

Supporting Information

Folding Construction of Doubly-fused Tricyclic, β - and γ -Graph Polymer Topologies with *kyklo*-Telechelic Precursors Obtained through An Orthogonal Click/ESA-CF Protocol

Masahito Igari, Hiroyuki Heguri, Takuya Yamamoto, and Yasuyuki Tezuka*

Department of Organic and Polymeric Materials, Tokyo Institute of Technology, O-okayama,

Meguro-ku, Tokyo 152-8552, Japan

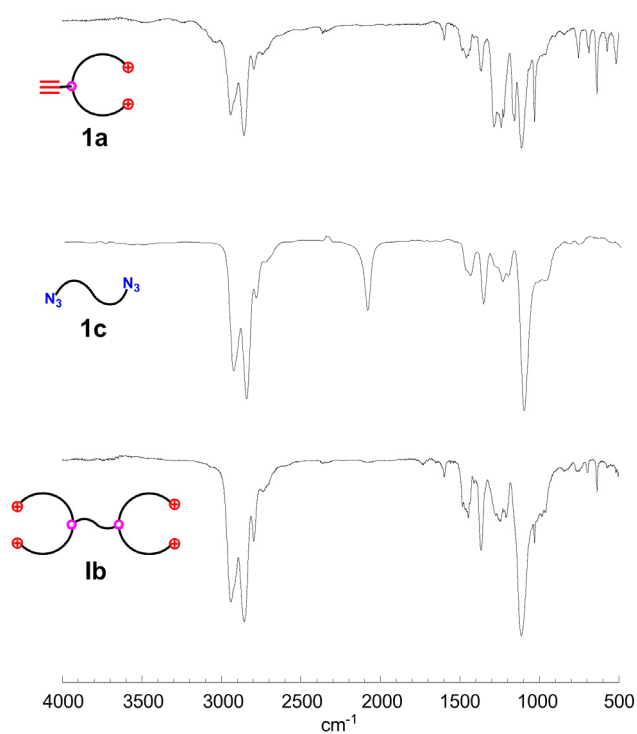


Figure S1. IR spectra of (top) **1a**/CF₃SO₃⁻, (middle) **1c**, and (bottom) **1b**/CF₃SO₃⁻.

