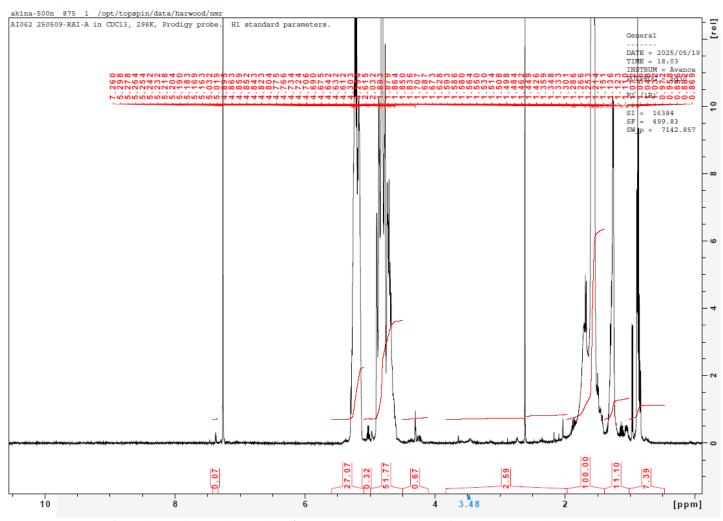


# No. AI062 Certificate of Analysis

Product Name: Poly(lactide-co-glycolide) amine endcap (ethylene diamine)

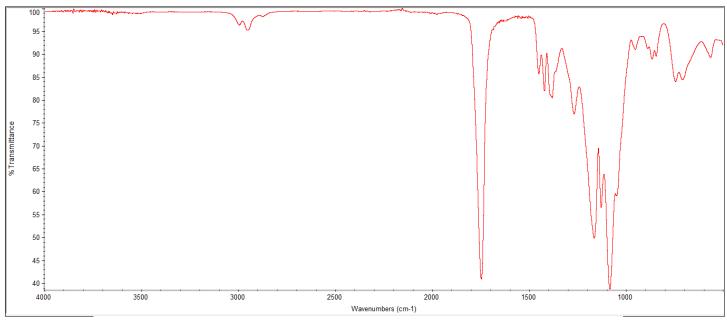
(Mn: 10,000 - 30,000 Da, 50:50 LA:GA) (Lot#: 250509RAI-A)

### H-NMR



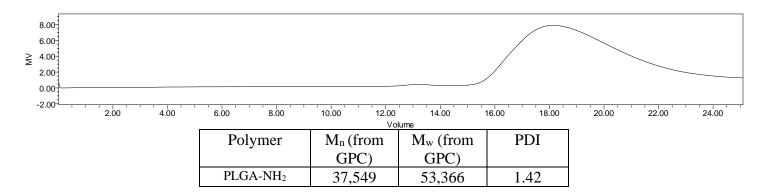
**H-NMR** Spectrum of copolymers in CDCl3 (Bruker ≥300 MHz, PINMRF) NMR of PLGA-NH<sub>2</sub> copolymer: LA-GA =51%-49% (LA:GA 56%:44% Da)

## **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.

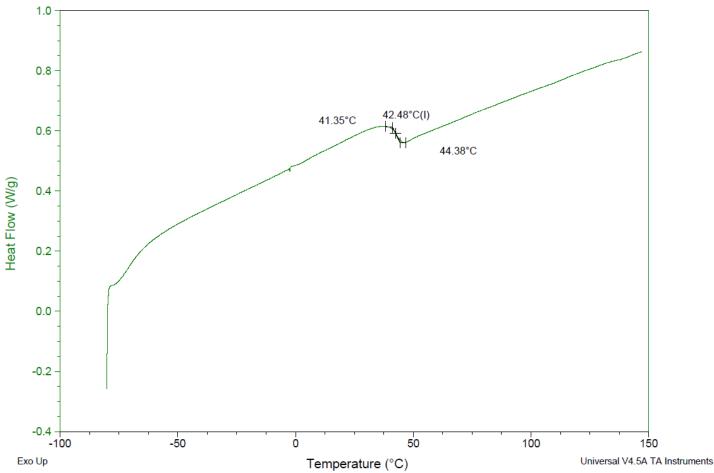
Sample: AI062 250509RAI-A

Size: 4.5000 mg Method: Ramp DSC

File: C:...\COA\AI062 250509RAI-A.002

Run Date: 16-May-2025 09:32

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 = 42.48 °C

### IV

**Inherent Viscosity:**  $0.240 \pm 0.003$  dL/g (calculated from kinematic viscosity at 2% w/v Acetone on Rheosense microVISC, n=3) at 25°C.

## Structure of copolymers

$$H_2N-CH_2-CH_2-NH$$
 $CH_2-CH_2-NH$ 
 $CH_3$ 
 $CH_2-CH_2-OH$ 
 $CH_3$ 

Approved By:

Amie Tyler

Quality Manager