Electronic supporting information for

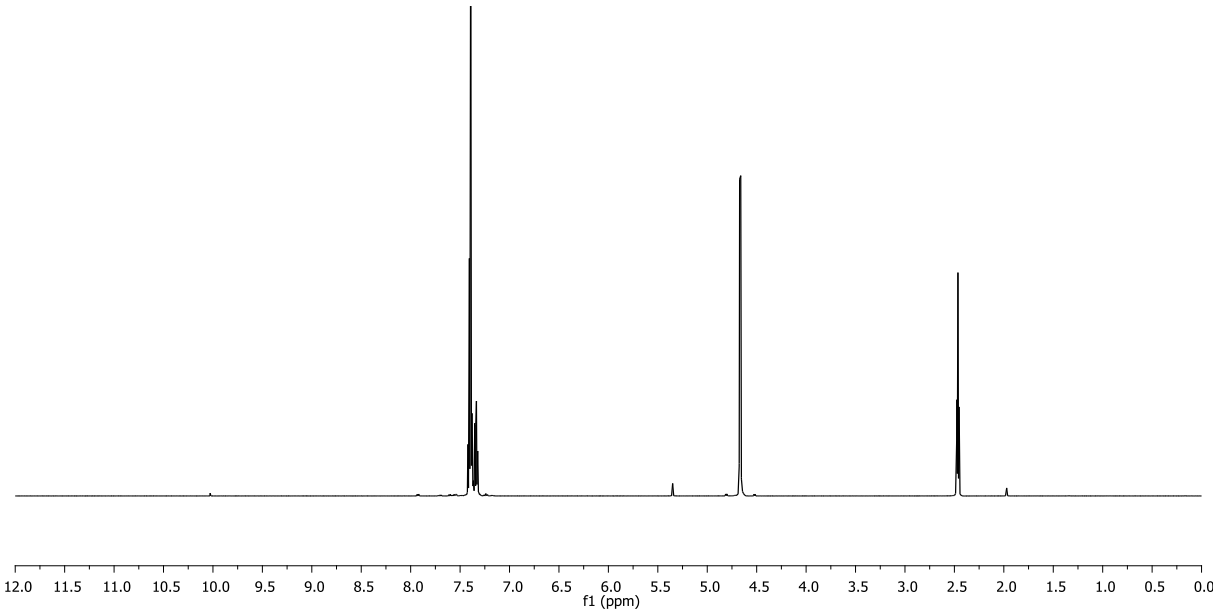
Alkali aminoether-phenolate complexes: Synthesis, structural characterization and evidences for an activated monomer ROP mechanism†

Sorin C. Roşca,[a] Dragoş A. Roşca,[a,b] Vincent Dorcet,[a] Christopher M. Kozak,[c]

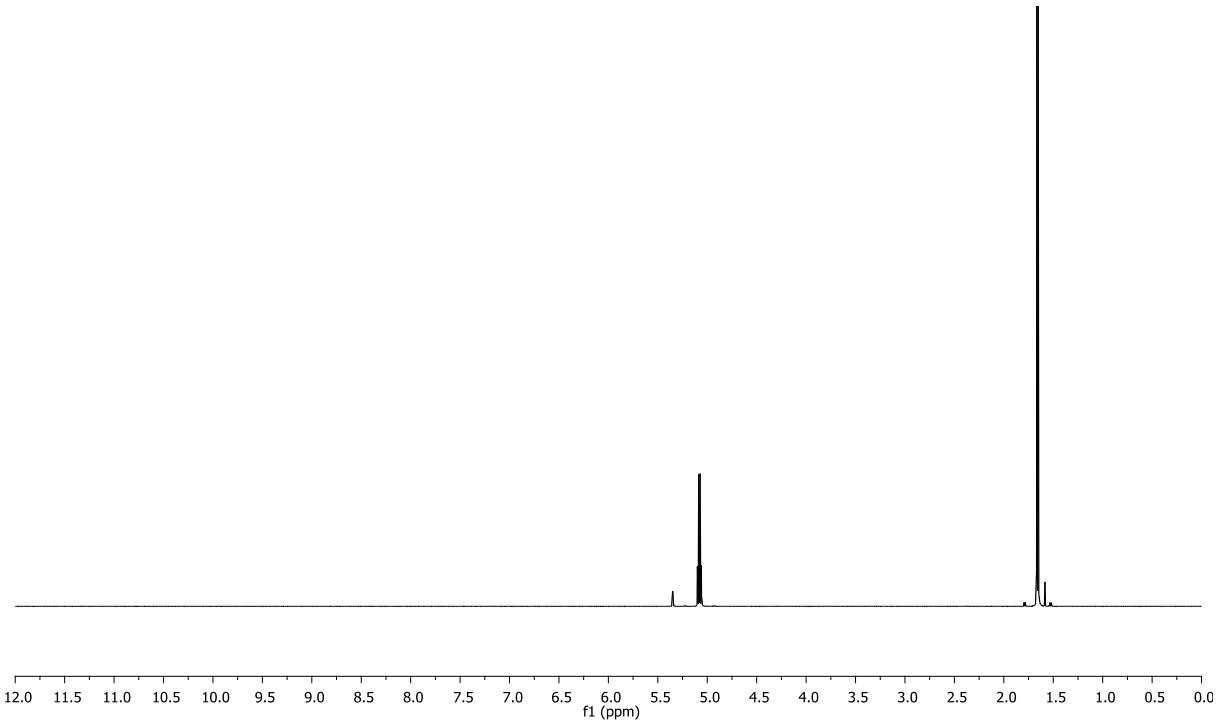
Francesca M. Kerton,[c] Jean-François Carpentier*[a] and Yann Sarazin*[a]