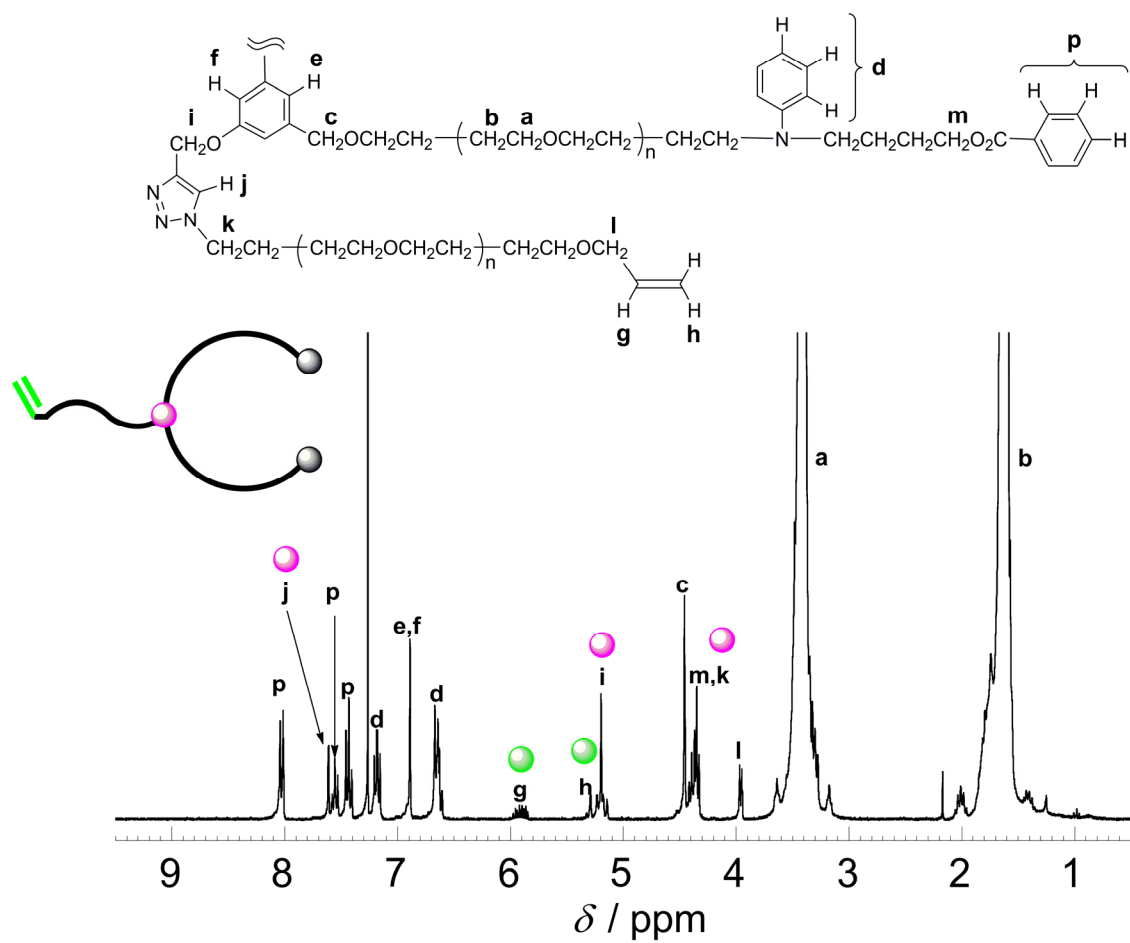


Figure S2. 300 MHz ¹H NMR spectra of **1a**, measured after the covalent conversion of *N*-phenylpyrrolidinium salt end groups by the ring-opening reaction with a benzoate anion. (CDCl₃, 40 °C)

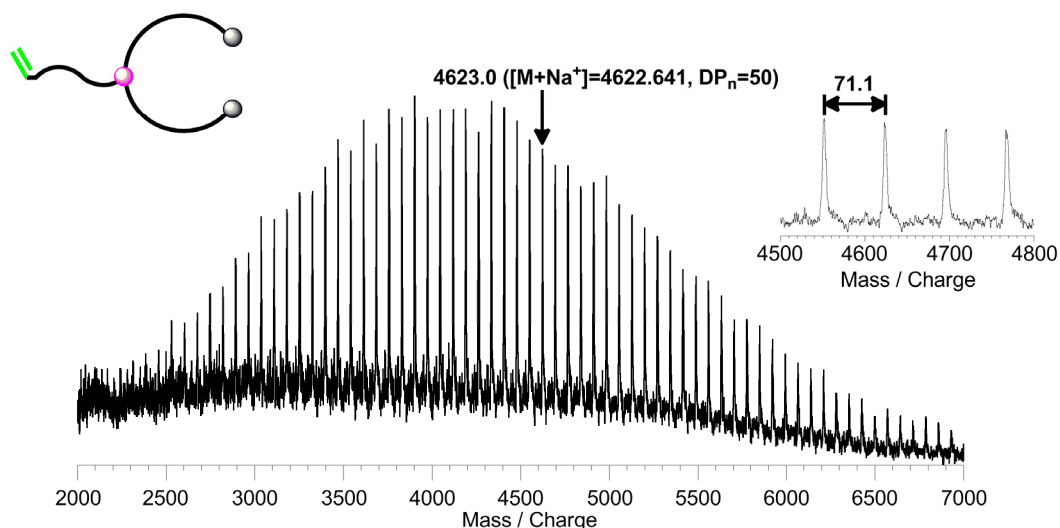


Figure S3. MALDI-TOF mass spectra of **Ia**, measured after the covalent conversion of *N*-phenylpyrrolidinium salt end groups by the ring-opening reaction with a benzoate anion. (Linear mode, matrix: dithranol with sodium trifluoroacetate. DP_n denotes the number of monomer units in the product.)

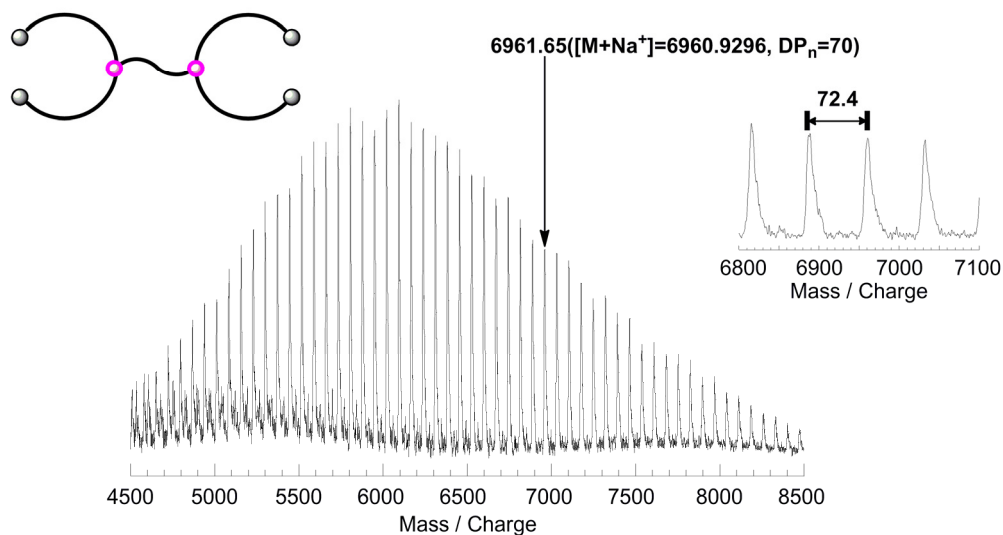


Figure S4. MALDI-TOF mass spectra of **Ib**, measured after the covalent conversion of *N*-phenylpyrrolidinium salt end groups by the ring-opening reaction with a benzoate anion. (Linear mode, matrix: dithranol with sodium trifluoroacetate. DP_n denotes the number of monomer units in the product.)

