

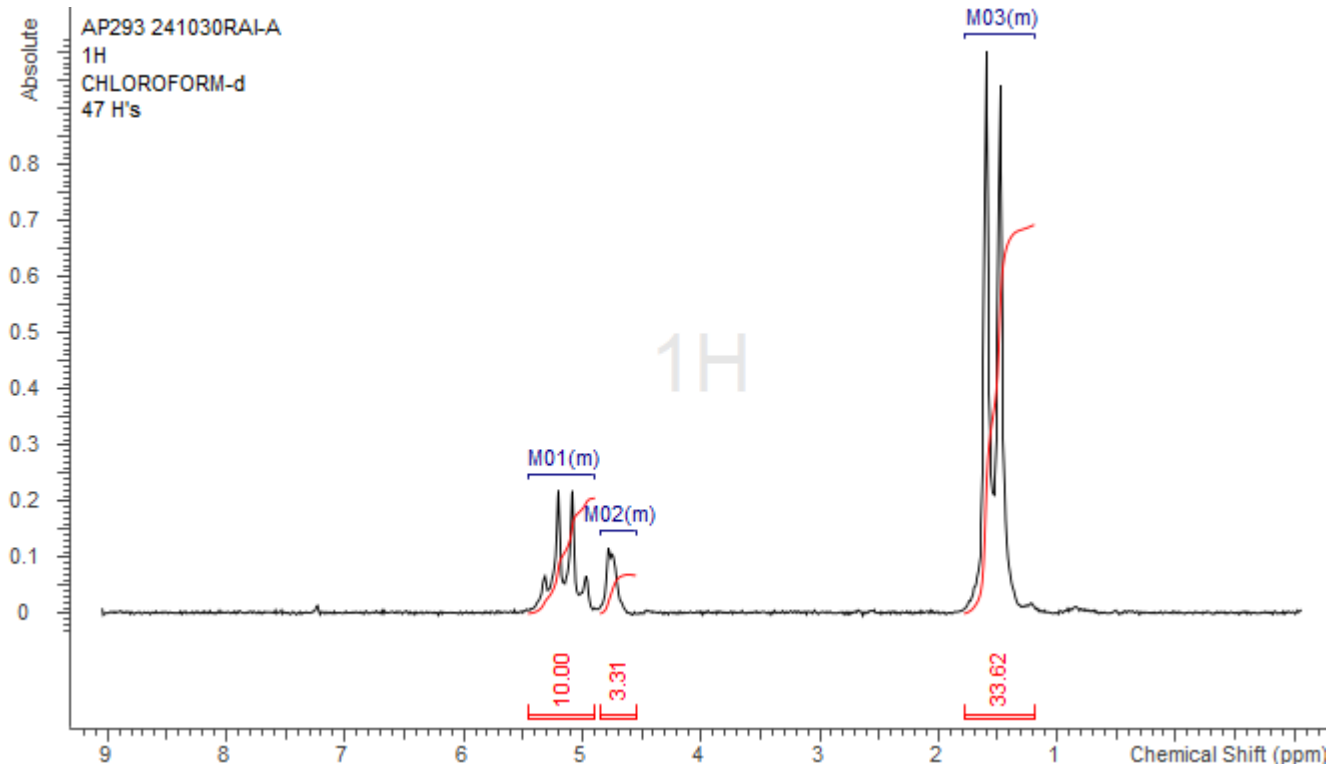
No. AP293

# Certificate of Analysis



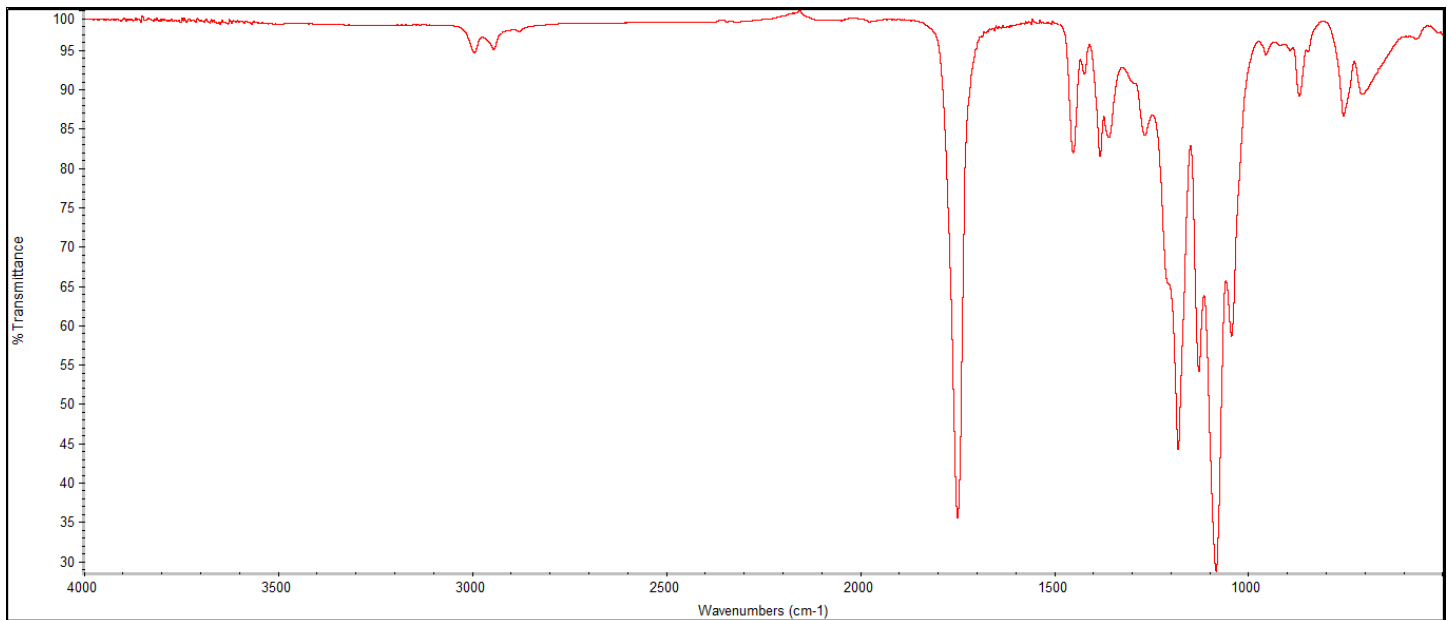
Product Name: Poly(L-lactide-co-glycolide) LG 85:15 acid endcap ( $M_n$  100,000-200,000 Da)  
(Lot#: 241030RAI-B)

## H-NMR



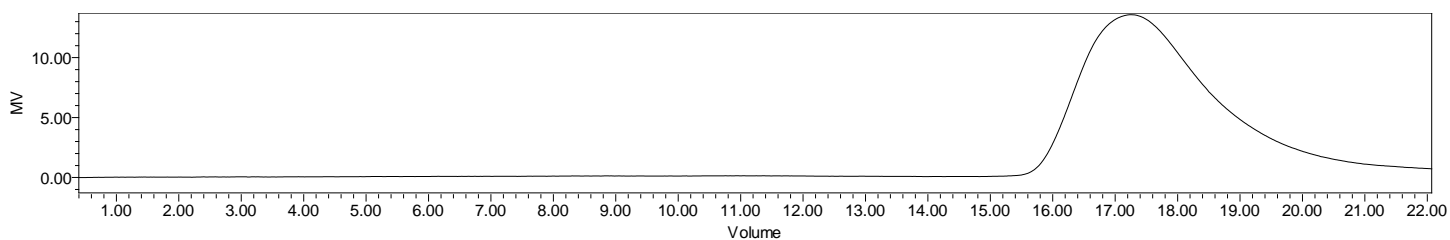
H-NMR Spectrum of copolymers in  $CDCl_3$  (NMReady-60e, Nanalysis 60 MHz) NMR of PLLGA copolymer: LA-GA =86%-14% molar ratio (LA:GA 88%:12% w:w)

## FTIR



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

## GPC-ES



Polymer	M <sub>n</sub> (from GPC)	M <sub>w</sub> (from GPC)	PDI
PLLGA	106,458	164,507	1.55

