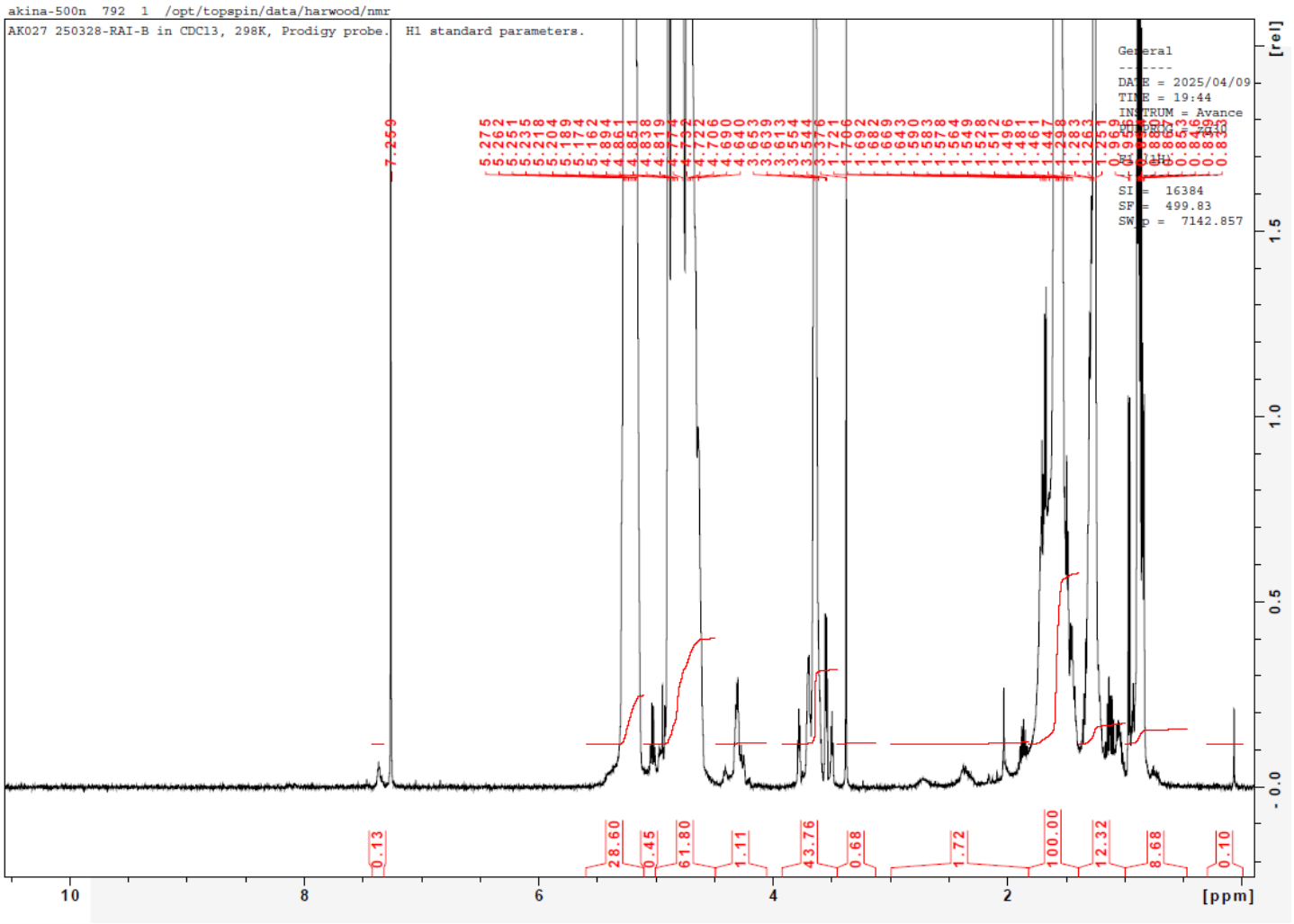
No. AK027 Certificate of Analysis

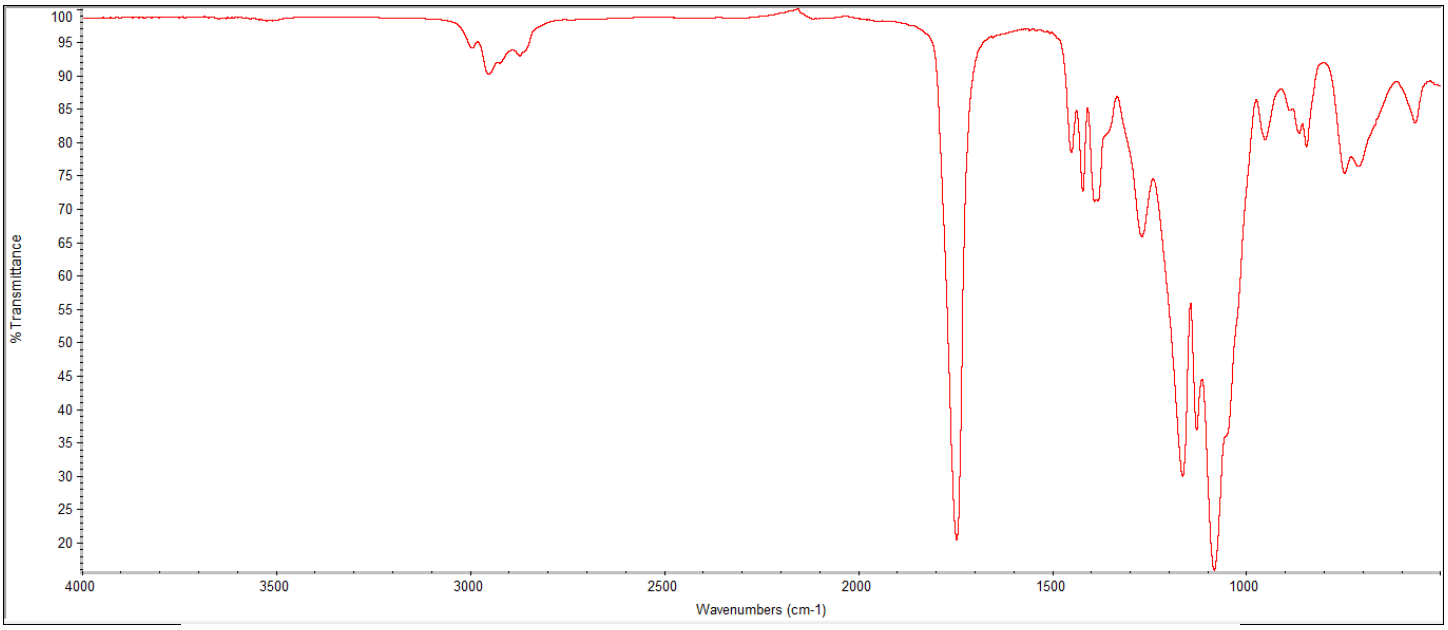
Product Name: Methoxy-Poly(ethylene glycol)-*b*-Poly(lactide-co-glycolide) (M_w ~ 2,000:15,000 Da, 50:50 LA:GA) (Lot#: 250328RAI-B)