Contents

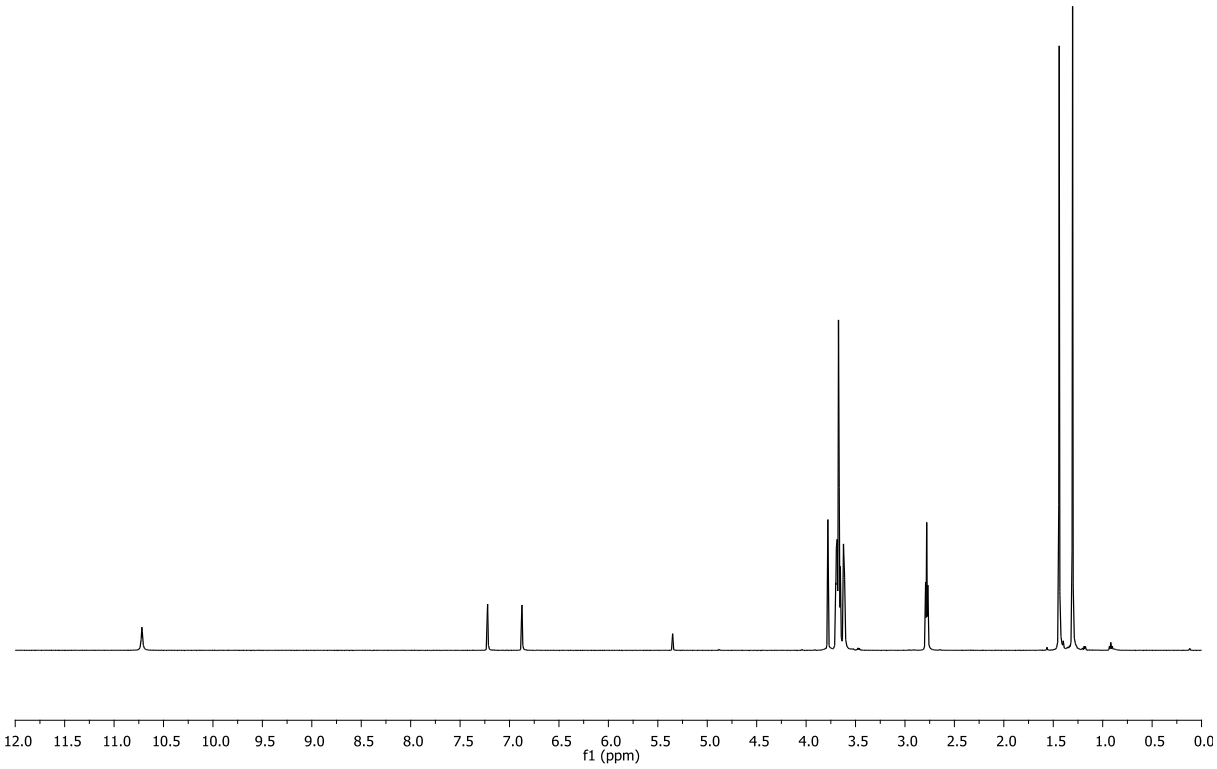
S1. ^{1}H NMR spectrum (0-12 ppm) of BnOH in CD_2Cl_2 (500.13 MHz, 298 K)



