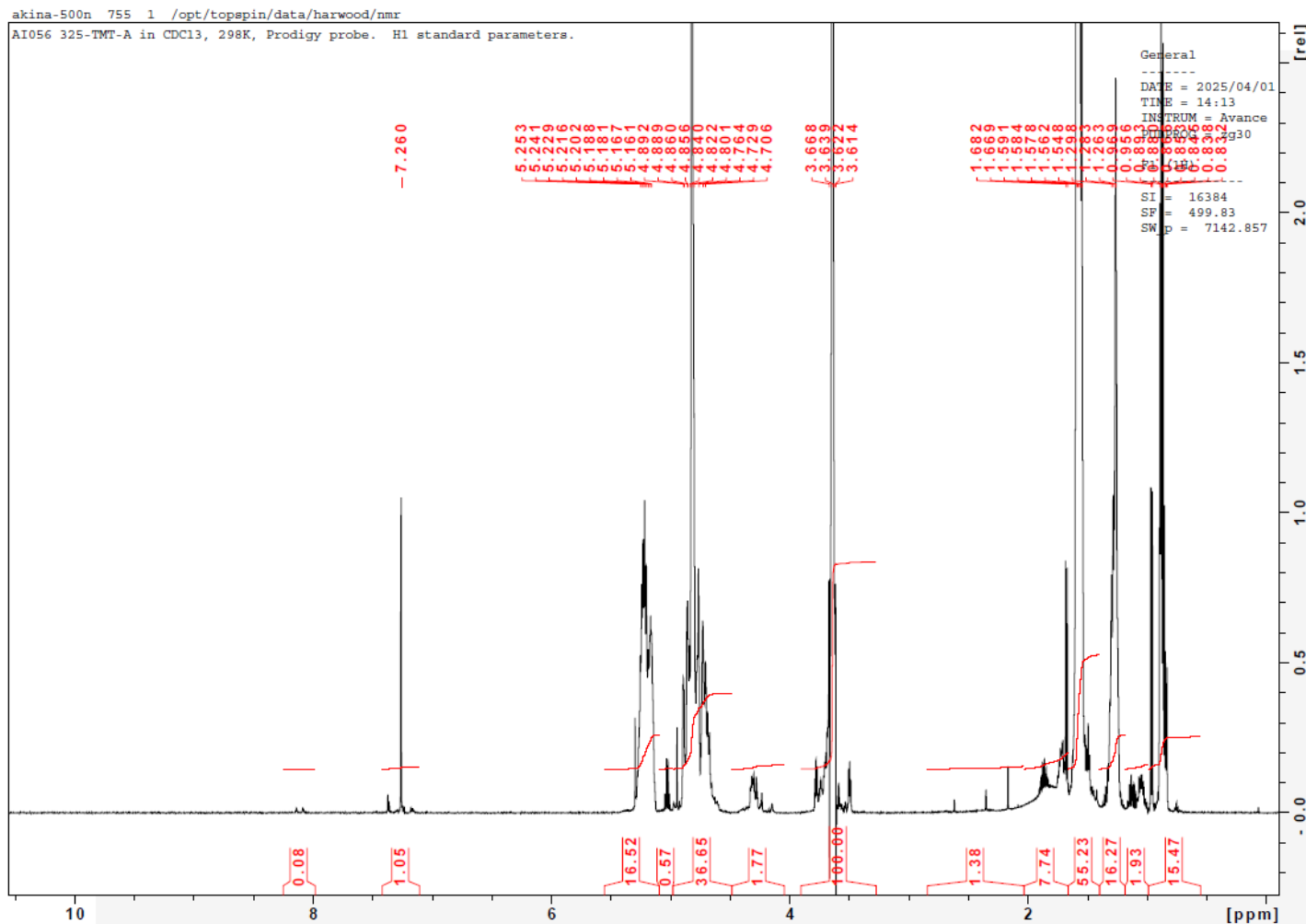


No. AI056      Certificate of Analysis

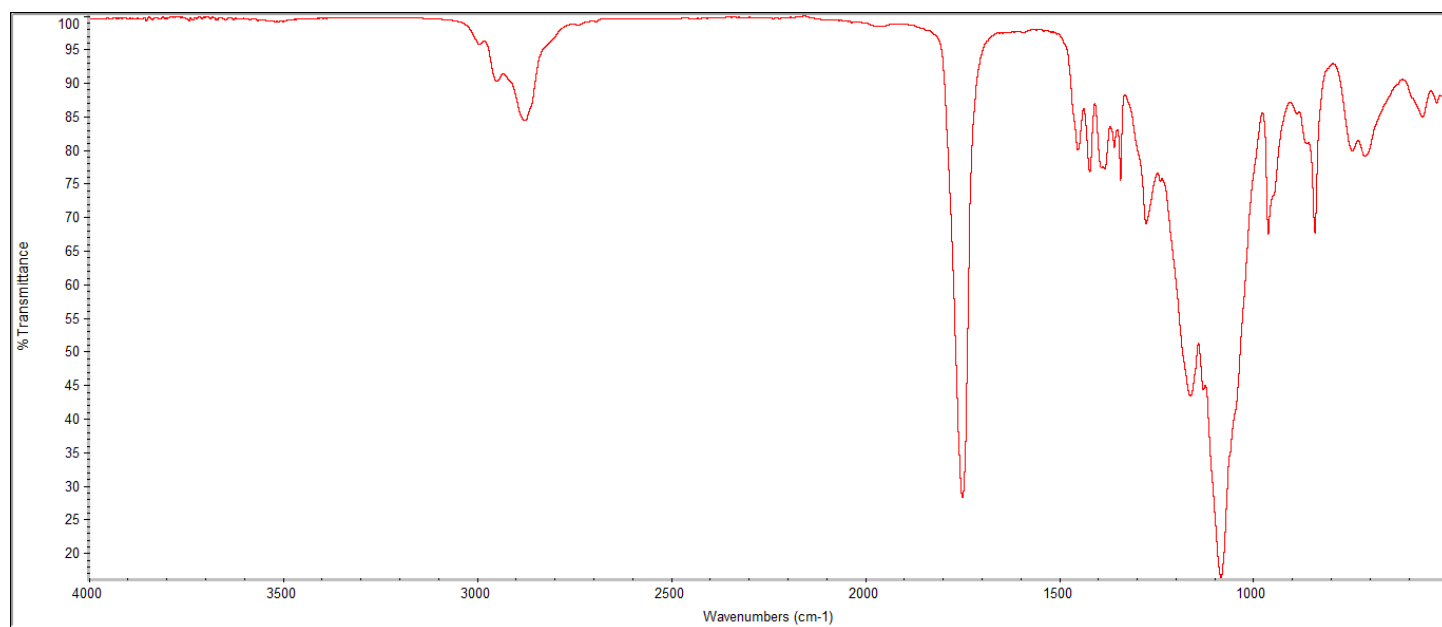
Product Name: Poly(lactide-co-glycolide)-b-Poly(ethylene glycol)-carboxylic acid endcap (Mw ~10,000 Da-5,000 Da) (Lot#: 250325TMT-A)

