

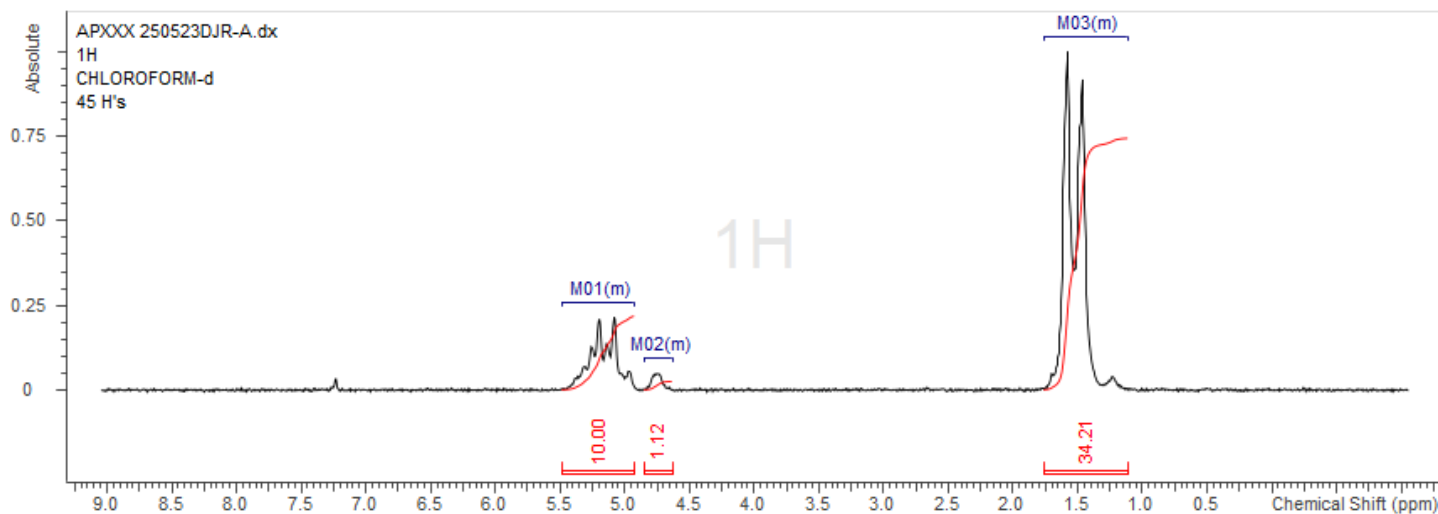
**No. AP321**

# Certificate of Analysis



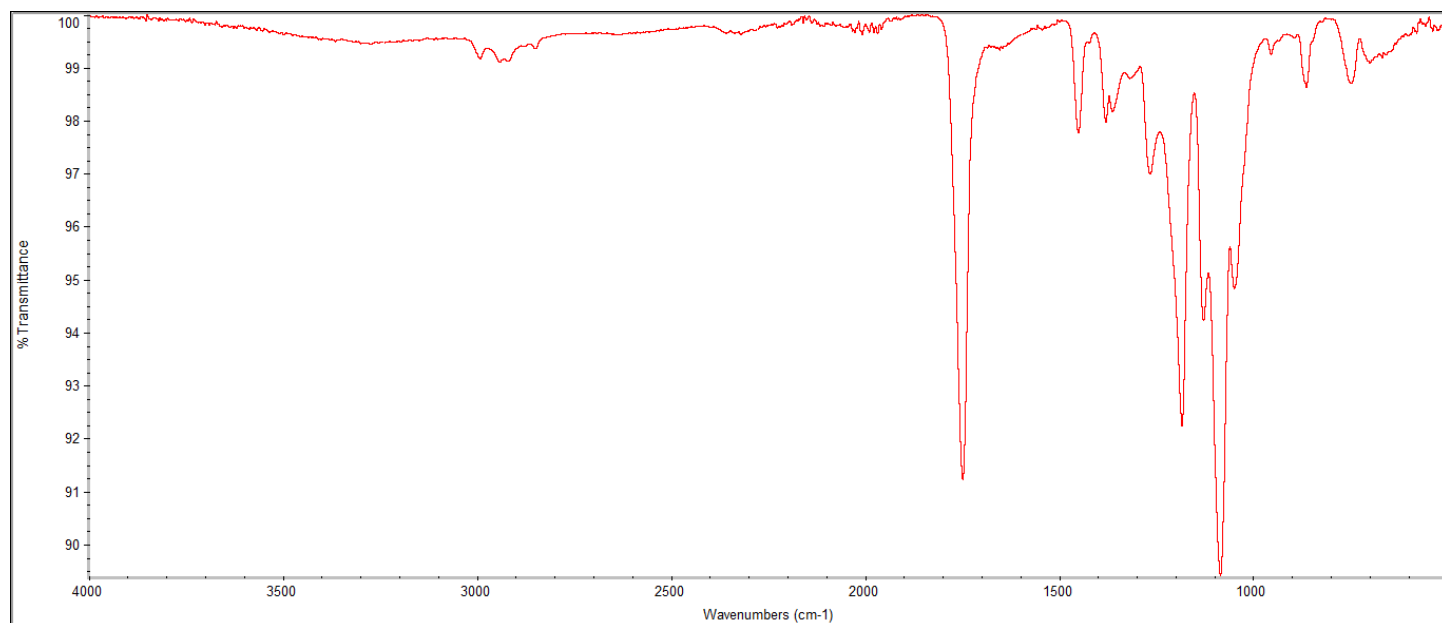
Product Name: Poly(lactide-co-glycolide) acid endcap (95:5 LA:GA, Mn: ~200,000 Da)  
