# The Solution Properties of Polymethacrylate Molecular Brushes with Oligo(ethylene glycol) and Oligo(propylene glycol) Side Chains

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The Figures S1-S3 show the spectra of the purified polymers. As can be seen from Figure S1, the purified polymers contain very few residual monomers. Their content can be approximately estimated based on the integral intensity of the signals for the vinyl protons (m) of the monomer and the methine group (c) in the polymer:

Resid. mon.=m/(m+c)= 1/(1+155.99)=0.006 (0.6%).
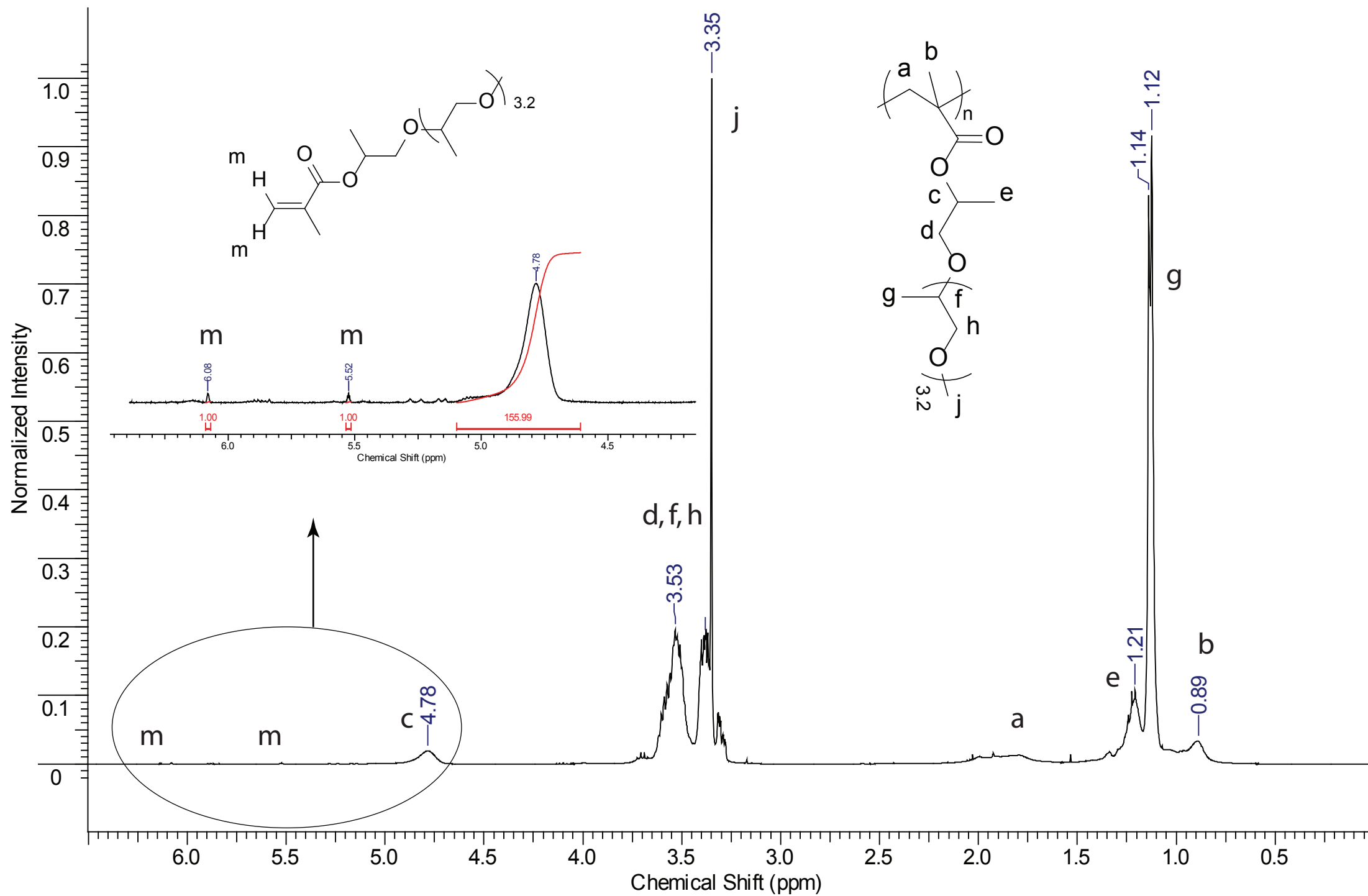
Fig. S1. $^1$H NMR spectrum of pPM
