

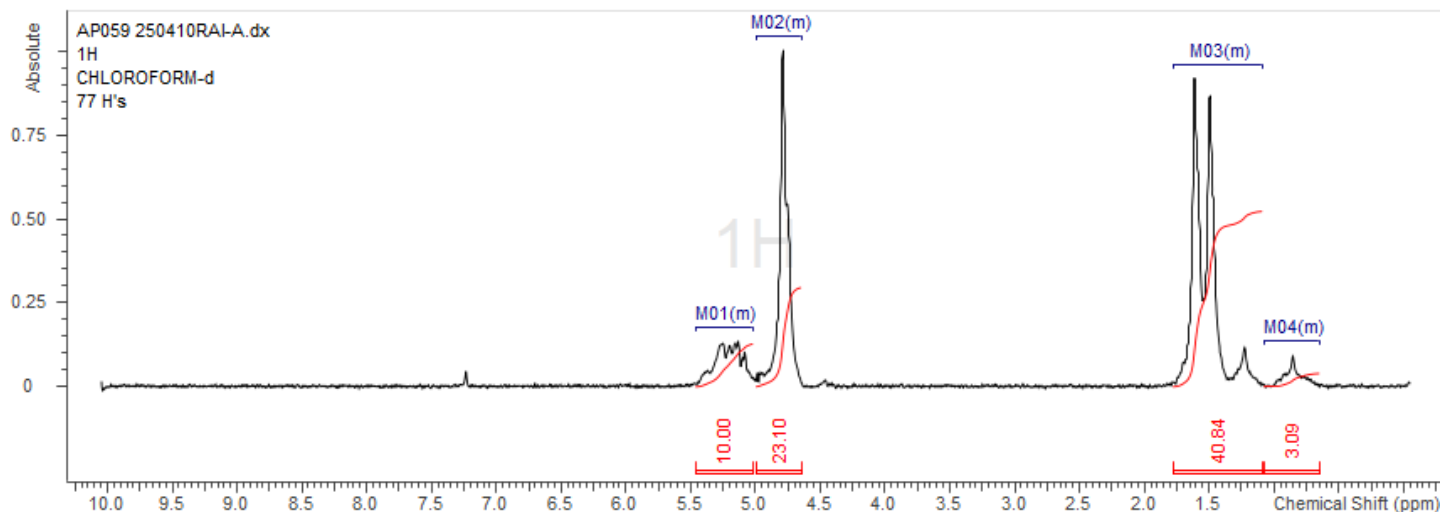
No. AP059

# Certificate of Analysis



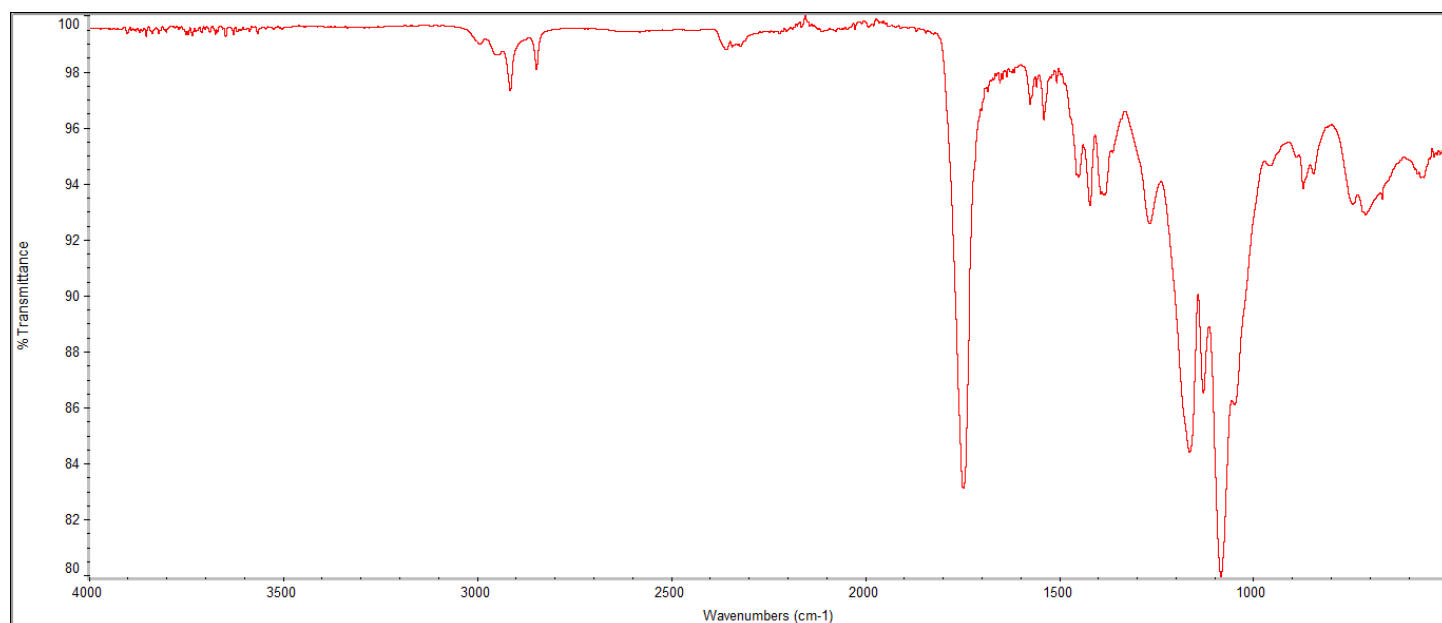
Product Name: Poly(lactide-co-glycolide) acid endcap (50:50 LA:GA,  $M_n$ : 45,000-55,000 Da)  
(Lot#: 250410RAI-A)

