

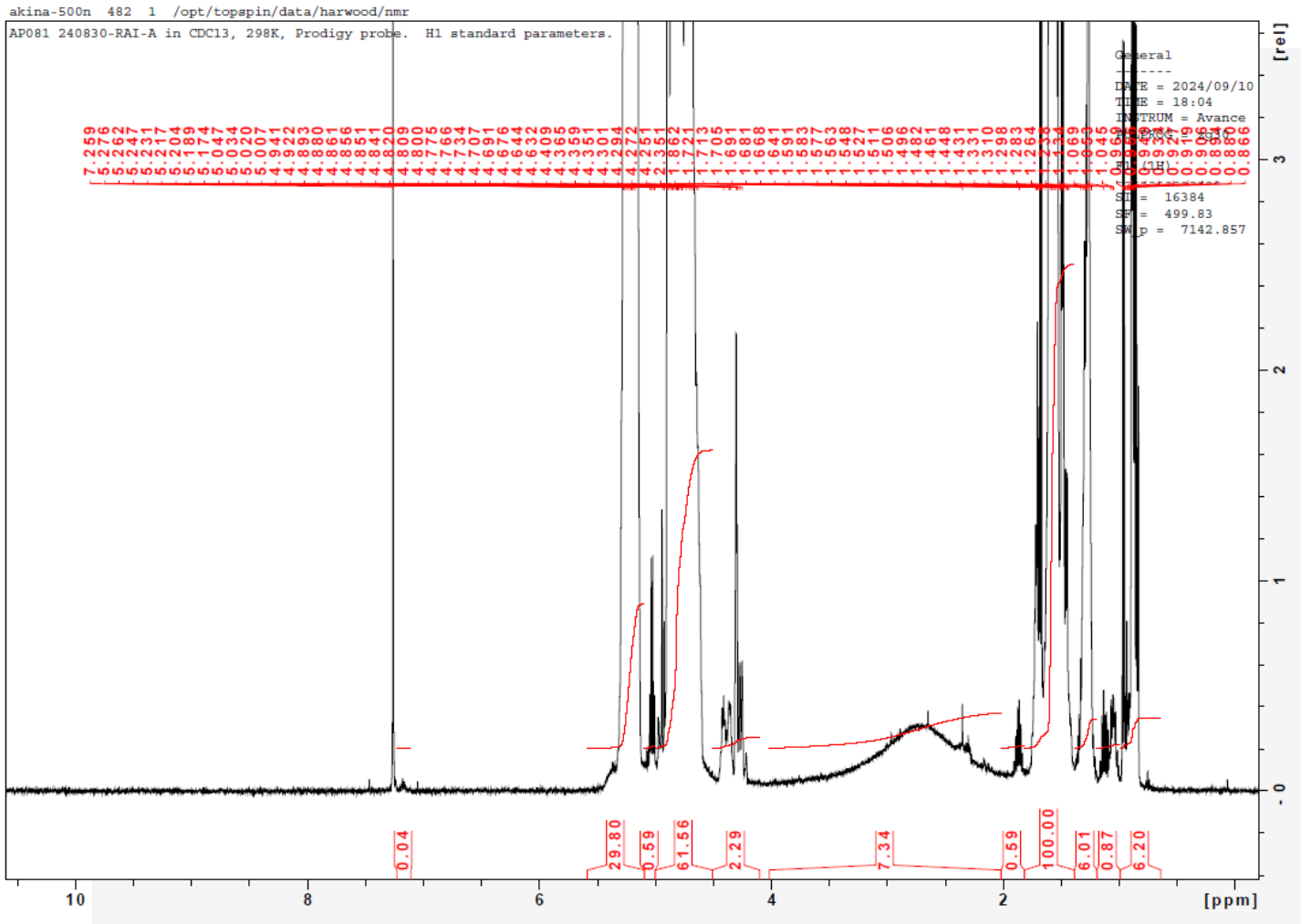
No. AP081

# Certificate of Analysis



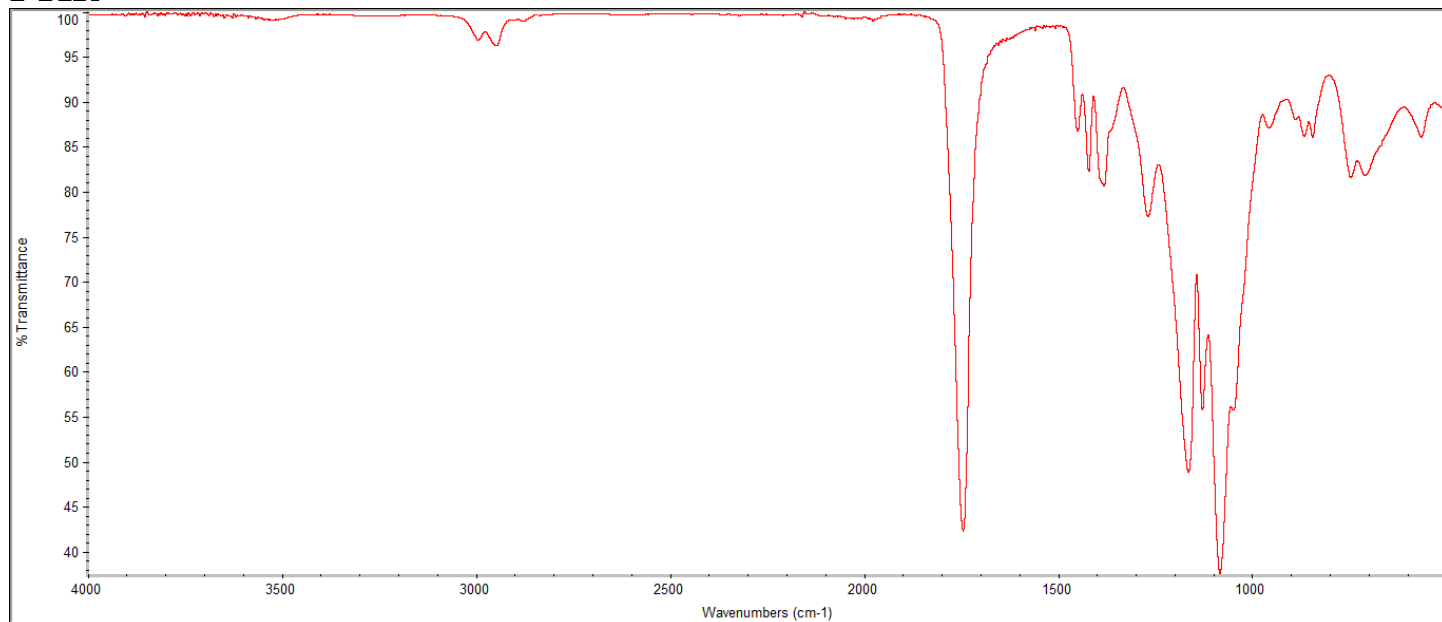
Product Name: Poly(lactide-co-glycolide) acid endcap (50:50 LA:GA) (Mn: 5,000-10,000 Da)  