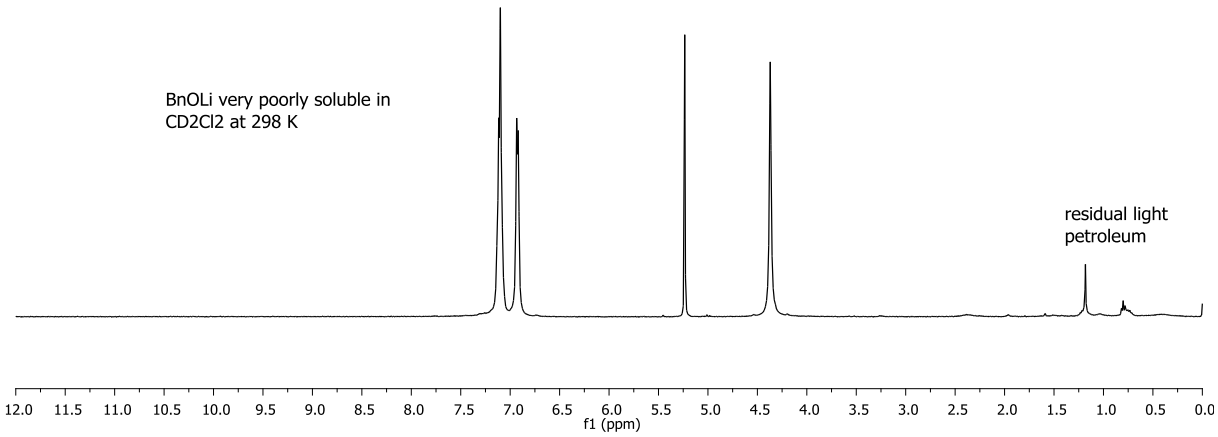
S2. ^{1}H NMR spectrum (0-12 ppm) of L-LA in CD_2Cl_2 (500.13 MHz, 298 K)



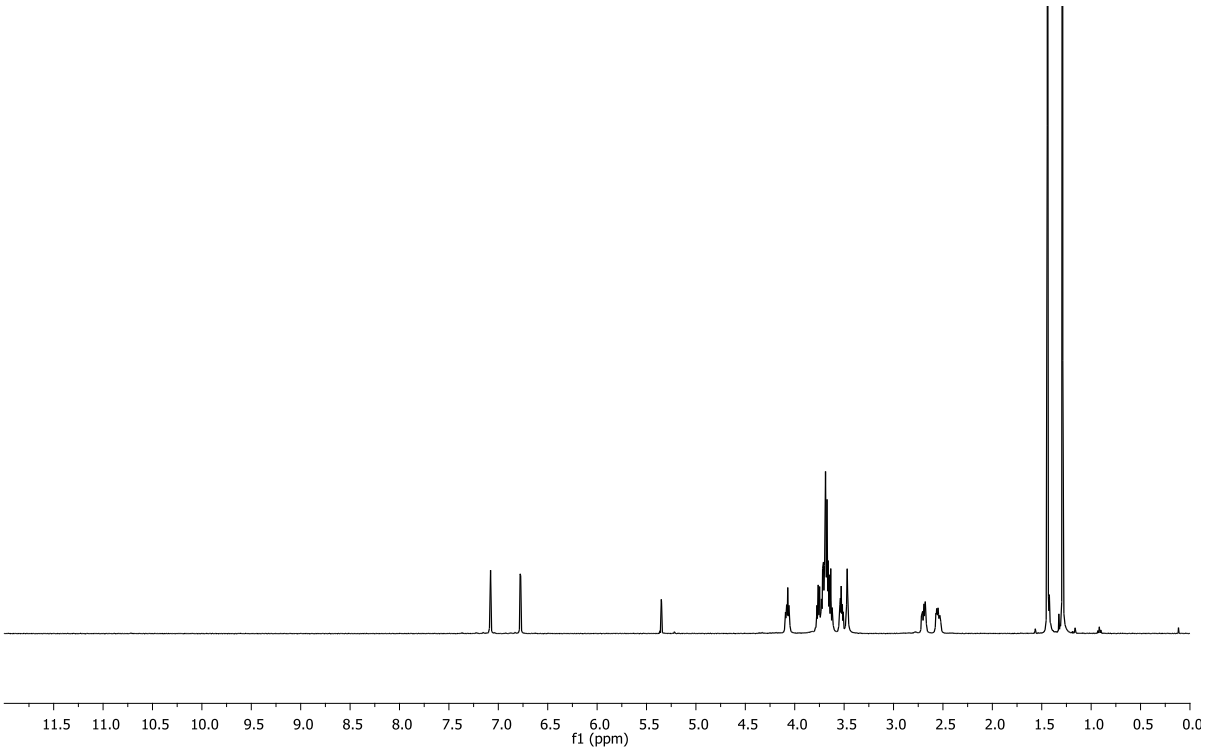
S3. ^{1}H NMR spectrum (0-12 ppm) of {LO^{3}}H in CD_2Cl_2 (500.13 MHz, 298 K)



