Supporting information
for

Multi-responsive polypeptide hydrogels derived from N-carboxyanhydride terpolymerizations for delivery of nonsteroidal anti-inflammatory drugs (NSAIDs)

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Figure S1. Calculated number of repeat units as a function of theoretical number of repeat units of Ala, Gly and Ile in the polymers 1 - 5.

Figure S2. (a) Second derivative and (b) ATR-FTIR spectra (black), fitting curve (red), baseline (blue) and fitting peaks (green) for a hydrogel formed from polymer 1 in the solid state.
Figure S3. WAXS pattern of polymer 1 in the solid state.

Figure S4. DSC traces of polymer 1 in the solid state. In the DSC traces, the sample was heated from -100 °C to 200 °C, then cooled to -100 °C, each with a rate of 10 °C/min. The second heating and cooling traces are shown.
Figure S5. (a) FTIR spectra of H$_2$O and D$_2$O. (b) *In situ* FTIR spectrum of a hydrogel formed from polymer 1 in the gel state hydrated with D$_2$O.

Figure S6. Fiber width distribution in a hydrogel formed from polymer 1 obtained from the TEM image by counting 100 fibers.