Supplementary Material (ESI) for Polymer Chemistry

Supplementary Information for:

Hyperbranched 5,6-Glucan as Reducing Sugar ball

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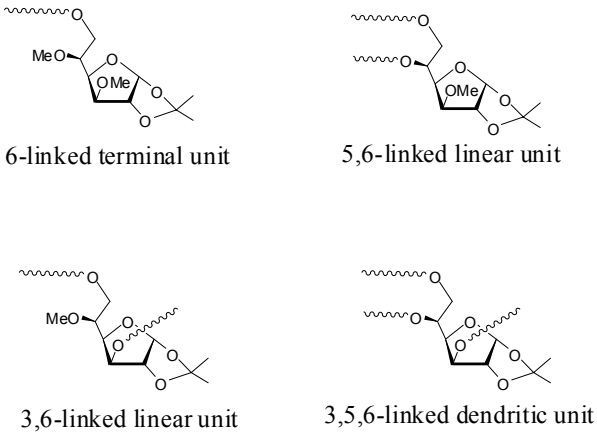

Fig. S1. Possible repeating units in polymer **4**.

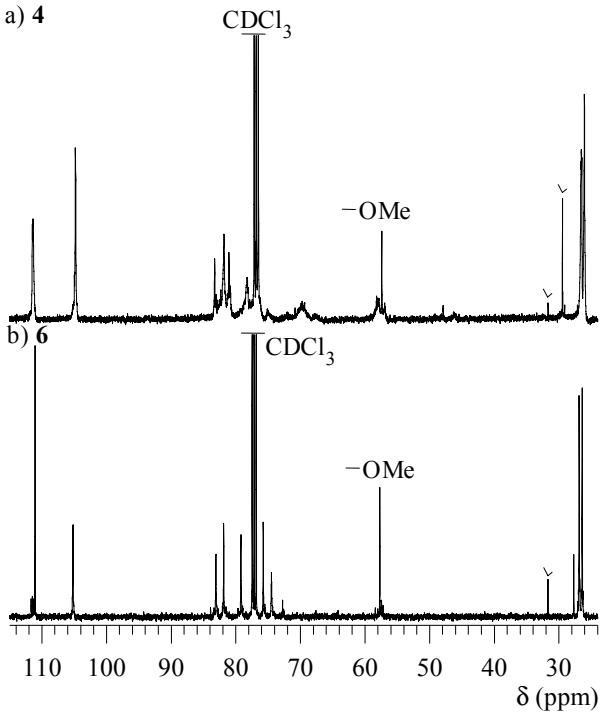

Fig. S2. ^{13}C NMR spectra of a) polymer **4** and b) polymer **6** in $CDCl_3$ (TMS as internal standard).

Fig. S3. Demonstration (run 1 in Fig 14) of the formation of gold particles using polymer **3** (entry 8). The left vial contains polymer **3** (46 unit-mmol·L^{-1}, 1.8 mL) and $HAuCl_4$ aqueous solution (0.01 mol·L^{-1}, 6.67μL) at 70 °C (after 150-min mixing), while the right vial is the control experiment in the absence of polymer **3**.