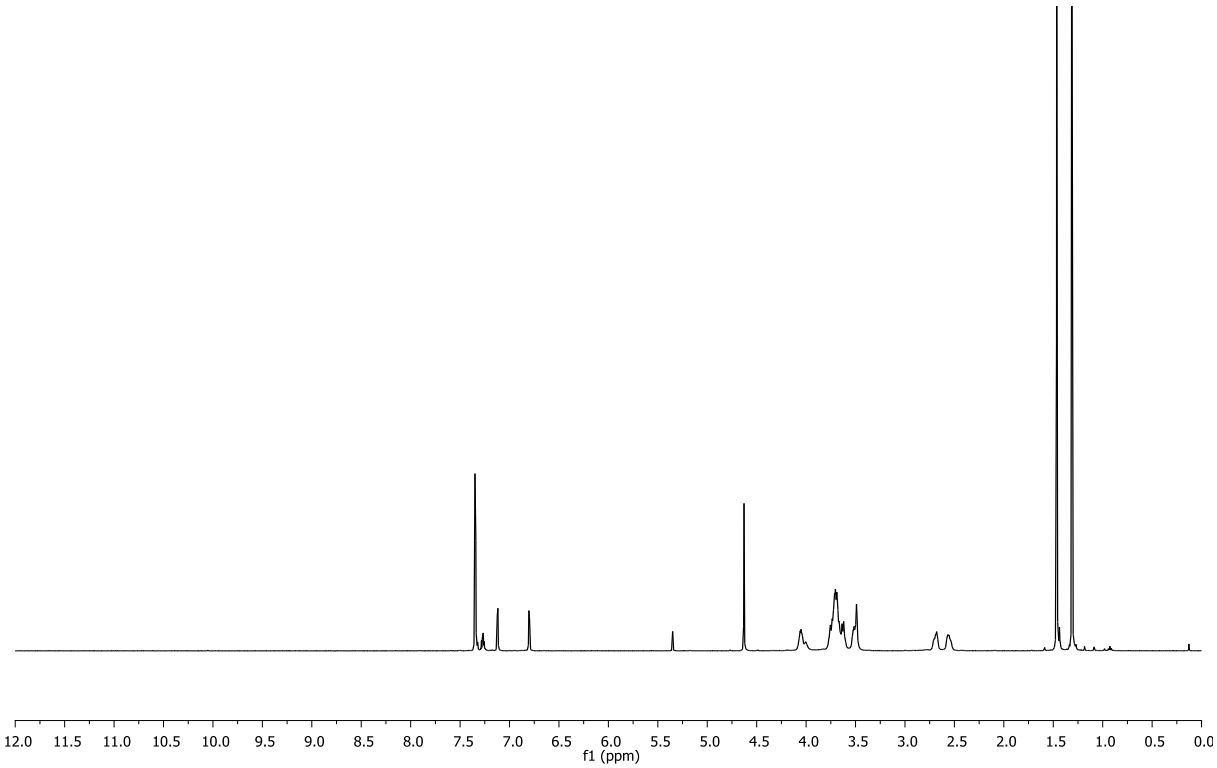
S4. ^{1}H NMR spectrum (0-12 ppm) of BnOLi in CD_2Cl_2 (500.13 MHz, 298 K)



