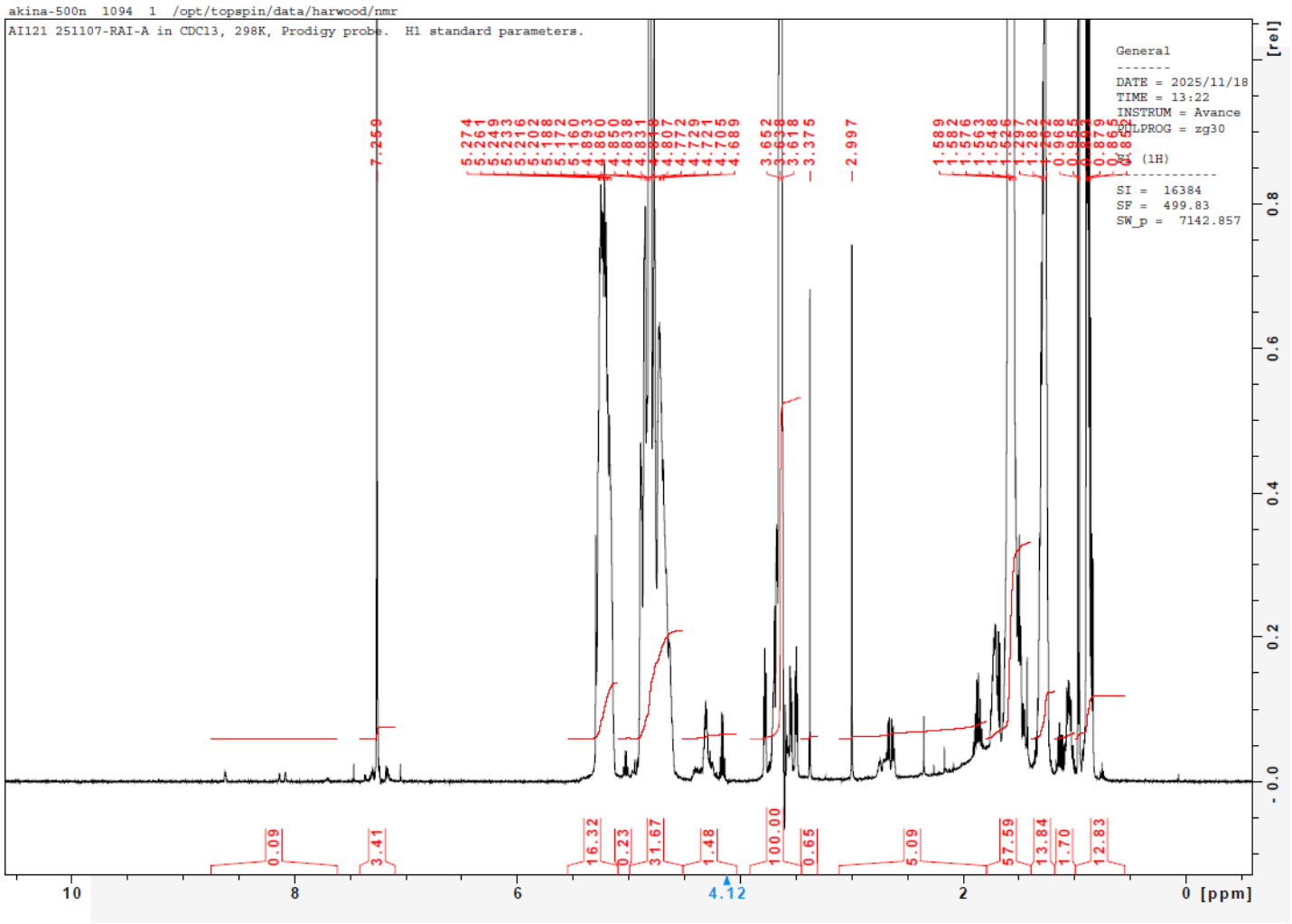
No. AI121 Certificate of Analysis

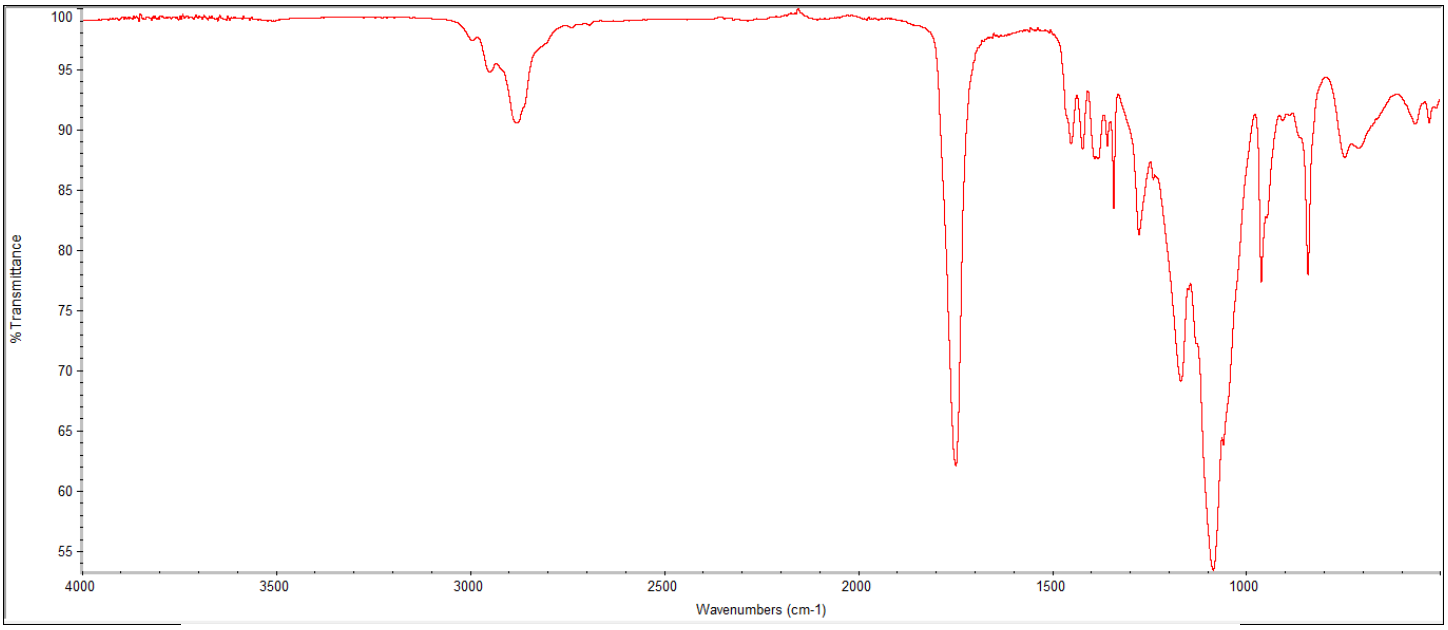
Product Name: Methoxy Poly(ethylene glycol)-b-Poly(lactide-co-glycolide) carboxylic acid (5,000:10,000 Da) (Lot#: 251107RAI-A)

