## **Supplementary Information**

for

## Syntheses of hyperbranched liquid crystalline biopolymers with strong adhesion from phenolic phytomonomers

Siqian Wang, Daisaku Kaneko, Kai Kan, Xin Jin, and Tatsuo Kaneko\*

School of Materials Science, Japan Advanced Institute of Science and Technology, 1-1Asahidai, Nomi, Ishikawa 923-1292, Japan

Tel:+81-761-51-1633, Fax:Tel:+81-761-51-1635, E-mail:kaneko@jaist.ac.jp



Fig. S1 Representative infrared spectra of (a) MHCA. (b) poly(DHCA-co-MHCA) with an in-feed MHCA composition of 60% . (c) DHCA



Fig. S2.  $T_g$  versus polymerization time in poly(DHCA-*co*-MHCA) with an in-feed MHCA composition, C<sub>MHCA</sub>, of 60 mol%



**Fig. S3** Representative curve of differential scanning calorimetry (DSC) for poly(MHCA-*co*-DHCA) with a  $C_{HHCA}$  of 60 % prepared in the presence of Na<sub>2</sub>HPO<sub>4</sub> (1 w%) at 200 °C, 8h.



**Fig. S4** Thermogravimetric curves of poly(DHCA-*co*-MHCA)s with various MHCA compositions.