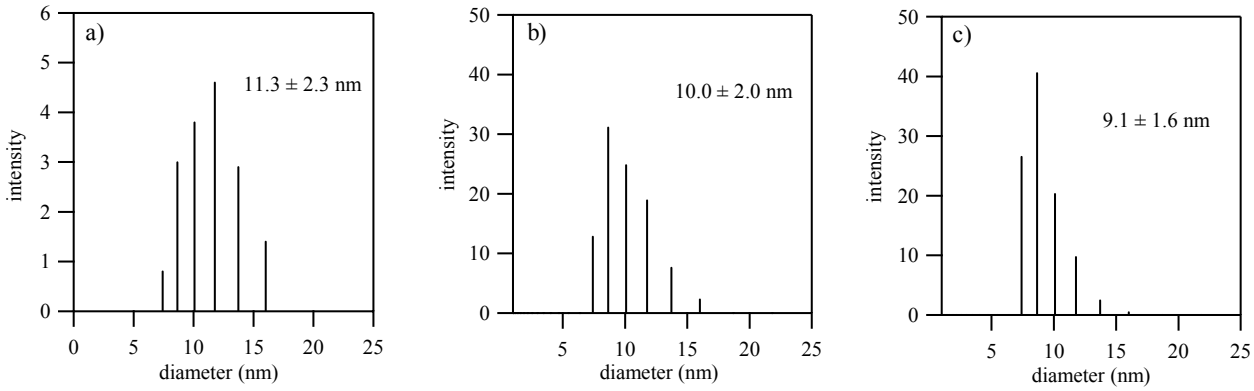

Fig. S4. Particle size distribution and average hydrodynamic diameter estimated by dynamic light scattering (DLS) measurements of run 2 in Fig 14. a) scatter average hydrodynamic diameter, b) weight average hydrodynamic diameter, and c) number average hydrodynamic diameter calculated using the histogram methods including the Marquadt analysis.

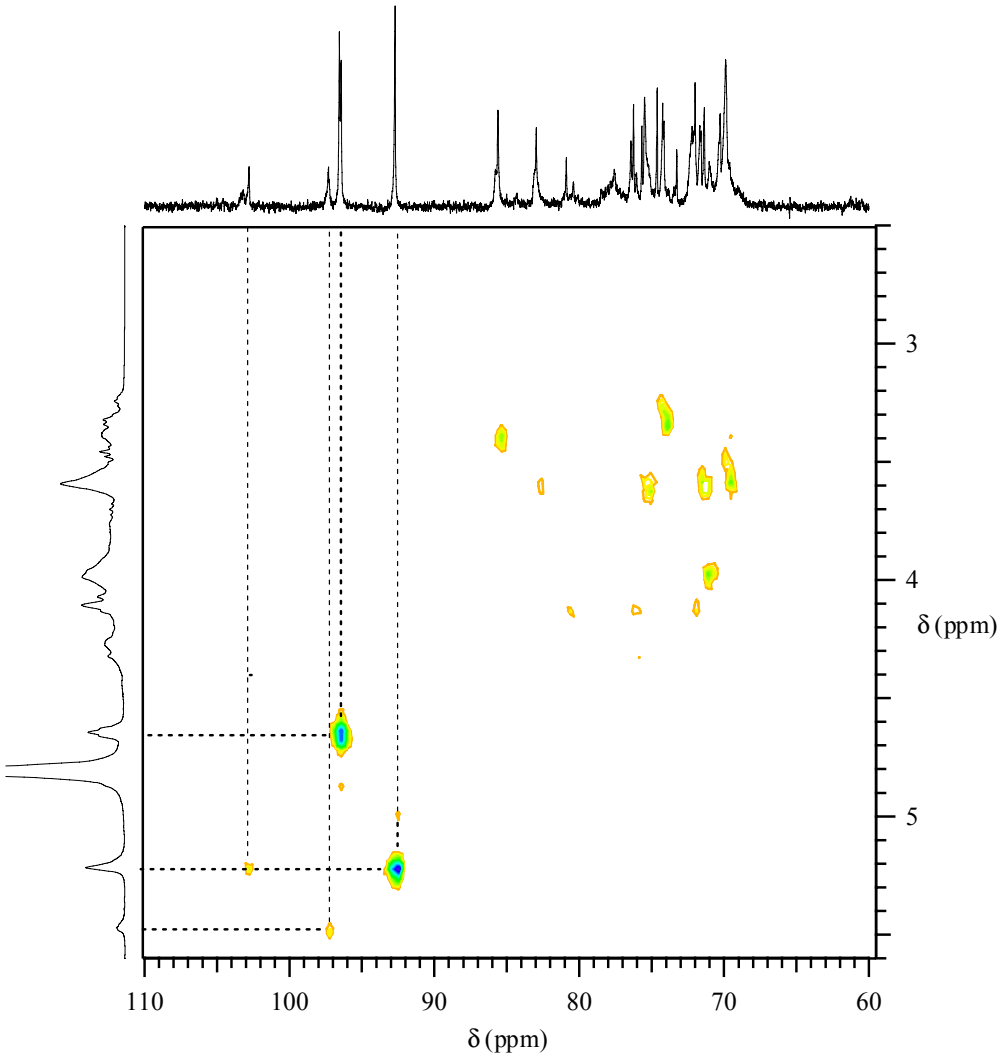

Fig. S5. C-H COSY spectrum of polymer **3** (entry 8) in D_2O (acetone as internal standard).