

Supporting Information

Functional Lactide Monomers: Methodology and Polymerization

*Warren W. Gerhardt¹, David E. Noga¹, Kenneth I. Hardcastle³, Andrés J. García²,
David M. Collard^{1,*}, and Marcus Weck^{1,*}*

*¹School of Chemistry and Biochemistry and ²Woodruff School of Mechanical Engineering and
Institute for Bioengineering and Bioscience, Georgia Institute of Technology, Atlanta, Georgia
30332-0400*

*³X-Ray Crystallographic Center, Department of Chemistry, Emory University,
Atlanta, GA 30322*

General Experimental Details.

H-Ser (Benzyl)-OH was purchased from Indofine Chemical Company. H-Glu(O-Benzyl)-OH was purchased from 3B Medical Systems. H-Lys(Z)-OH was purchased from Fluka. N,N-Diisopropylethyl amine (DIEA) was distilled from CaH₂. Diethyl ether and benzene were distilled from metallic sodium and benzophenone, acetone from 4Å molecular sieves, and CH₂Cl₂ was dried via passage through Cu₂O and alumina columns. All anhydrous liquids brought into the nitrogen-filled glove box were first degassed with three freeze-pump-thaw cycles using liquid nitrogen at 50 mmHg. Chromatography was performed with Sorbent Tech

Premium Grade silica: porosity 60 Å, particle size 40-75 µm (200×400 mesh), surface area 450-550 m²/g, pH range 6-8., decomposition of cyclic monomer **1** was observed during chromatography using Sorbent Tech Standard Grade silica: porosity 60 Å, particle size 32-63 µm (230×450 mesh), surface area 500-600 m²/g, pH range 6.5-7.5. Compounds were analyzed by use of UV light (254 nm), I₂, or a 5% solution of ammonium molybdate in 2 M sulfuric acid. Chemical shifts are reported in parts per million (ppm), using residual solvent as an internal standard.