(Lot#: 240830RAI-A)

## H-NMR



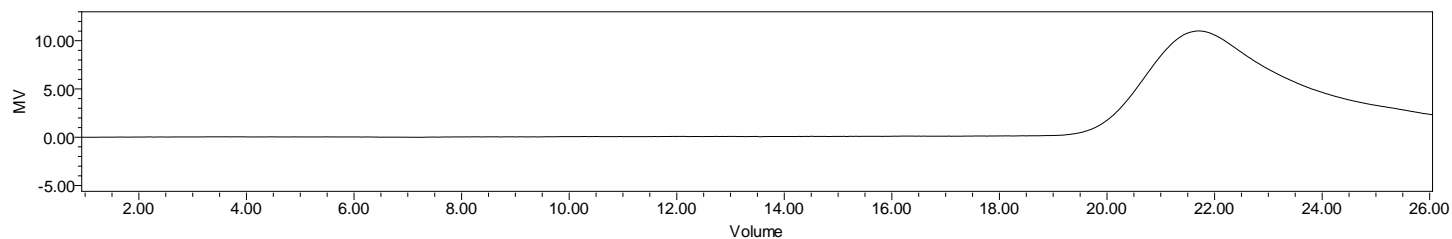
H-NMR Spectrum of copolymers in CDCl3 (Bruker  $\geq 300$  MHz, PINMRF) NMR of PLGA copolymer: LA-GA =49%:51% (LA:GA 55%:45%)