## H-NMR



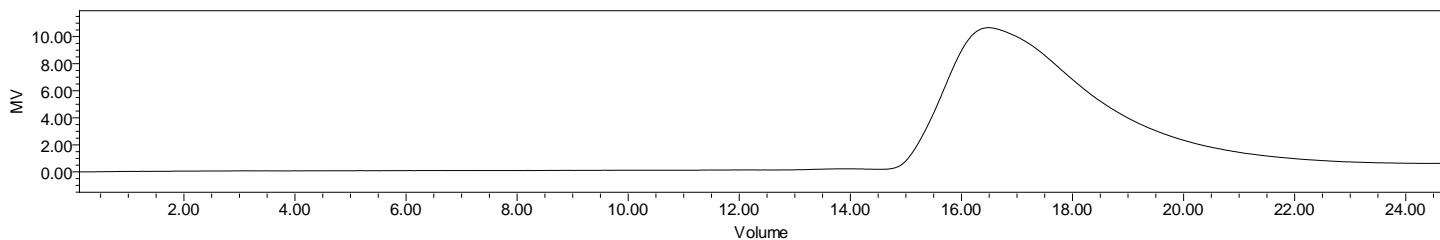
H-NMR Spectrum of copolymers in  $CDCl_3$  (NMReady-60e, Nanalysis 60 MHz) NMR of PLGA copolymer: LA-GA =46%-54% molar ratio (LA:GA 52%:48% w:w)

