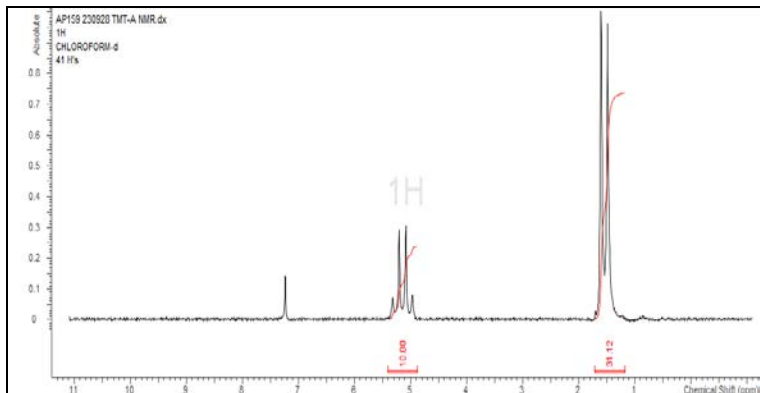


# No. AP159

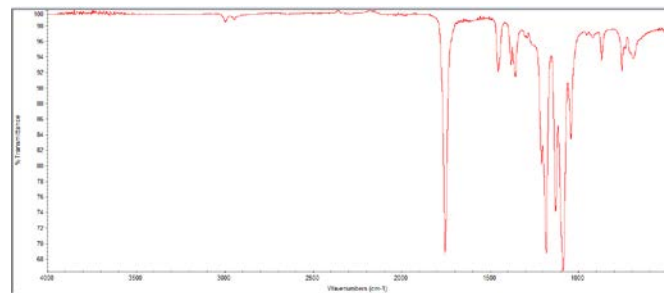
# Certificate of Analysis



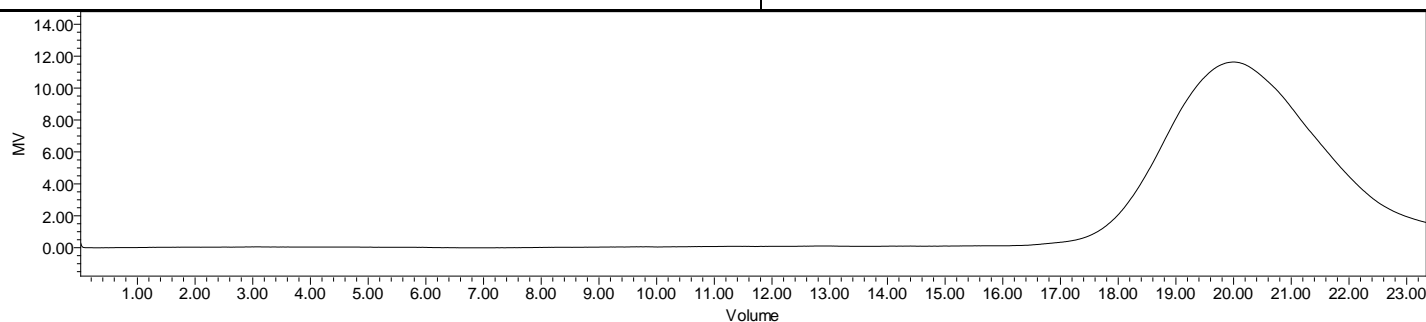
Product Name: Poly(D-lactide) acid endcap ( $M_n$ : 10,000-15,000 Da)  
(Lot#: 230928TMT-A)



H-NMR Spectrum of copolymers in  $CDCl_3$  (NMReady-60e, Nanalysis 60 MHz) NMR of P(D)LA Copolymer



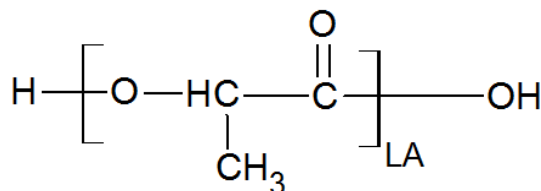
FTIR Analysis: Collected from IS5 ID7-ATR spectrometer (ThermoFisher) and analyzed in transmission mode.



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
P(D)LA	13,969	27,413	1.96

## • Structure of P(D)LA copolymers



Approved By:  
*Amie Tyler*  
Quality Manager