## FTIR



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

## GPC-ES



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
PLGA	5324	7833	1.47

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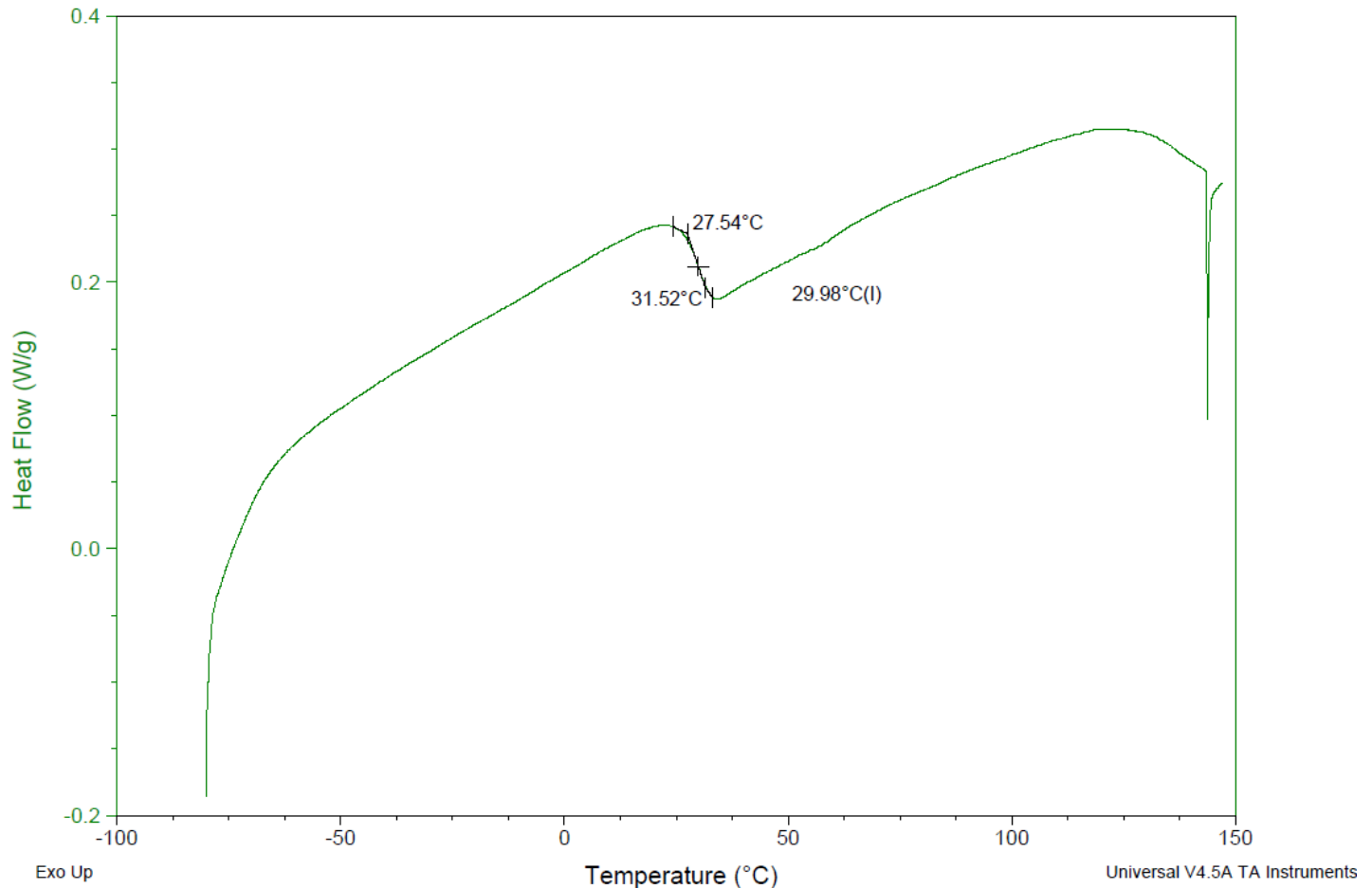
# DSC

Sample: AP081 240830RAI-A  
Size: 4.1000 mg  
Method: Ramp

## DSC

File: \\... \COA\AP081 240830RAI-A DSC.002

Run Date: 04-Sep-2024 13:04  
Instrument: DSC Q2000 V24.11 Build 124

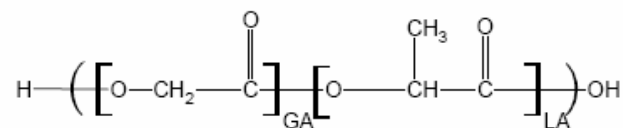


DSC Testing: 1-5 mg sample tested in crimped aluminum pan on a TA Instruments Model Q2000 with procedure equilibraion 100 °C, isothermal 5 minutes, equilibrate -80 °C, data on, ramp 10 °C/min to 150 °C. Tg = 21.98 °C

## IV

**Inherent Viscosity:** 0.12 dL/g (calculated from kinematic viscosity at 2% w/v Acetone on Rheosense microVISC, n=3) at 25°C.

### Structure of PLGA copolymers



Approved By:  
Amie Tyler  
Quality Manager