

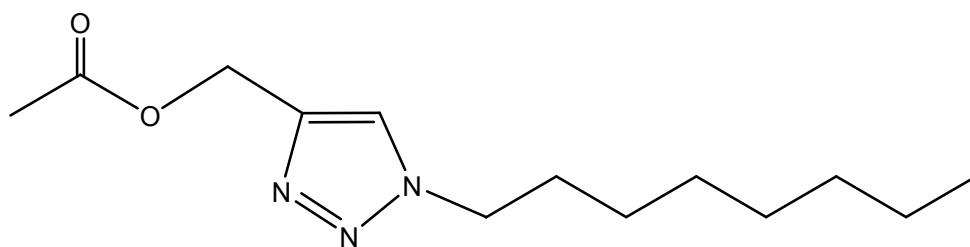
Supporting Information for:

“Clickable” Bacterial Poly(γ -Glutamic Acid)

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Compound S1



Propargyl acetate (147 mg, 1.5 mmol) was added to compound **7** (278 mg, 1.8 mmol) dissolved in 10 mL of DMF. CuSO₄ (49 mg, 0.3 mmol), Na Ascorbate (120 mg, 0.6 mmol), and, slowly, 1 mL of H₂O, 10% relative to the solvent, were added to the solution. The solution was stirred for 18 h at room temperature. H₂O (20 mL) were added to the mixture and it was then extracted with AcOEt (3x25 mL), dried with Na₂SO₄, filtered and evaporated. The product was purified using column chromatography (SiO₂; hexane/AcOEt: 7/3) to give **S1** as a yellowish solid (335 mg, 88%). ¹H NMR (CD₃SOCD₃, 200 MHz) δ = 8.13 (s, 1H; -CH- triazole), 5.08 (s, 2H; -COOCH₂-), 4.33 (t, 2H; -NCH₂-), 2.01 (s, 3H; CH₃COO-), 1.81 (m, 2H; -CH₂CH₂N-), 1.23 (s, 10H; -CH₂CH₂- chain), 0.84 (t, 3H; CH₃CH₂-). ¹³C NMR (CD₃SOCD₃, 75 MHz) δ = 170.1 (C=O), 141.7 (C_{quat}), 124.5 (CH triazole), 57.1 (CH₂), 49.3 (CH₂), 31.1 (CH₂), 29.6 (CH₂), 28.5 (CH₂), 28.3 (CH₂), 25.8 (CH₂), 22.0 (CH₂), 20.6 (CH₃), 13.9 (CH₃).

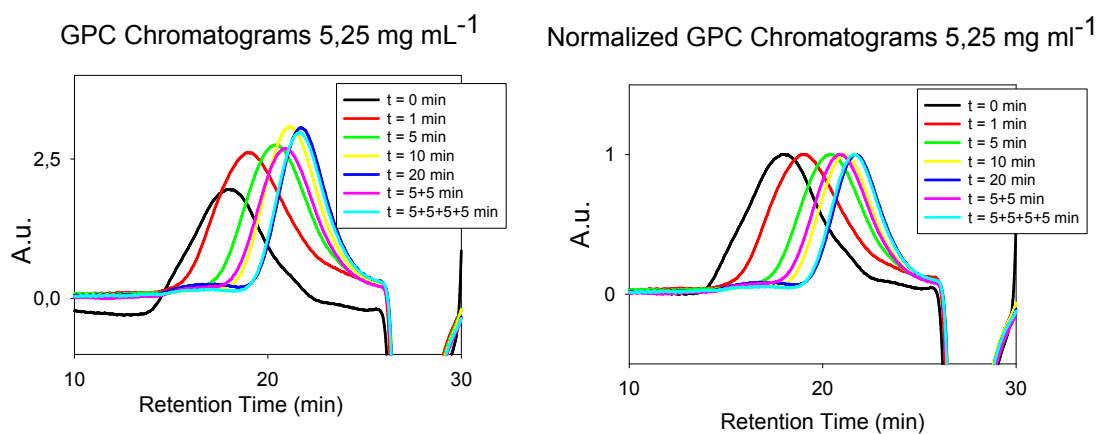


Figure S1. GPC chromatograms (right: original traces, and left: normalized traces with respect to polymeric peak height) as a function of sonication time for a γ -PGA solution (0.033 M in H_2O).

