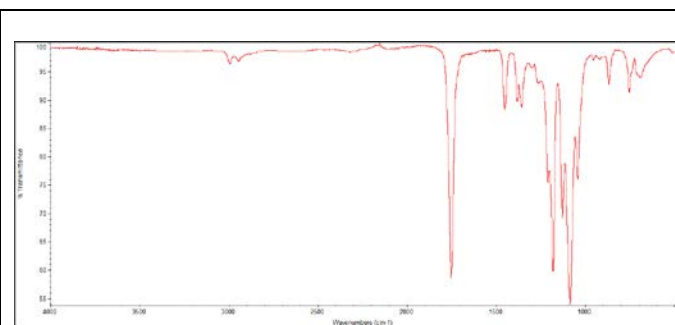
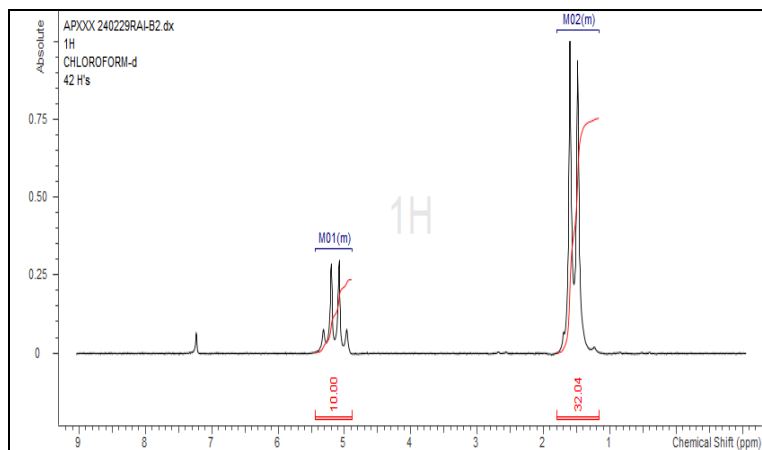


No. AP314

Certificate of Analysis

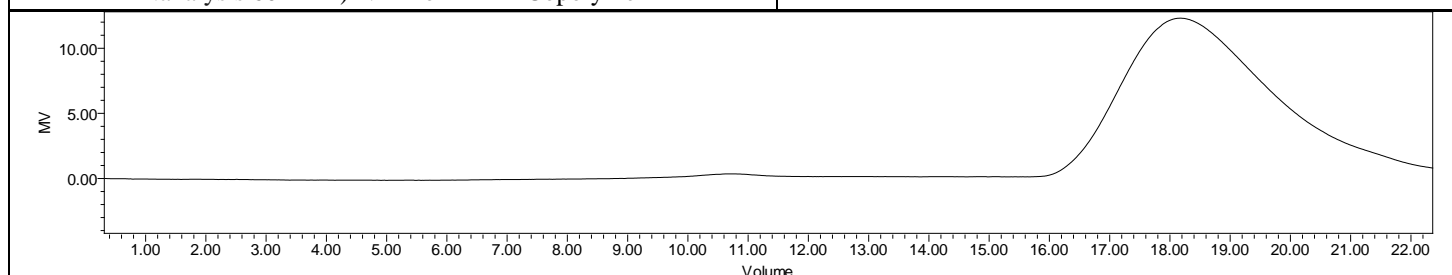


Product Name: Poly(L-lactic acid) ester endcapped (Mn: 45,000-55,000 Da)
(Lot#: 240229RAI-B)



FTIR Analysis: Collected from IS5 ID7-ATR spectrometer (Thermo Scientific) and analyzed in transmission mode.

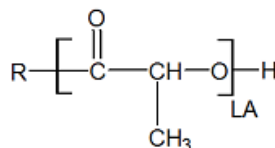
H-NMR Spectrum of copolymers in CDCl₃ (NMReady-60e, Nanalysis 60 MHz) NMR of PLLA Copolymer



GPC-ES Analysis Method: Waters Breeze 2 system with 1 ml/min THF flow across three GPC columns. Detection via refractive index, calibrated against polystyrene standards.

Polymer	M _n (from GPC)	M _w (from GPC)	PDI
PLLA	54,286	85,779	1.58

• Structure of PLLA copolymers



R – 1-decanol ester endcap

Approved By:
Amie Tyler
Quality Manager