## H-NMR



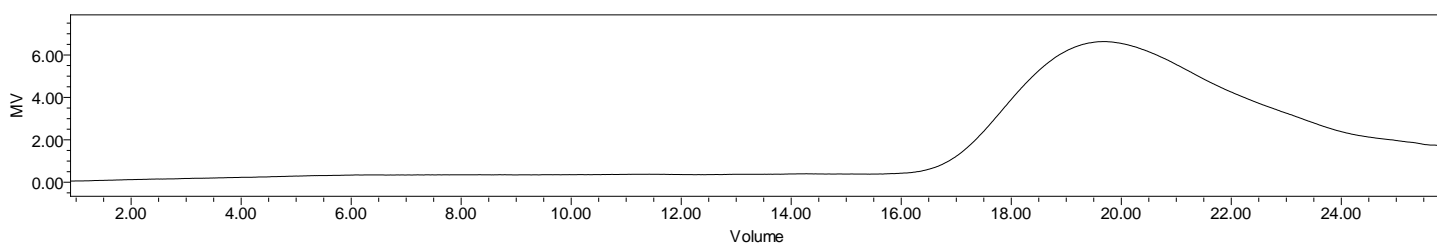
**H-NMR** Spectrum of copolymers in CDCl<sub>3</sub> (Bruker ≥300 MHz, PINMRF) NMR of PLGA copolymer: EG\*/LA-GA =102\*/67-75 (Mn EG\*/LA:GA 4495\*/4853:4339 Da) LA:GA 53%:47%