H-NMR



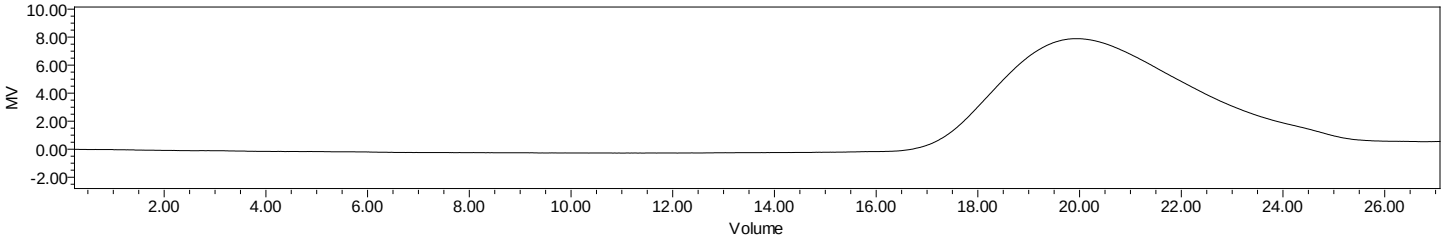
H-NMR Spectrum of copolymers in CDCl3 (Bruker ≥300 MHz, PINMRF) NMR of PLGA-PEG copolymer: EG/LA-GA =46*/120-130 (Mn EG/LA:GA 2026*/8658:7541 Da) LA:GA 53%:47%