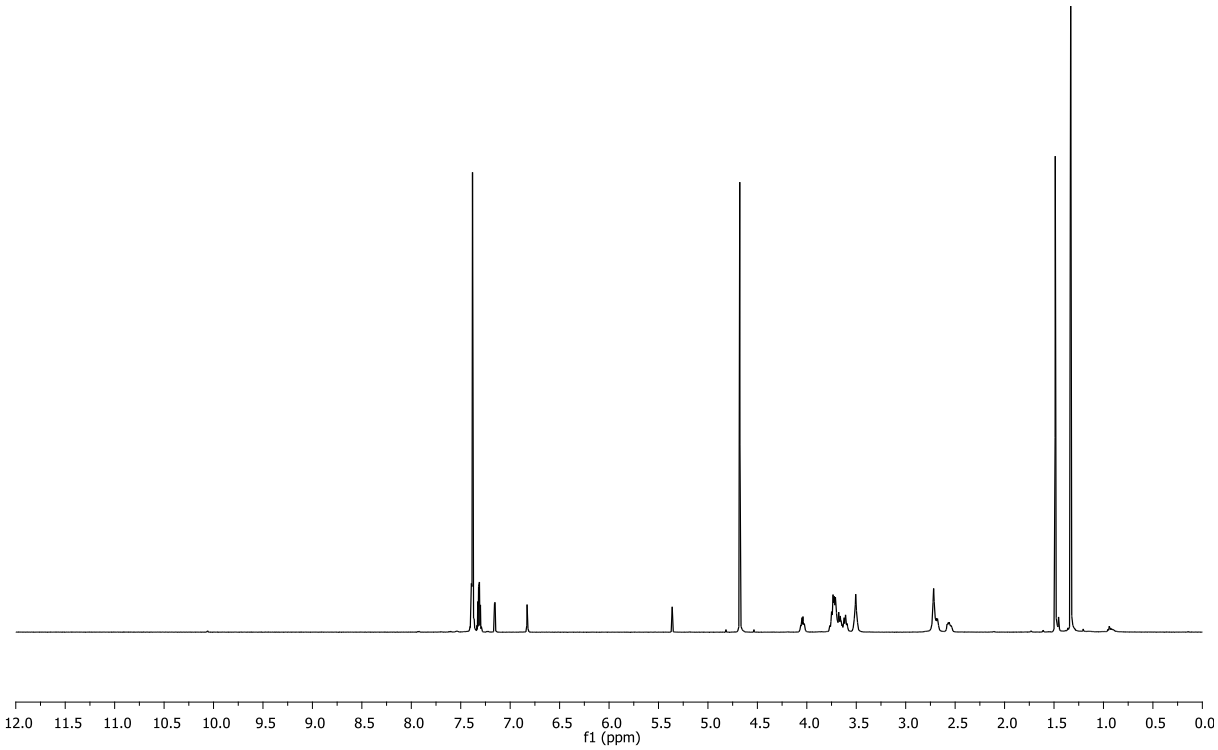
S5. ^{1}H NMR spectrum (0-12 ppm) of {LO^{3}}Li (**3**) in CD_2Cl_2 (500.13 MHz, 298 K)