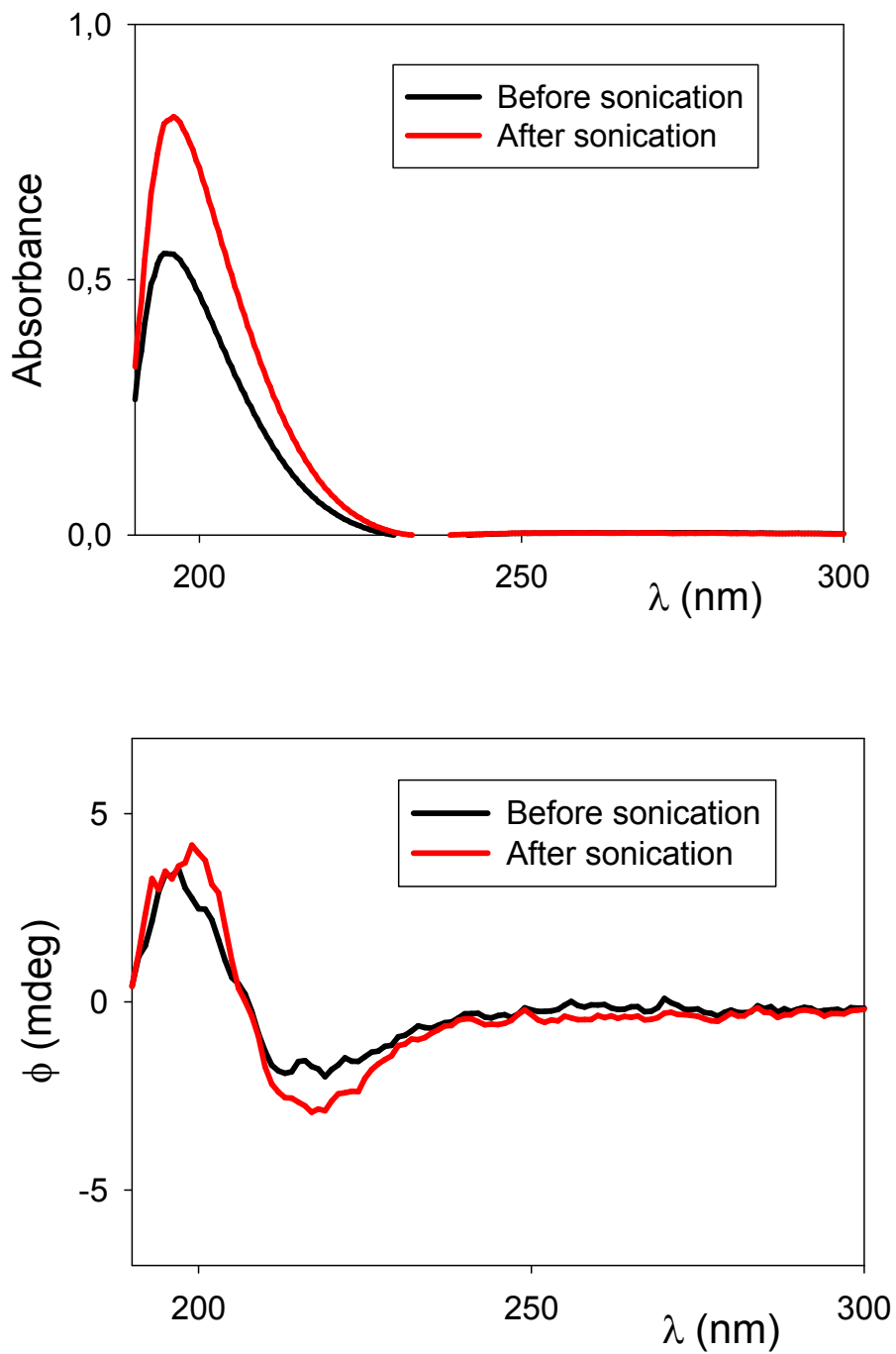


Figure S2. UV spectra (top) and CD spectra (bottom) of a γ -PGA solution (0.0002 M in H₂O) before and after sonication.

