## Electronic Supplementary Information

Syntheses of Biodegradable and Biorenewable Polylactides Initiated by Aluminum Complexes Bearing m-Xylylenediamine Derivatives *via* the Ring-Opening Polymerization of Lactides

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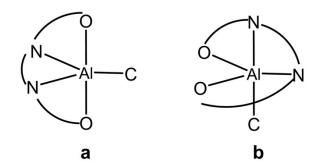
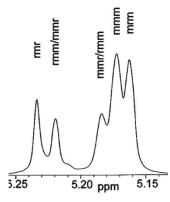


Figure S1. Possible trigonal bipyramidal coordination isomers.



**Figure S2**. Homonuclear decoupled <sup>1</sup>H NMR spectrum of the methine part of poly(*rac*-LA) by complex **4** at 25 °C, Table 1, entry 11, 500 MHz, CDCl<sub>3</sub>)

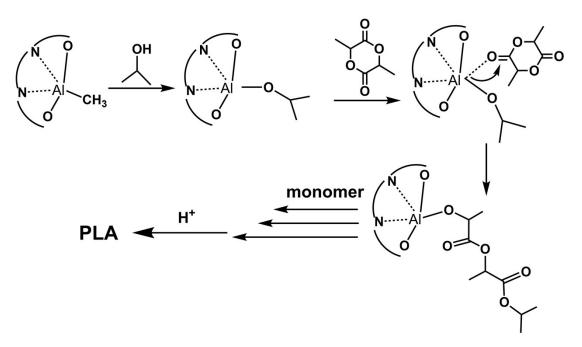
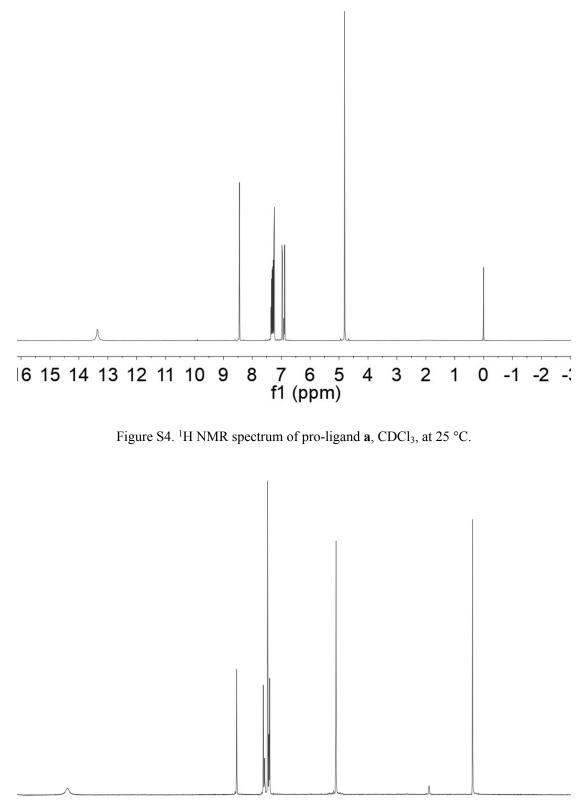


Figure S3. Proposed mechanism for the ROP of lactide initiated by aluminum complexes with isopropanol.



6 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1 0 -1 -2 -3 f1 (ppm)

Figure S5. <sup>1</sup>H NMR spectrum of pro-ligand **c**, CDCl<sub>3</sub>, at 25 °C.