FTIR



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

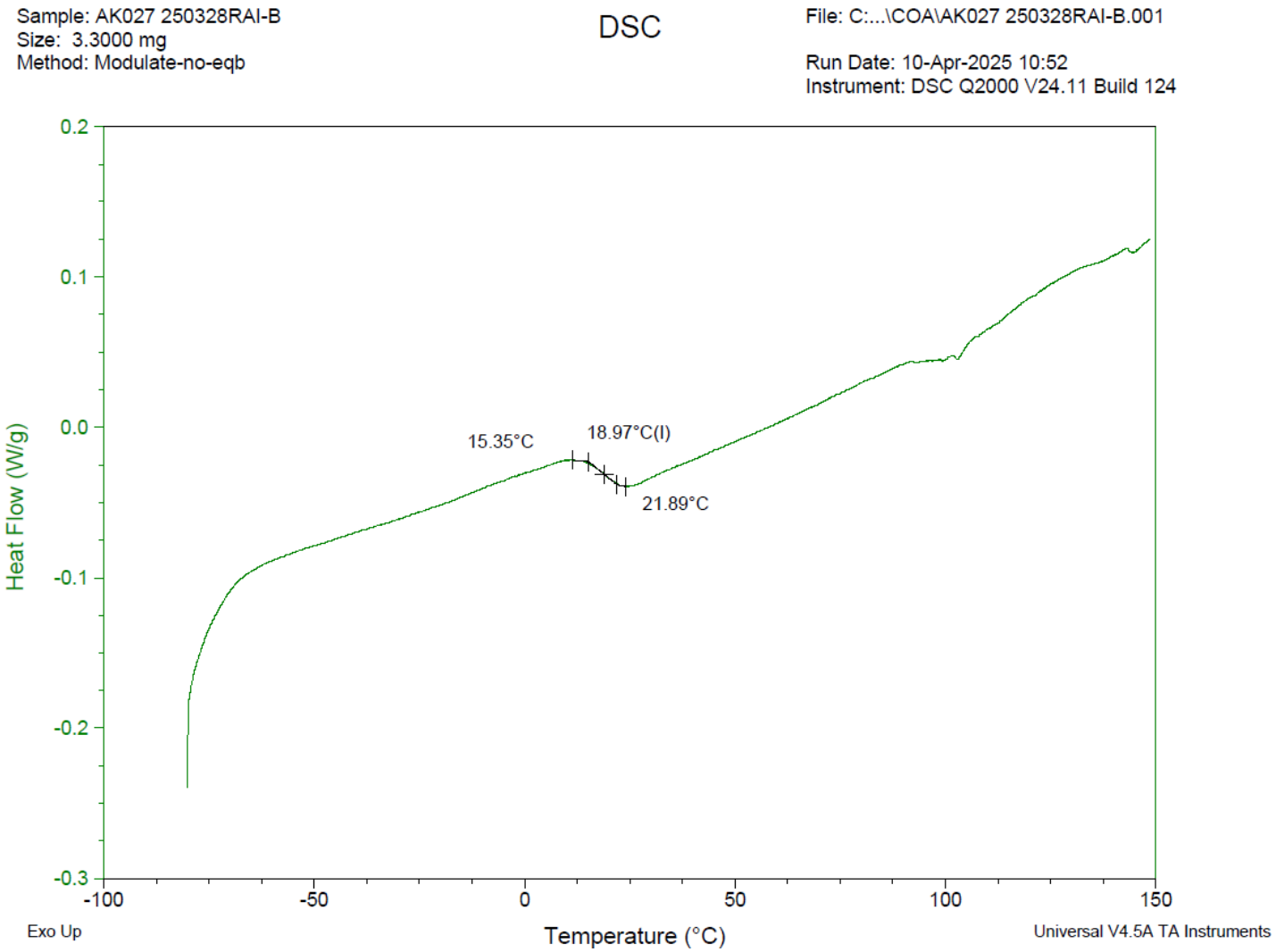
GPC-ES



Polymer	M_n (from GPC)	M_w (from GPC)	PDI
mPEG-PLGA	17,847	24,546	1.38
PEG-Precursor*	2044*		

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

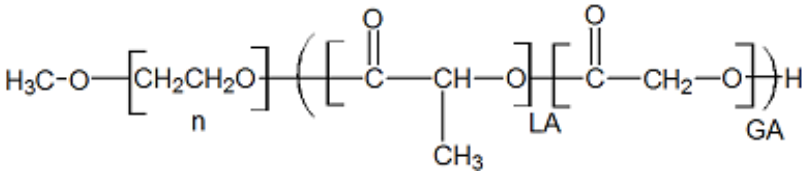


DSC Testing: 1-5 mg sample tested in crimped aluminum pan on a TA Instruments Model Q2000 with procedure equilibraion 100 °C, isothermal 5 minutes, equilibrate -80 °C, data on, ramp 10 °C/min to 150 °C. Tg = 18.97 °C

IV

Inherent Viscosity: 0.194 ± 0.005 dL/g (calculated from kinematic viscosity at 2% w/v Acetone on Rheosense microVISC, n=3) at 25ºC.

Structure of copolymers



Approved By:
Amie Tyler
Quality Manager