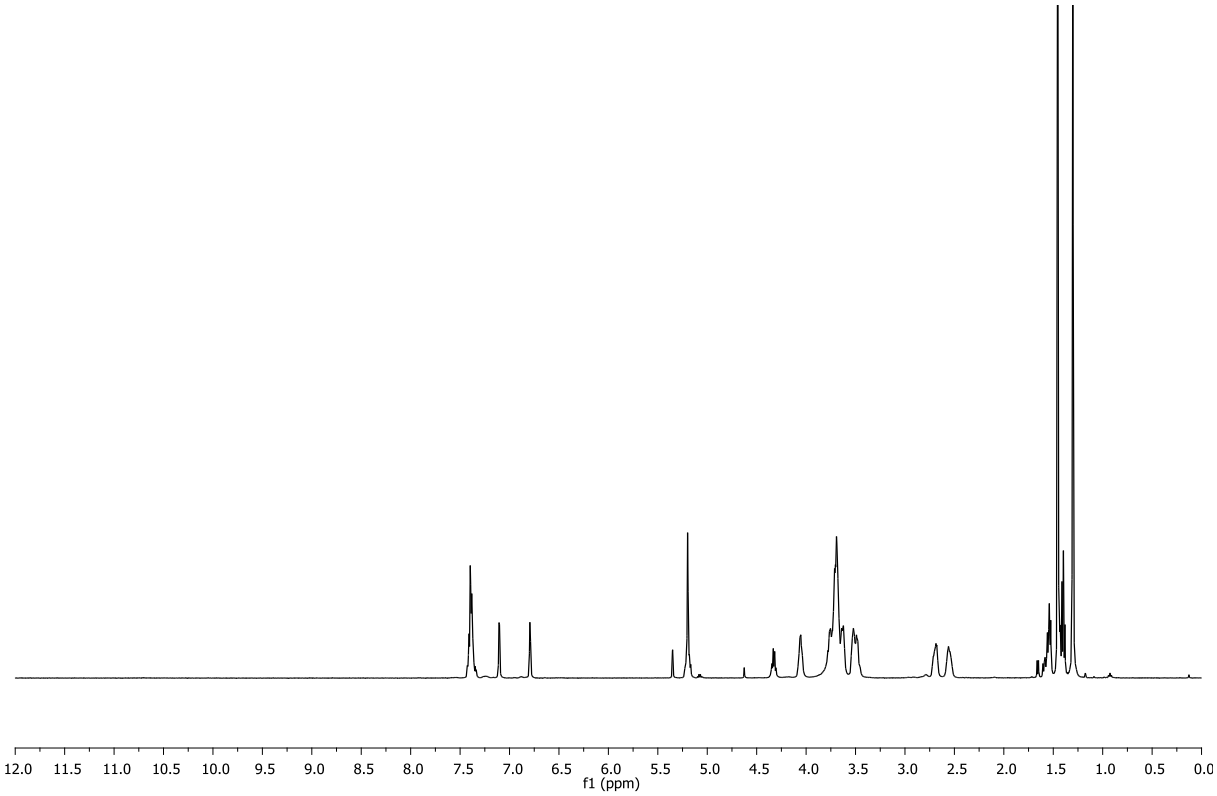
S6. ^{1}H NMR spectrum (0-12 ppm) of a 1:1 mixture of BnOH and **3** in CD_2Cl_2 (500.13 MHz, 298 K)



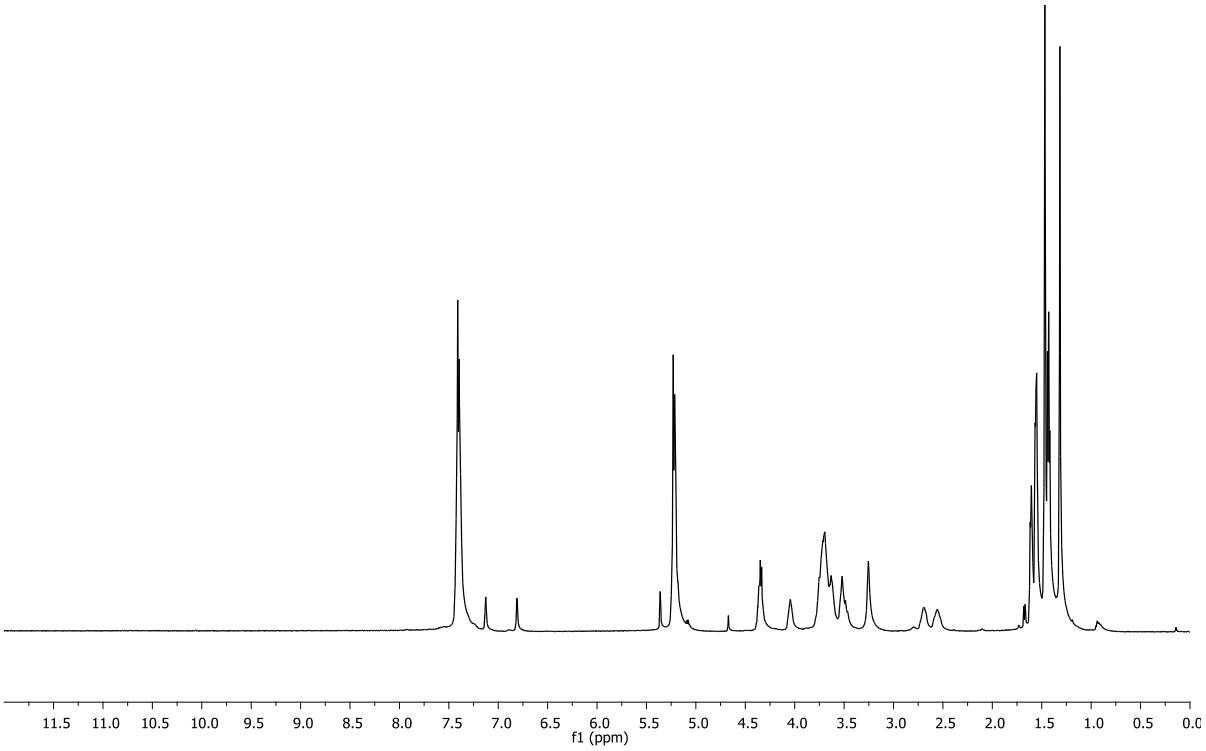
S7. ^{1}H NMR spectrum (0-12 ppm) of a 5:1 mixture of BnOH and **3** in CD_2Cl_2 (500.13 MHz, 298 K)