(Lot#: 250523DJR-A)

## H-NMR



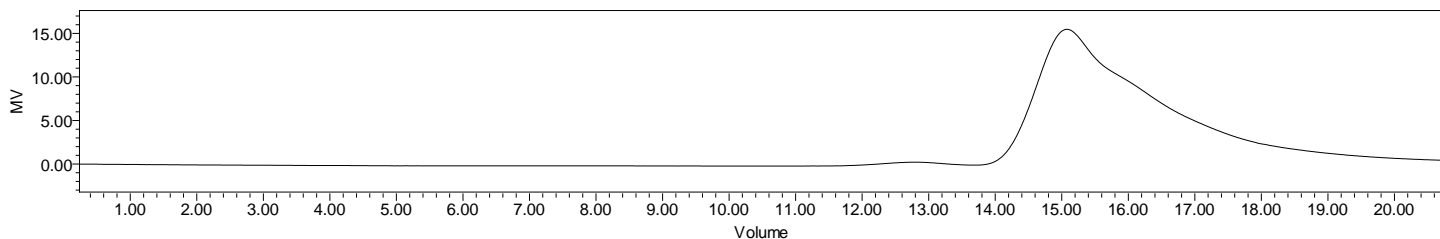
**H-NMR** Spectrum of copolymers in CDCl<sub>3</sub> (NMReady-60e, Nanalysis 60 MHz) NMR of PLGA copolymer: LA-GA = 95%:5% molar ratio(LA:GA 96%:4% w:w)