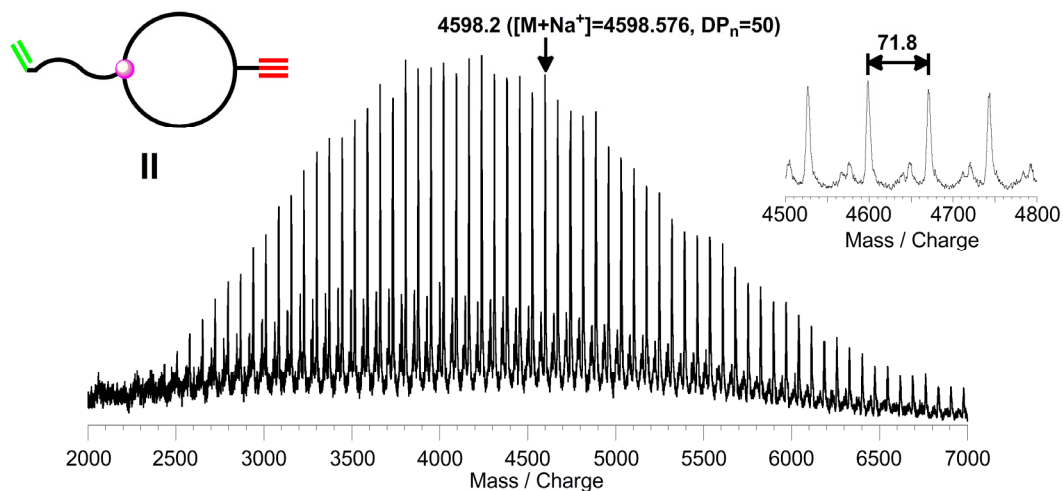


Figure S5. MALDI-TOF mass spectra of **II**. (Linear mode, matrix: dithranol with sodium trifluoroacetate. DP_n denotes the number of monomer units in the product.)

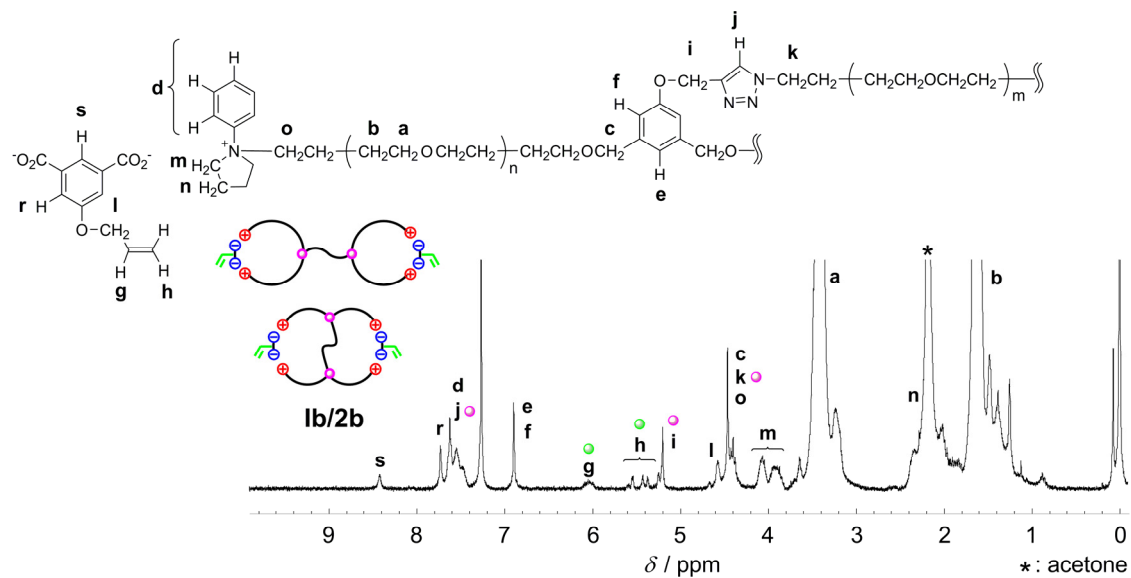


Figure S6. 300 MHz 1H NMR spectra of **Ib/2b**. ($CDCl_3$, 40 $^{\circ}C$)