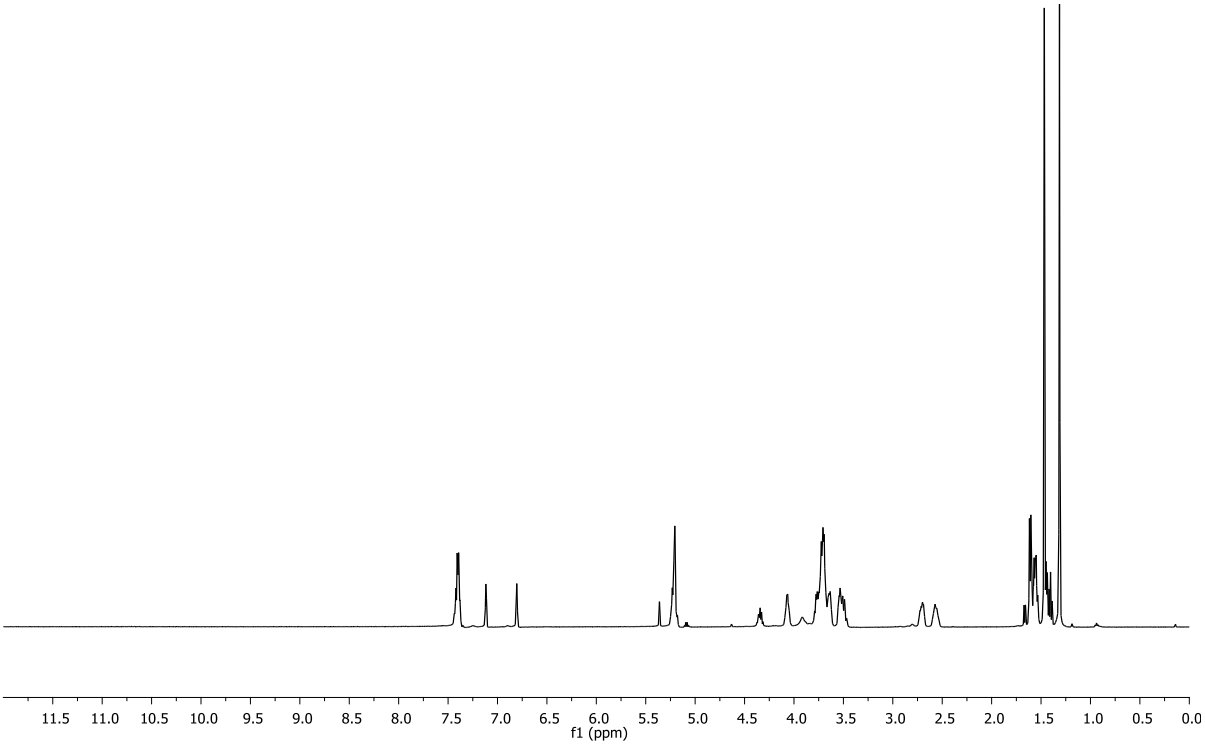
S8. ^{1}H NMR spectrum (0-12 ppm) of a 1:1:1 mixture of BnOH, L-LA and **3** in CD_2Cl_2 (500.13 MHz, 298 K) leading to the formation of $\mathbf{P_1}$



