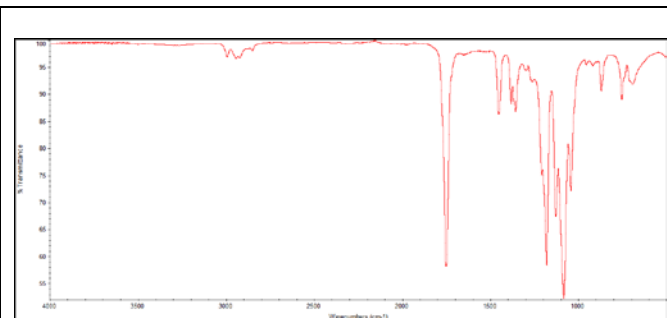
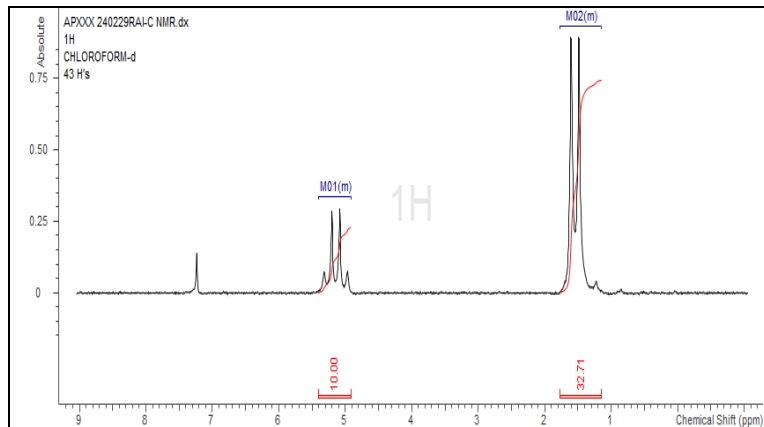


# No. AP315

# Certificate of Analysis

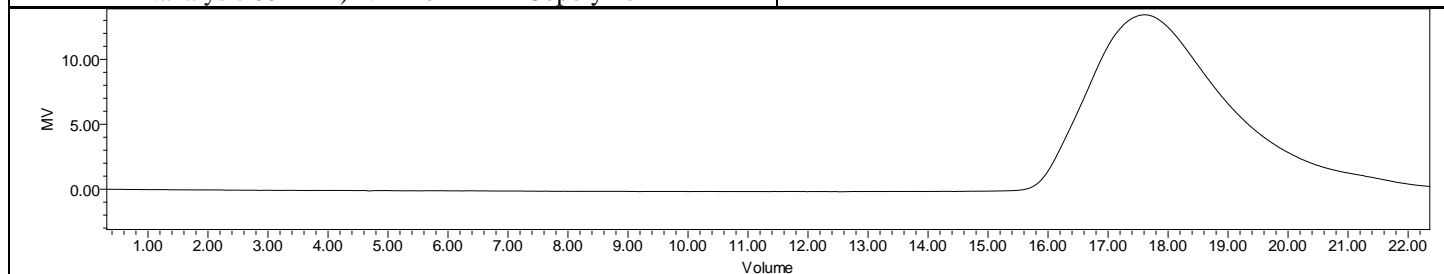


Product Name: Poly(L-lactic acid) ester endcapped (Mn: 85,000-100,000 Da)  
(Lot#: 240229RAI-C)



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

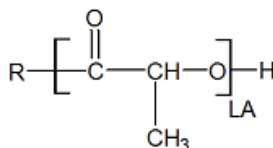
H-NMR Spectrum of copolymers in CDCl<sub>3</sub> (NMReady-60e, Nanalysis 60 MHz) NMR of PLLA Copolymer



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 <sub>n</sub> (from GPC)	M <sub>w</sub> (from GPC)	PDI
PLLA	93,205	135,686	1.46

## • Structure of PLLA copolymers



R – 1-decanol ester endcap

Approved By:  
*Amie Tyler*  
Quality Manager