

Supporting Information

The Effect of WS₂ Nanosheets on the Non-Isothermal Cold- and Melt-Crystallization Kinetics of Poly(L-lactic acid) Nanocomposites

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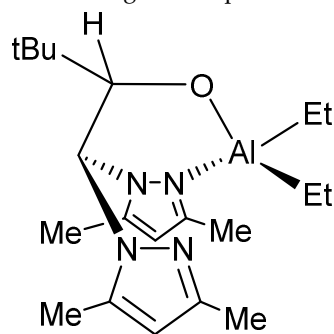
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1. Synthesis of [AlEt₂{ κ^2 -bpzbe}] (1)

In 250 cm³ Schlenk tube, bpzbeH (1.0 g, 3.4 mmol) was dissolved in dry toluene (70 mL) and heated to 50 °C. A solution of AlEt₃ (1 M in hexane, 3.4 mL, 3.4 mmol) was added and the reaction mixture was stirred at this temperature for 2 h. Removal of the volatiles under reduced pressure yielded **1** as a white solid. The product was washed with n-hexane (25 mL) and recrystallized from toluene at -26 °C to give compound **1** as a white solid.



Initiator 1

Figure S1. Initiator used for the synthesis of PLLA.

2. Poly(L-lactic acid) Characterization

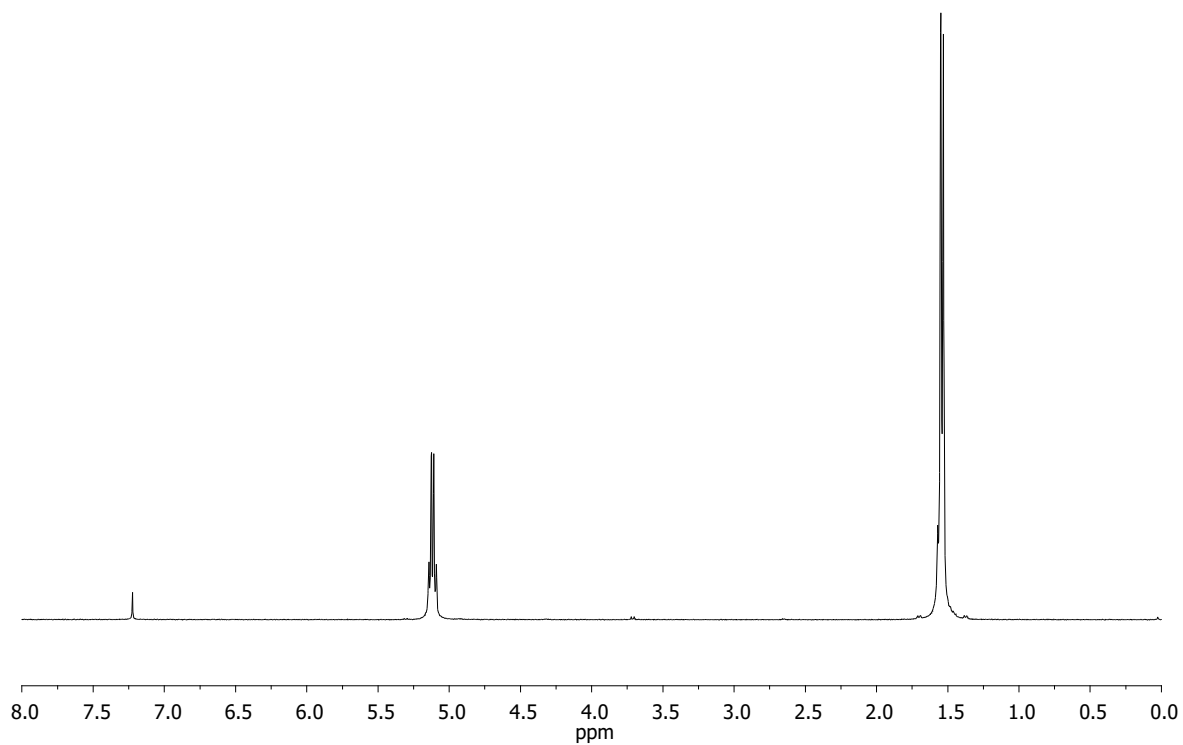


Figure S2. Representative ^1H NMR spectrum of PLLA obtained by **1**.