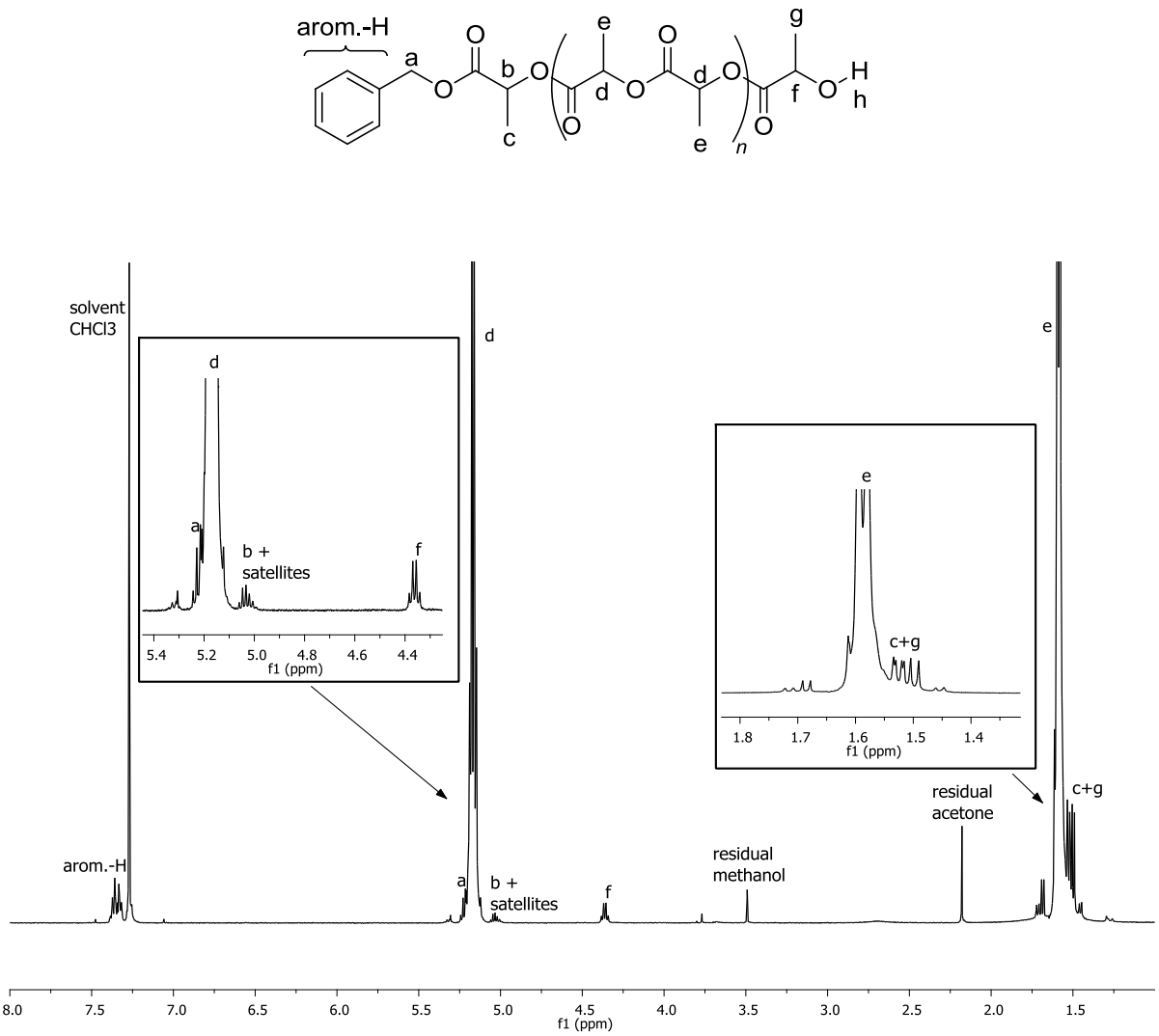
S9. ^{1}H NMR spectrum (0-12 ppm) of a 5:5:1 mixture of BnOH, L-LA and **3** in CD_2Cl_2 (500.13 MHz, 298 K) leading to the formation of $\mathbf{P_1}$



S10. ^{1}H NMR spectrum (0-12 ppm) of a 1:2:1 mixture of BnOH, L-LA and **3** in CD_2Cl_2 (500.13 MHz, 298 K) leading to the formation of $\mathbf{P_2}$



S11. ^{1}H NMR spectrum ($CDCl_3$, 500.13 MHz, 298 K) of a PLLA sample prepared with **3**/BnOH (from Table 2, entry 8)



S12 VT ^{7}Li NMR for {LO^{3}}Li·LiN(SiMe$_2$H)$_2$ (**5**) in toluene-d_8 (258–353 K)