H-NMR



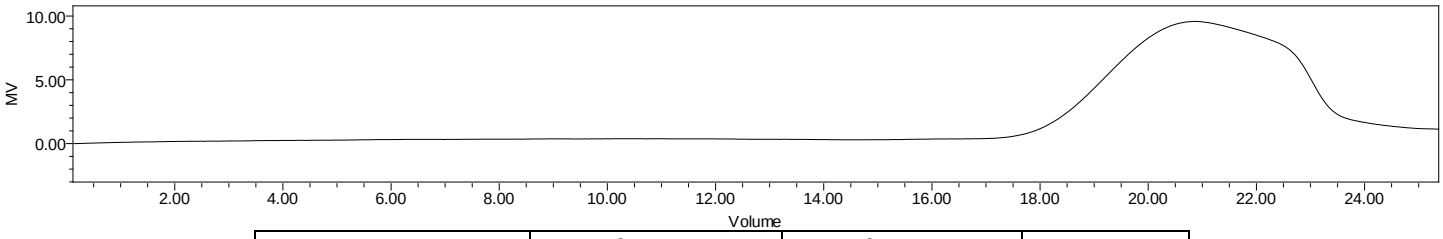
H-NMR Spectrum of copolymers in CDCl3 (Bruker ≥300 MHz, PINMRF) NMR of PLGA copolymer: EG*/LA-GA =117*/76-74 (Mn EG*/LA:GA 5154*/5499-4301 Da) LA:GA 56%:44% *from MFG data