## 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
PLGA	54,994	91,401	1.66

**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.

## DSC

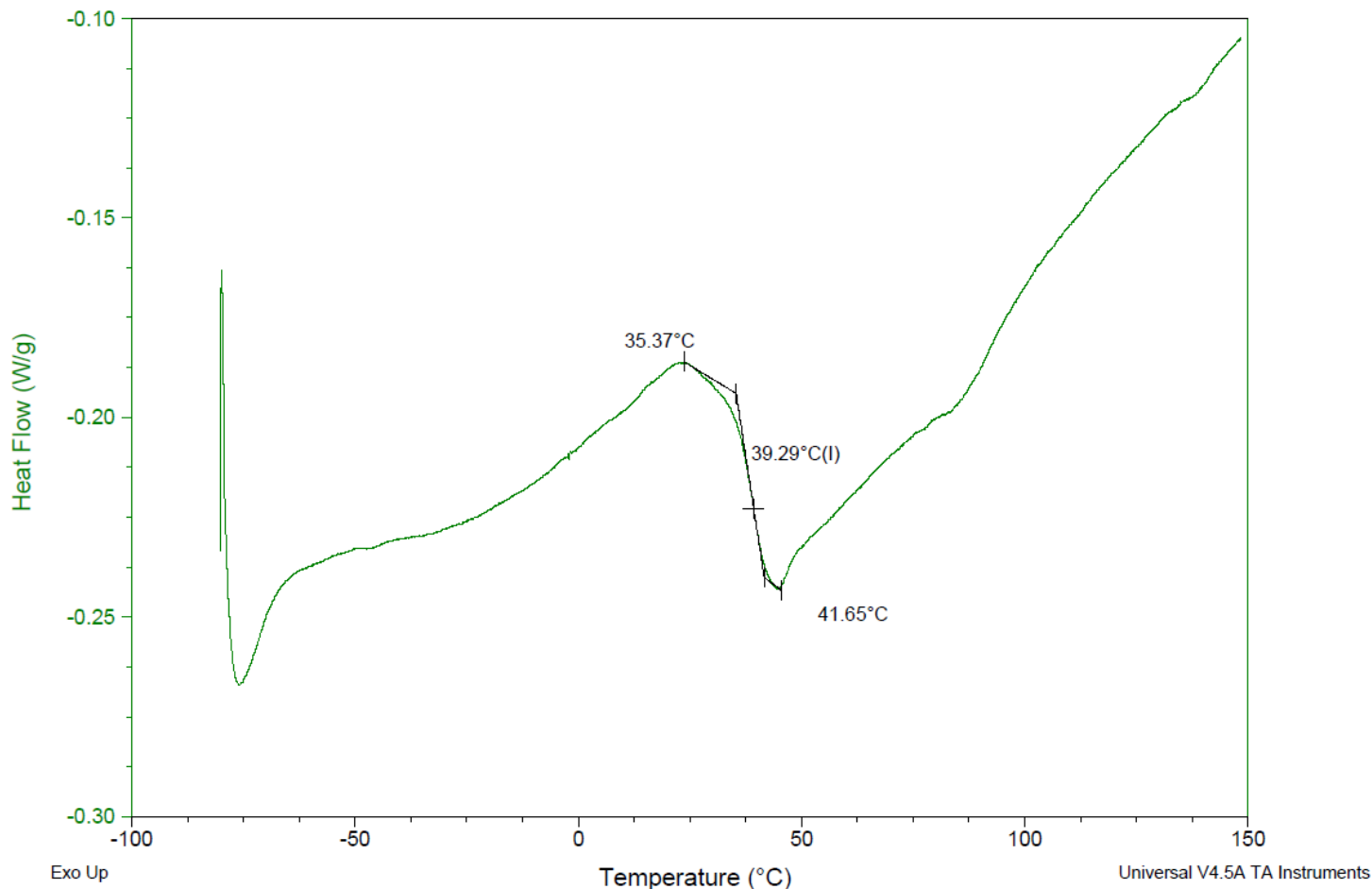
Sample: AP059 250410RAI-A  
Size: 3.2000 mg  
Method: Modulate-no-eqb

### DSC

File: C:\...\COA\AP059 250410RAI-A.001

Run Date: 22-Apr-2025 10:57

Instrument: DSC Q2000 V24.11 Build 124

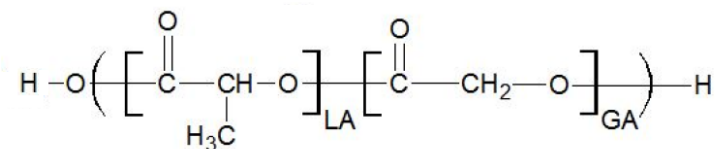


**DSC Testing:** 1-5 mg sample tested in crimped aluminum pan on a TA Instruments Model Q2000 with procedure equilibration 100 °C, isothermal 5 minutes, equilibrate -80 °C, data on, ramp 10 °C/min to 150 °C. T<sub>g</sub> = 39.29 °C

## IV

**Inherent Viscosity:**  $0.36 \pm 0.01$  dL/g (calculated from kinematic viscosity at 2% w/v Acetone on Rheosense microVISC, n=3) at 25°C.

### Structure of copolymers



Approved By:  
*Amie Tyler*  
Quality Manager