGEPGSNGPQGS QGNPGKNGQPGSPGSQGSPGNQGSPGQPGNPGQPGEQGKPGNQGPAGEPGNPGSPGNQGQPGNK GSPGNPGQPGNEGQPGQPGQNGQPGEPGSNGPQGSQGNPGKNGQPGSPGSQGSPGNQGSPGQPG NPGQPGEQGKPGNQGPAGE (GAGAGAGH) "GAGAPGEPGNPGSPGNQGQPGNKGSPGNPGQPGNE GQPGQPGQNGQPGEPGSNGPQGSQGNPGKNGQPGSPGSQGSPGNQGSPGQPGNPGQPGNE MQGPAGEPGNPGSPGNQGQPGNKGSPGNPGQPGNEGQPGQPGQNGQPGEPGSNGPQGSQGNPGK NGQPGSPGSQGSPGNQGSPGQPGNPGQPGEQGKPGNQGPAGEGA

Figure S1: Amino acid sequence of protein polymers (n = 8, 16, 24 or 48) used in this study.



Figure S2: MALDI-TOF spectra of $C_2S_8^HC_2$ (a), $C_2S_{16}^HC_2$ (b) and $C_2S_{24}^HC_2$ (c). Each spectrum shows four peaks corresponding to the $(M + H)^+$, $(M + 2H)^{2+}$, $(M + 3H)^{3+}$ and $(M + 4H)^{4+}$.