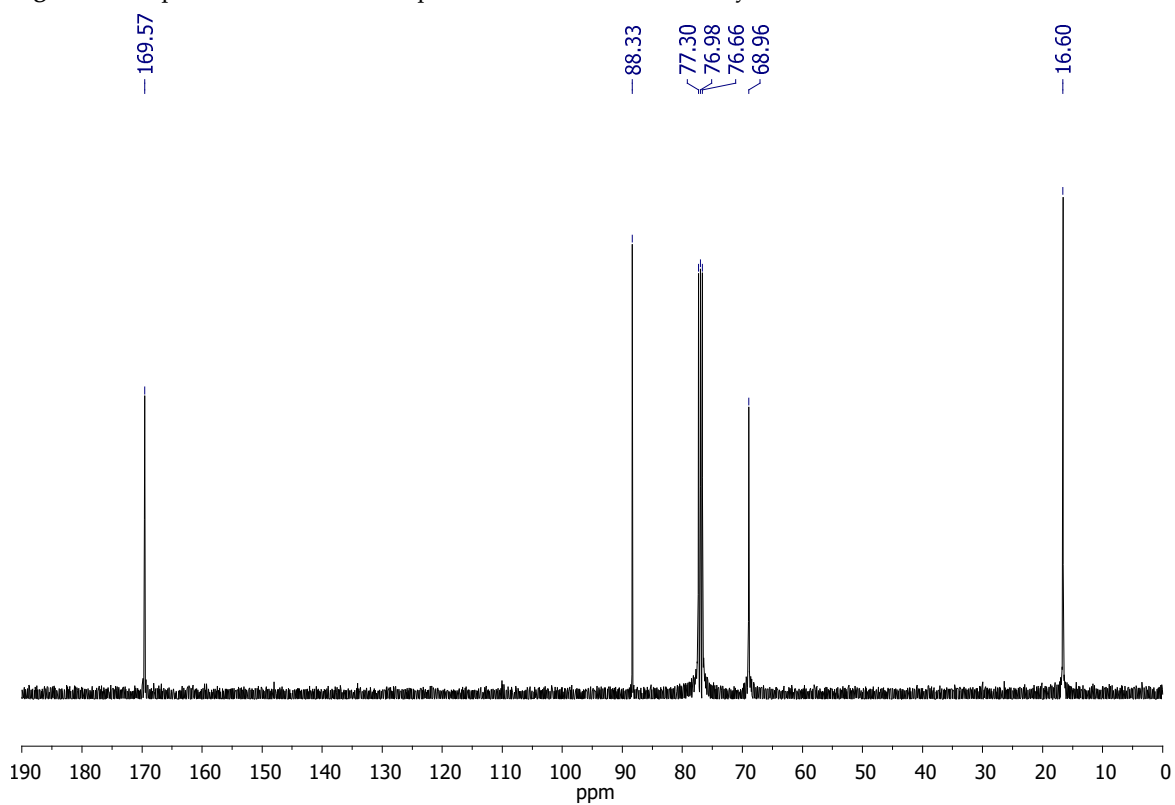


Figure S3. Representative $^{13}\text{C}\{^1\text{H}\}$ -NMR spectrum of PLLA obtained by **1**.

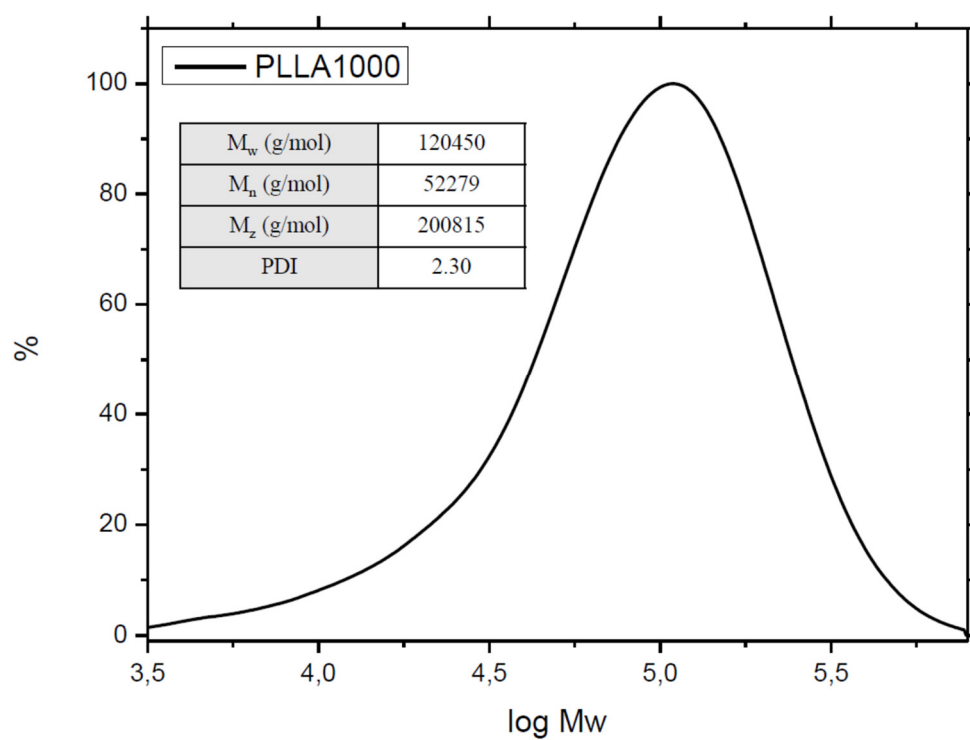


Figure S4. Representative GPC profile of PLLA prepared by 1.