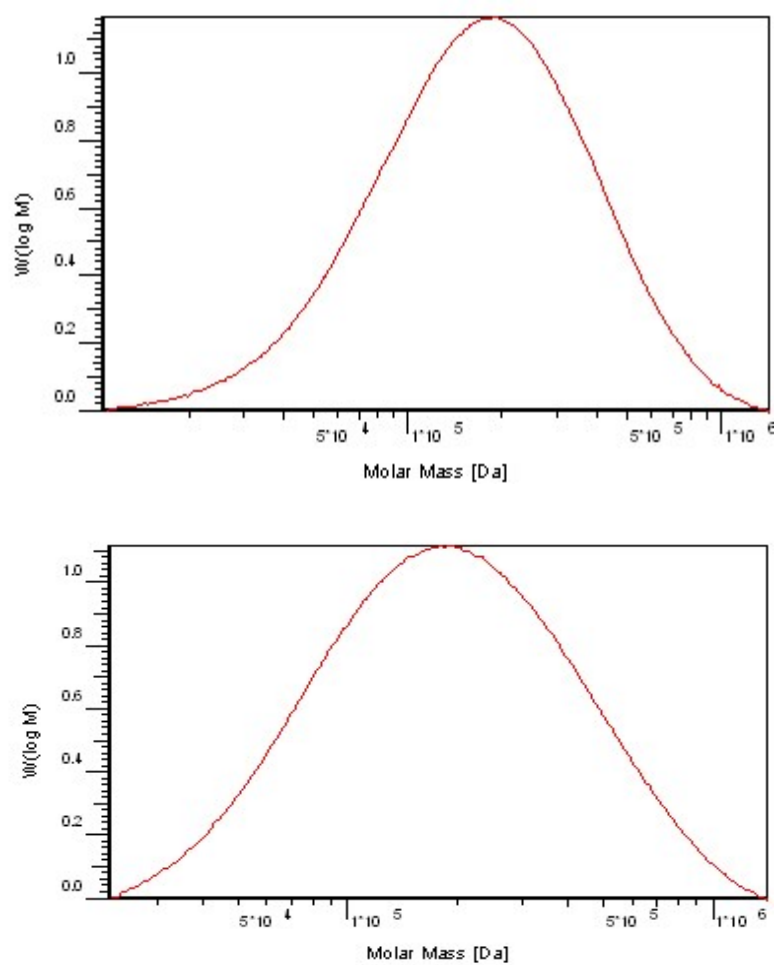
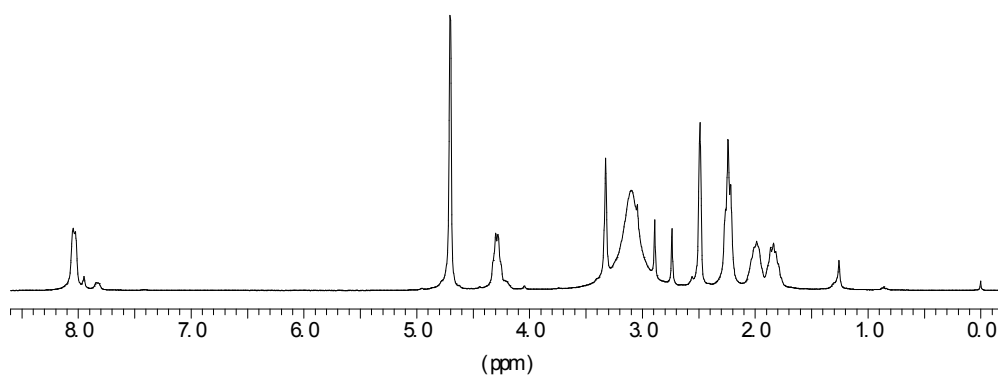
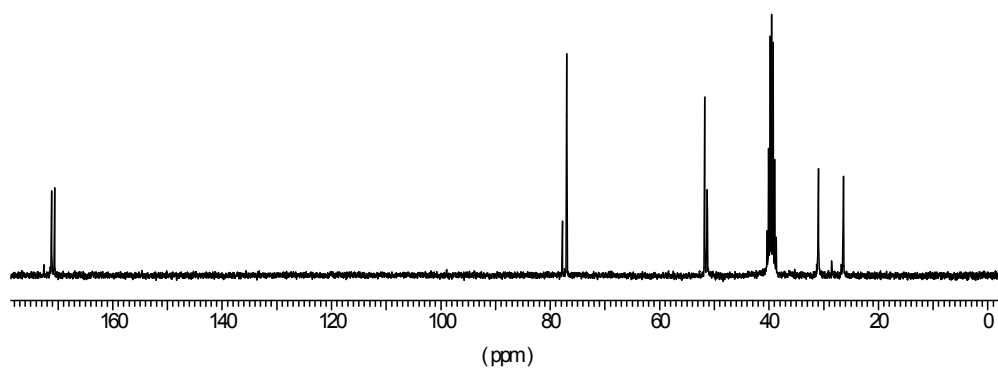