**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.

## IV

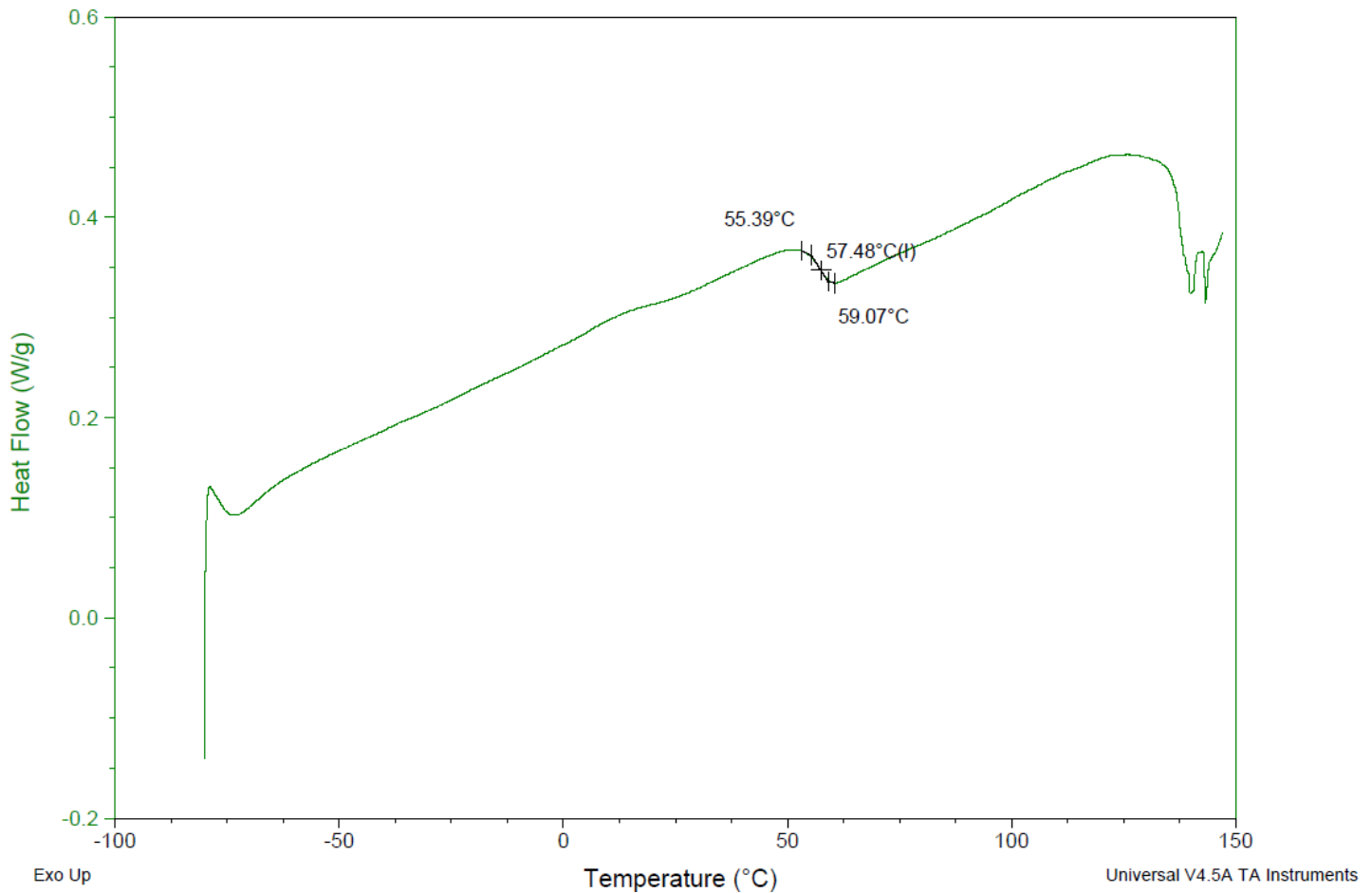
**Inherent Viscosity:** 0.812 dL/g (calculated from kinematic viscosity at 2% w/v Acetone on Rheosense microVISC, n=3) at 25°C.

# DSC

Sample: AP293 241030RAI-B  
Size: 4.9000 mg  
Method: Glass Transition-simple

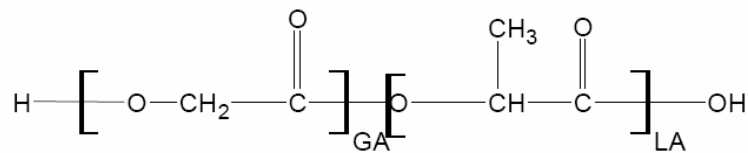
## DSC

File: C:\COA\AP293 241030RAI-B.001  
Run Date: 13-Nov-2024 12:20  
Instrument: DSC Q2000 V24.11 Build 124



DSC Testing: 1-5 mg sample tested in crimped aluminum pan on a TA Instruments Model Q2000 with procedure equilibraion 100 °C, isothermal 5 minutes, equilibrate -80 °C, data on, ramp 10 °C/min to 150 °C. T<sub>g</sub> = 57.48 °C

## Structure of PLLGA copolymers



Approved By:  
*Amie Tyler*  
Quality Manager