## 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-PEG-COOH	11,996	24,207	2.02
PEG-precursor*	4700*		

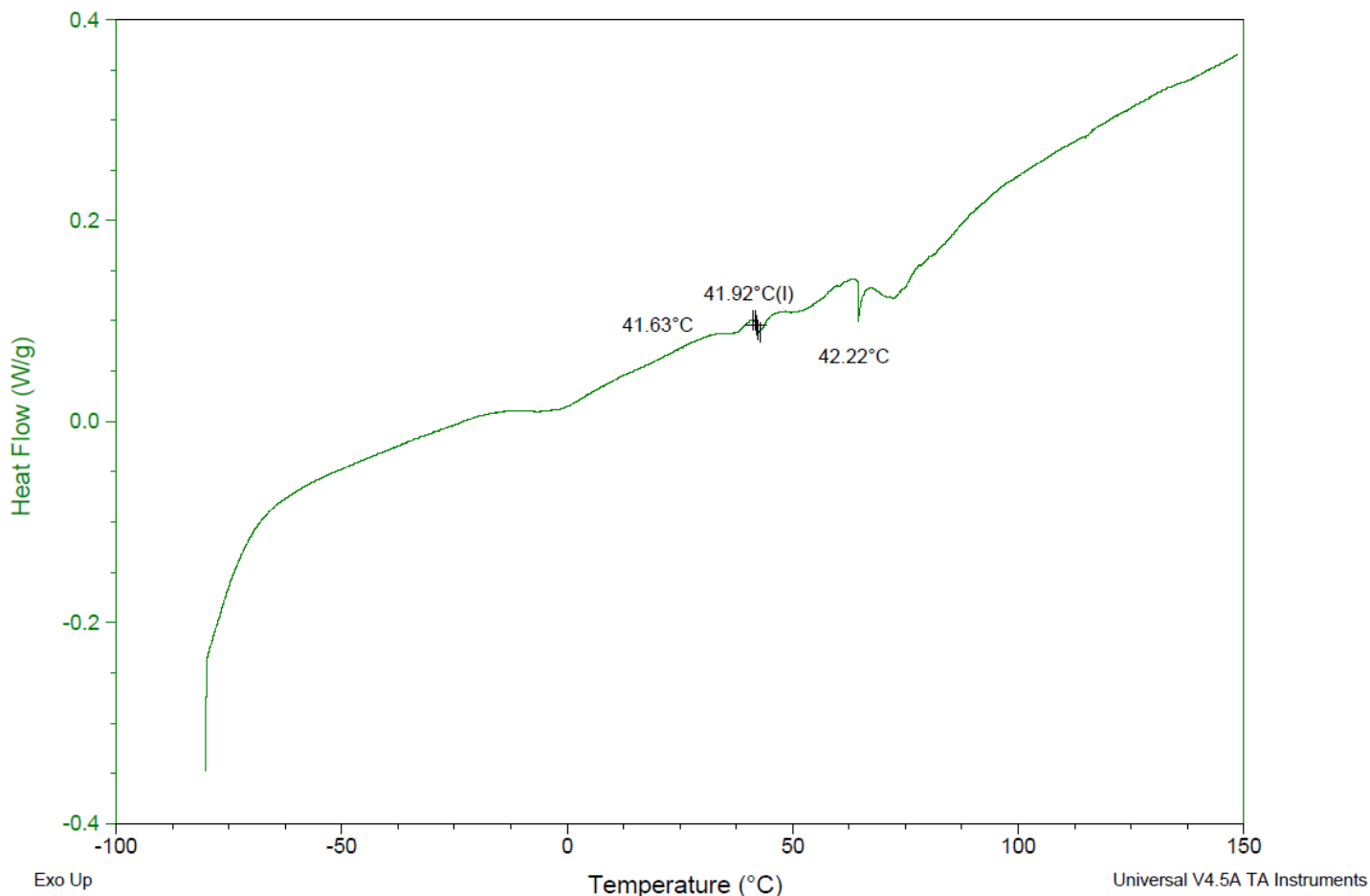
**GPC-ES Analysis Method:** Waters Breeze 2 system with 1 ml/min THF flow across three GPC columns. Detection via refractive index, calibrated against polystyrene standards. \*- from MFG data

## DSC

Sample: AI056 250325TMT-A  
Size: 3.2000 mg  
Method: Modulate-no-egb

## DSC

File: C:\...\COA\AI056 250325TMT-A.003  
Run Date: 10-Apr-2025 09:33  
Instrument: DSC Q2000 V24.11 Build 124

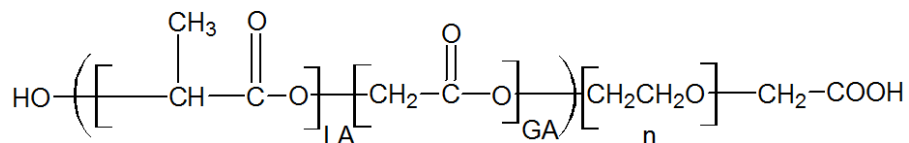


DSC Testing: 1-5 mg sample tested in crimped aluminum pan on a TA Instruments Model Q2000 with procedure equilibraion 100 °C, isothermal 5 minutes, equilibrate -80 °C, data on, ramp 10 °C/min to 150 °C. Tg = 41.92 °C

## IV

**Inherent Viscosity:**  $0.135 \pm 0.007$  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