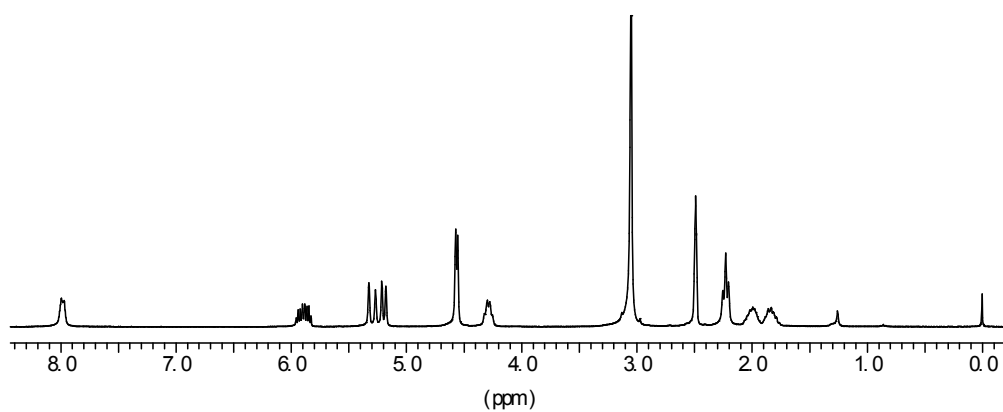
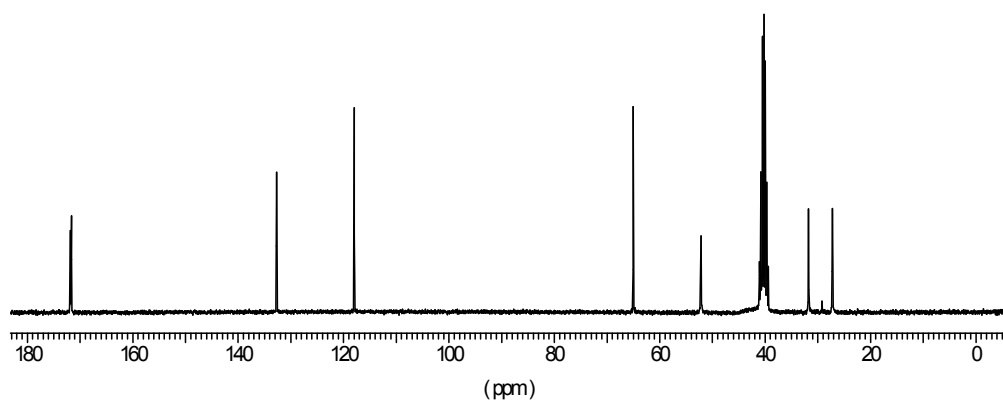
Figure S3. Representative GPC traces (DMAc) of samples **3d** (top) and **8** (bottom)

Copies of NMR Spectra for Polymers.