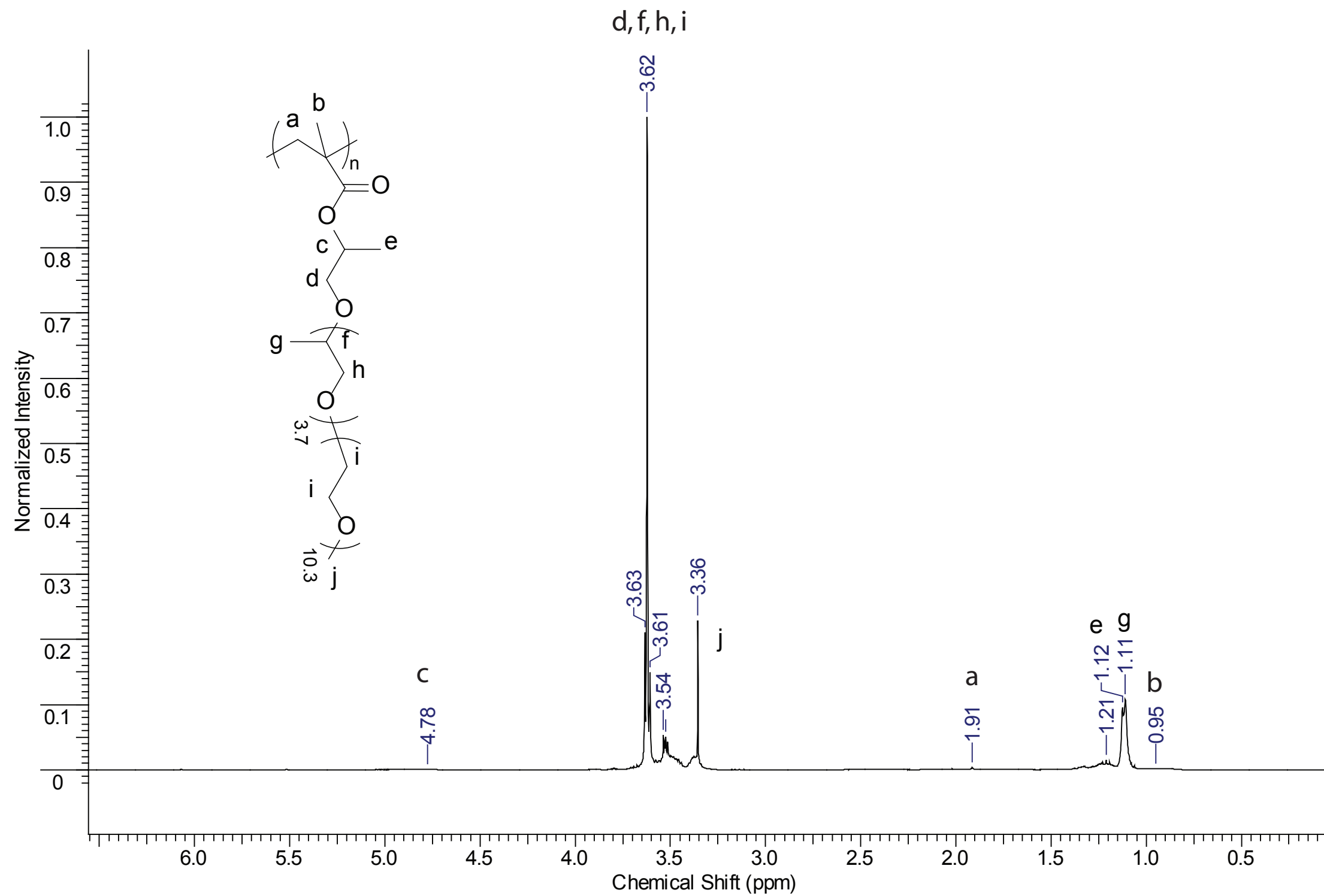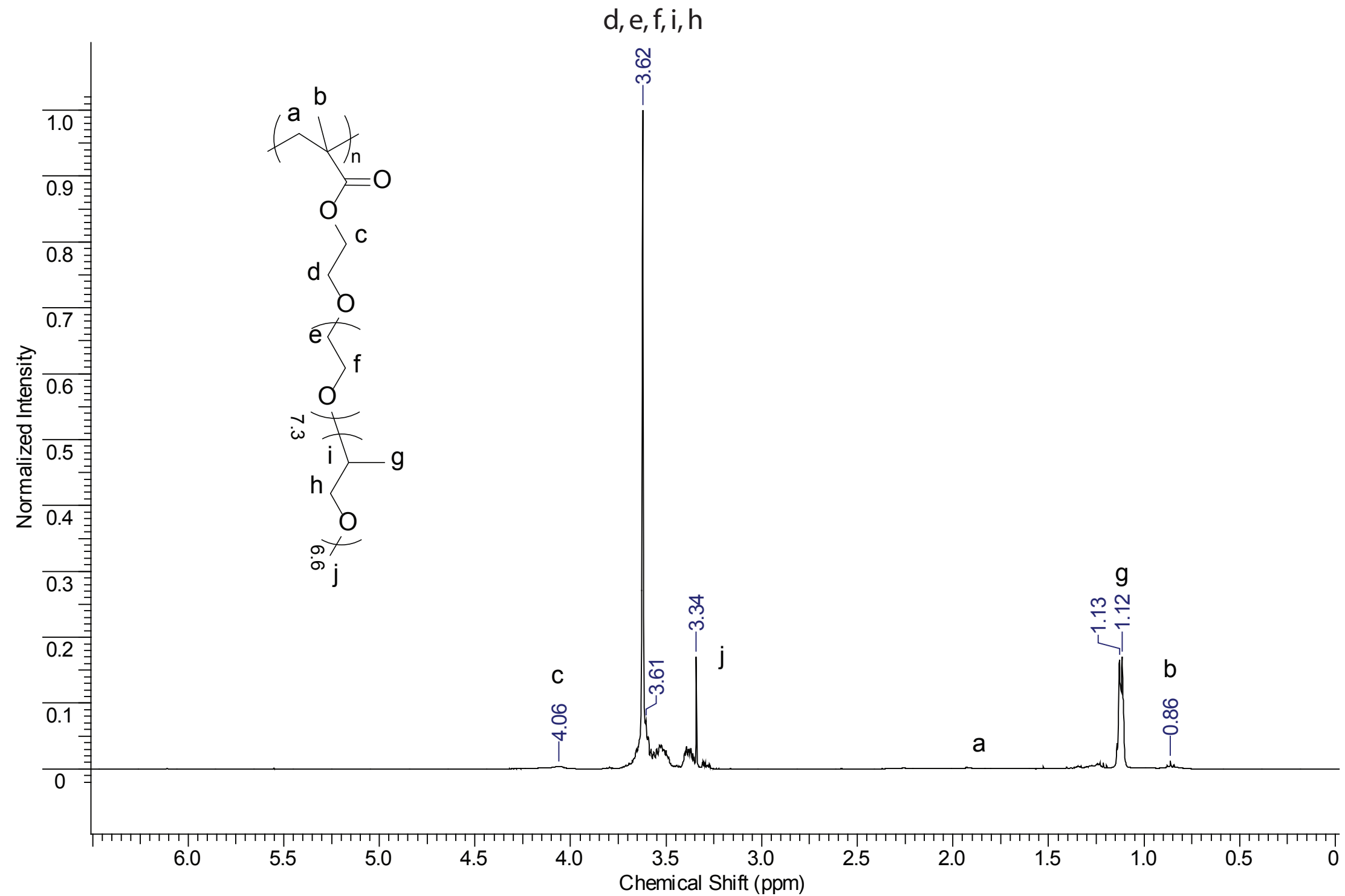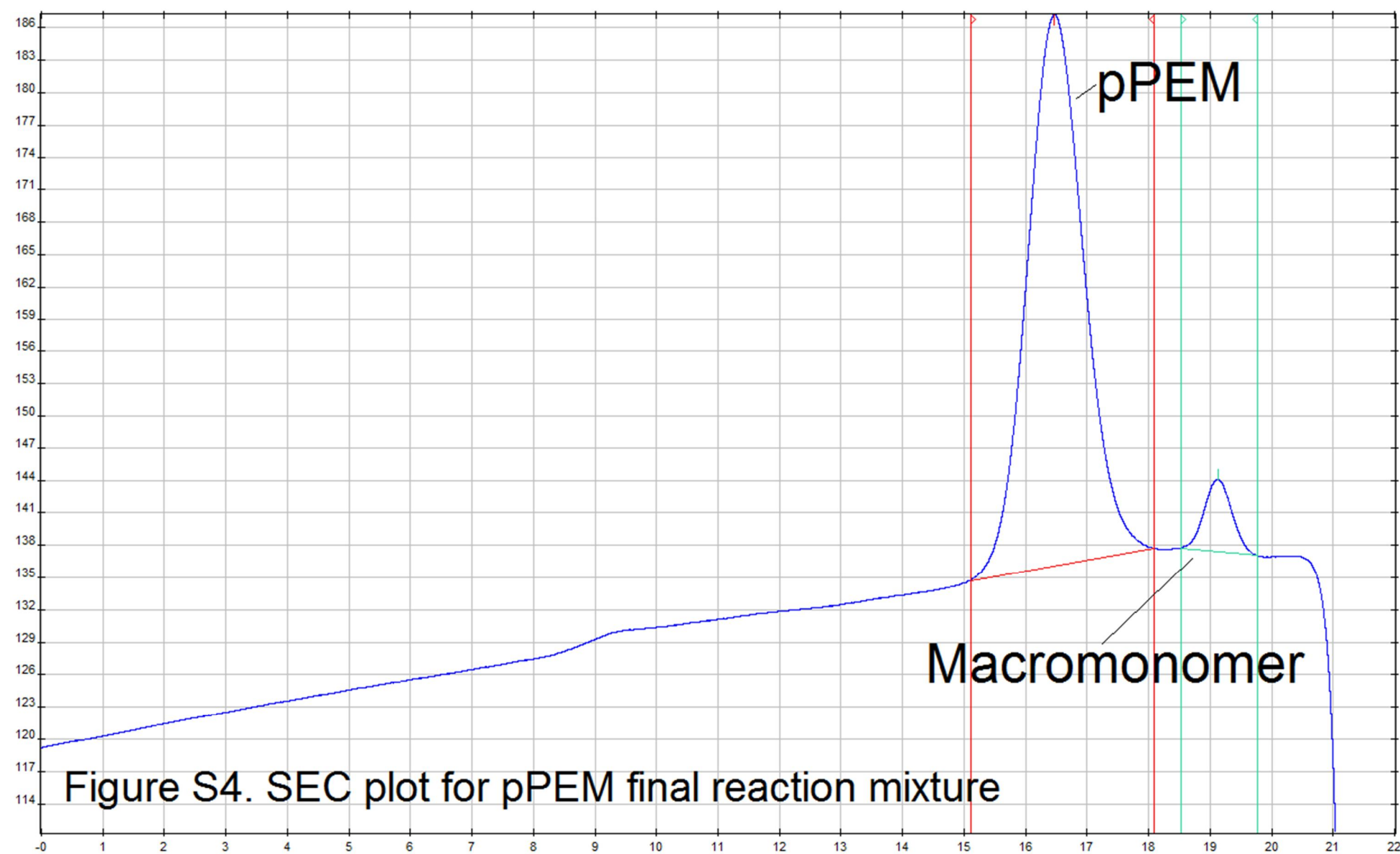
Fig. S2. $^1$H NMR spectrum of pEPM

Fig. S3. $^1$H NMR spectrum of pPEM

Figure S4. SEC plot for pPEM final reaction mixture