FTIR



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

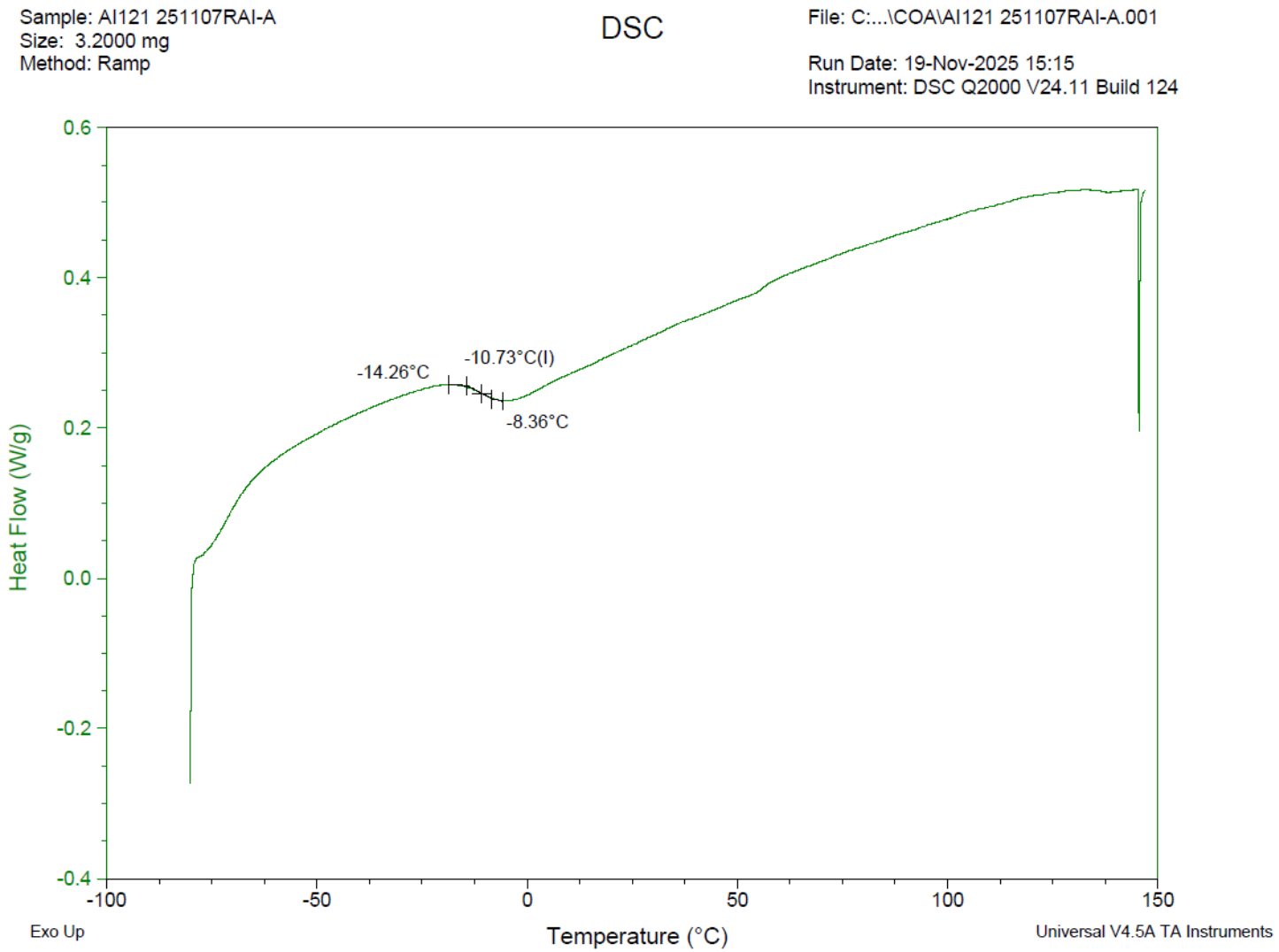
GPC-ES



Polymer	M_n (from GPC)	M_w (from GPC)	PDI
mPEG-PLGA-COOH	13,328	17,605	1.32
mPEG-precursor*	Mn=5165*		

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

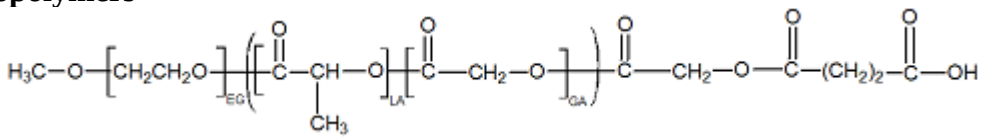


DSC Testing: 1-5 mg sample tested in crimped aluminum pan on a TA Instruments Model Q2000 with procedure equilibraion 100 °C, isothermal 5 minutes, equilibrate -80 °C, data on, ramp 10 °C/min to 150 °C. Tg = -10.73 °C

IV

Inherent Viscosity: 0.142 ± .007 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