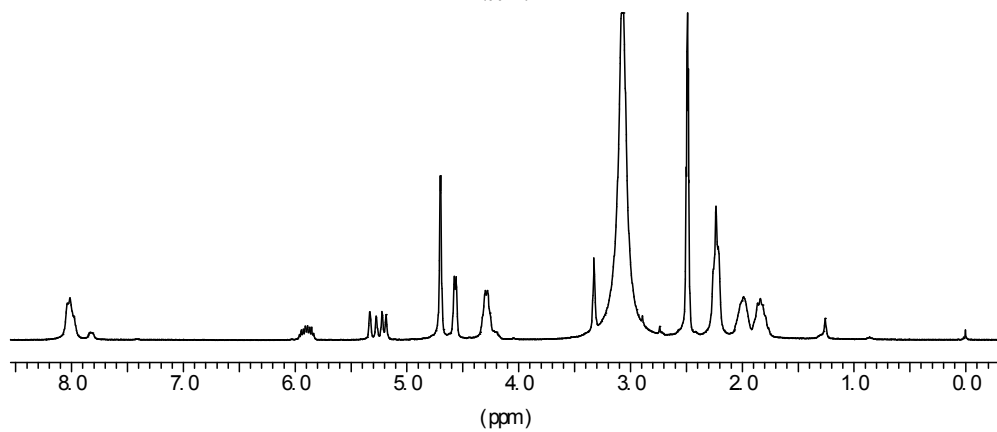
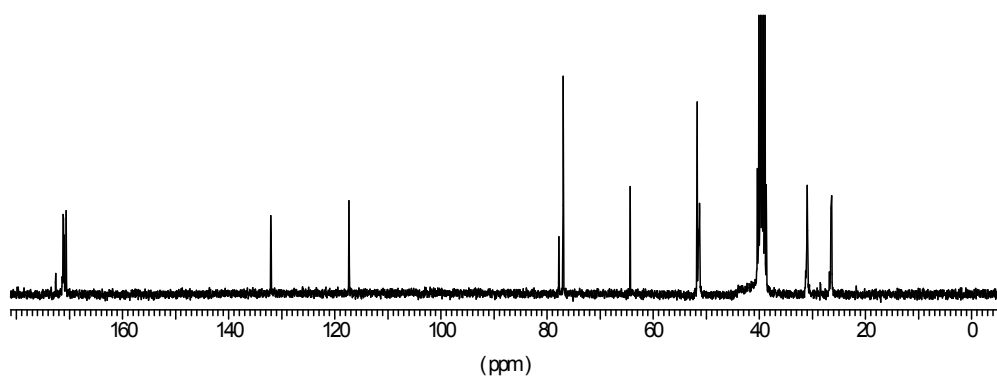
Polymer 3d



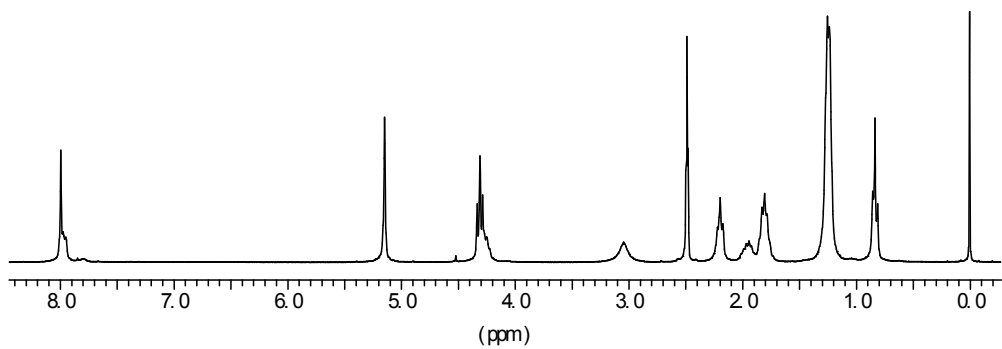
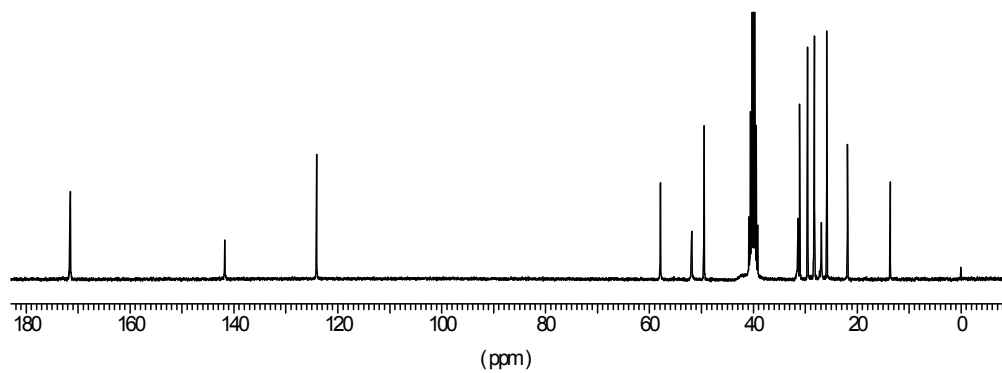
Polymer 5



Polymer 6



Polymer 8



Compound S1