## 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	204,607	309,310	1.51

**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

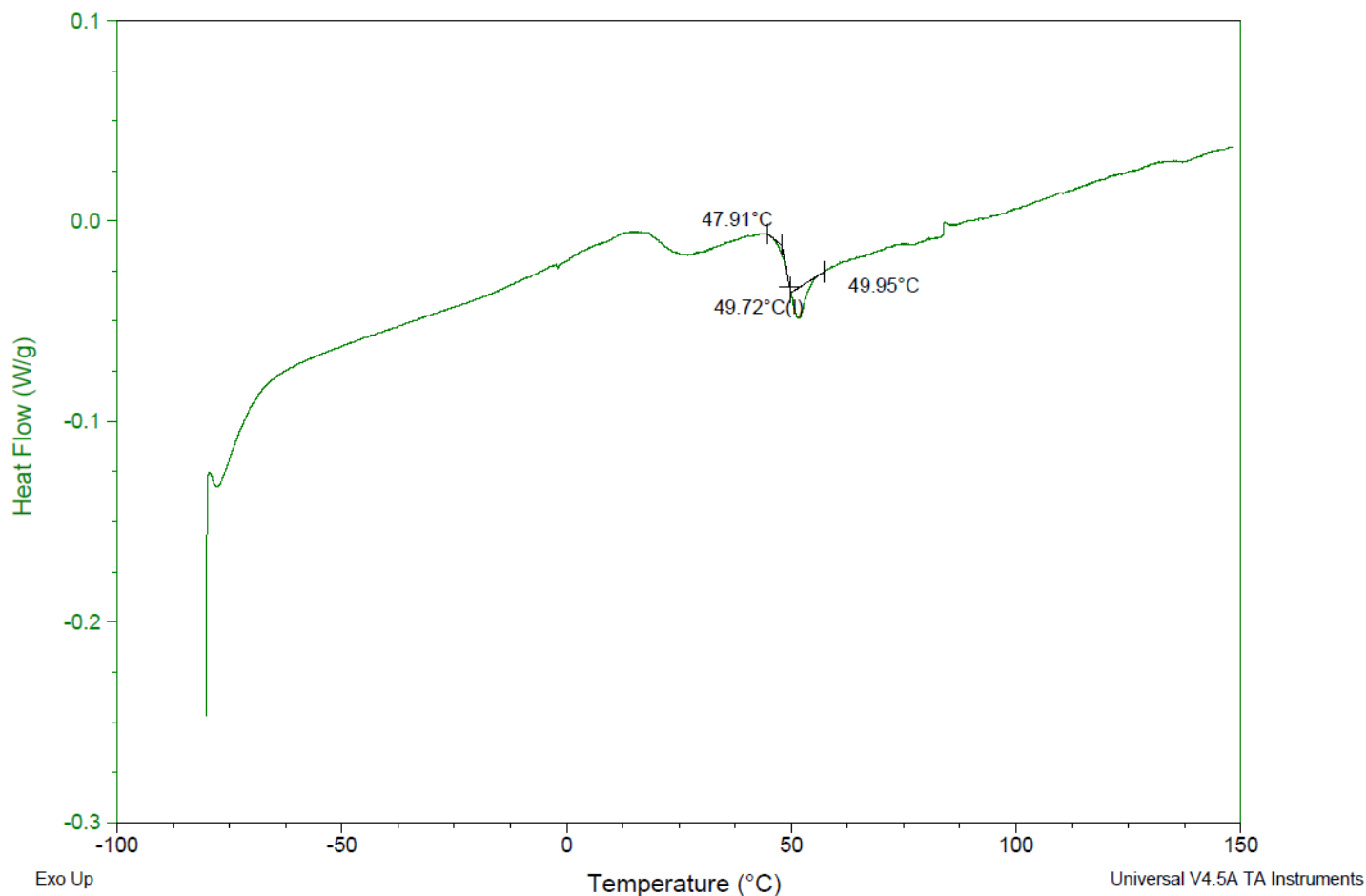
Sample: APXXX 250523DJR-A  
Size: 4.4000 mg  
Method: Modulate-no-eqb

DSC

File: C:\...\COA\APXXX 250523DJR-A DSC.002

Run Date: 30-May-2025 09:01

Instrument: DSC Q2000 V24.11 Build 124

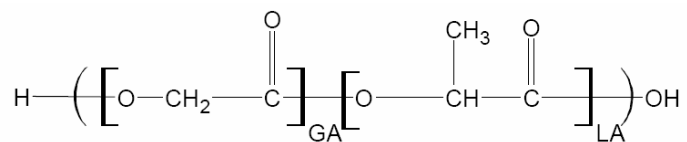


**DSC Testing:** 1-5 mg sample tested in crimped aluminum pan on a TA Instruments Model Q2000 with procedure equilibraion 100 °C, isothermal 5 minutes, equilibrate -80 °C, data on, ramp 10 °C/min to 150 °C. T<sub>g</sub> = 49.72 °C

## IV

**Inherent Viscosity:**  $0.835 \pm 0.020$  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