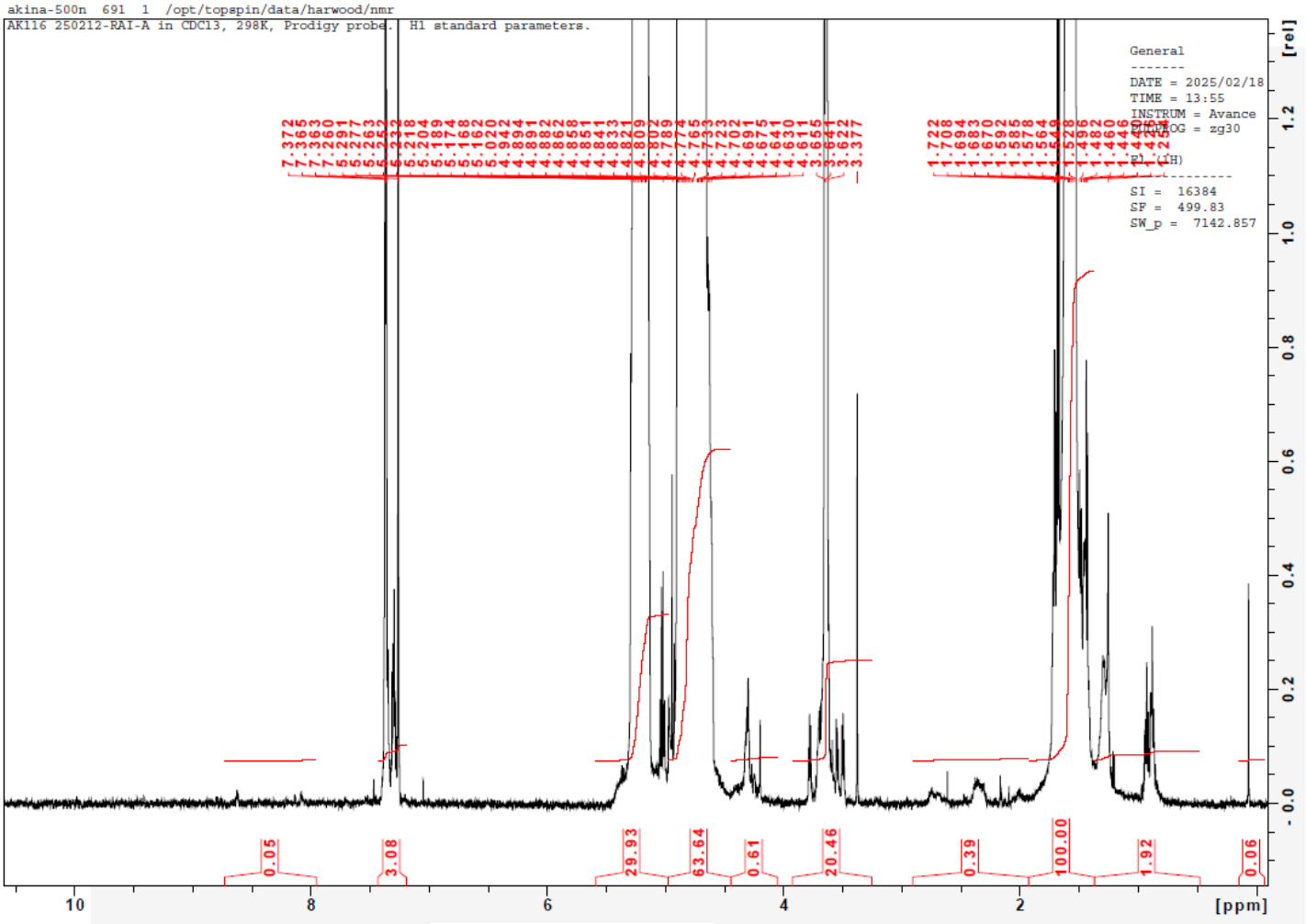
No. AK116 Certificate of Analysis

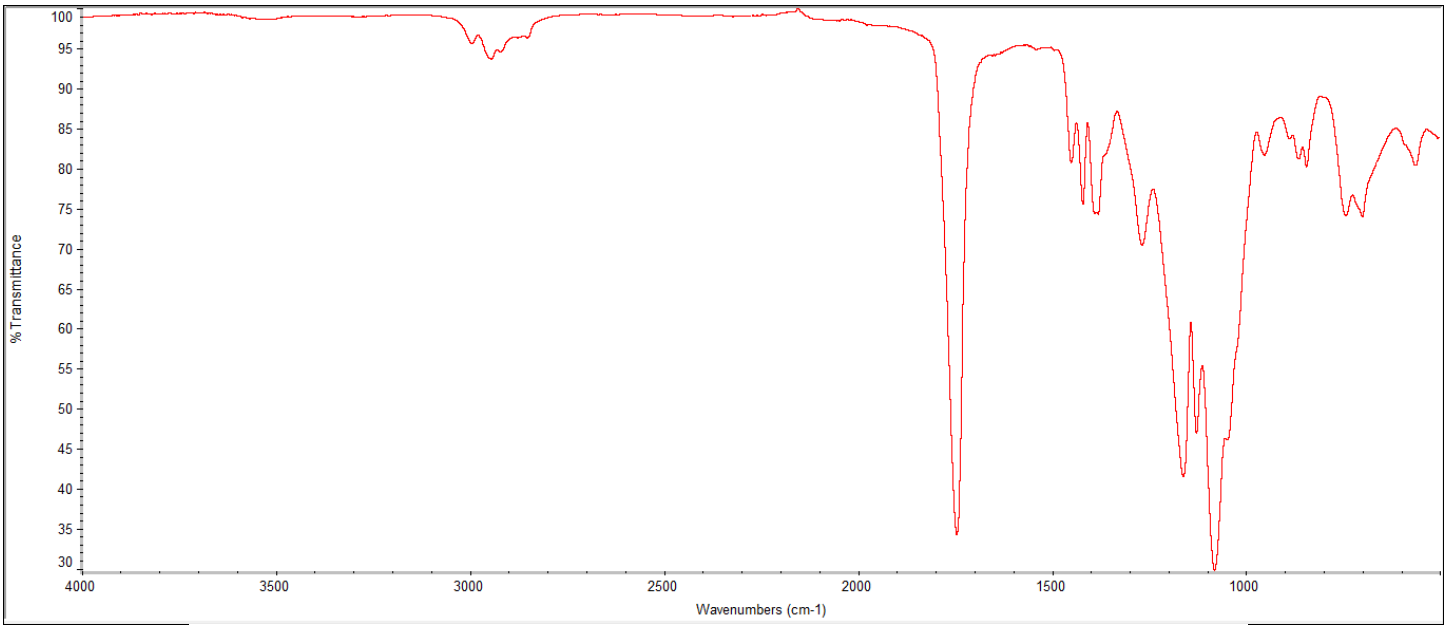
Product Name: Methoxy Poly(ethylene glycol)-Poly(lactide-co-glycolide) (5,000-75,000 Da) (LA:GA 50:50) (Lot# 250212RAI-A)

H-NMR



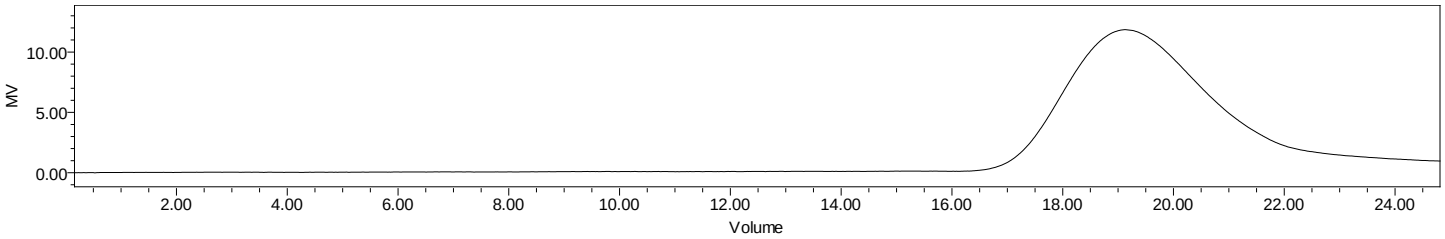
H-NMR Spectrum of copolymers in CDCl3 (Bruker ≥300 MHz, PINMRF) NMR of mPEG-PLGA copolymer: EG*/LA-GA =117*/685-728 (Mn EG*/LA:GA 5154*/49292-42244 Da) LA:GA 54%:46% *from MFG data

FTIR



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

GPC-ES

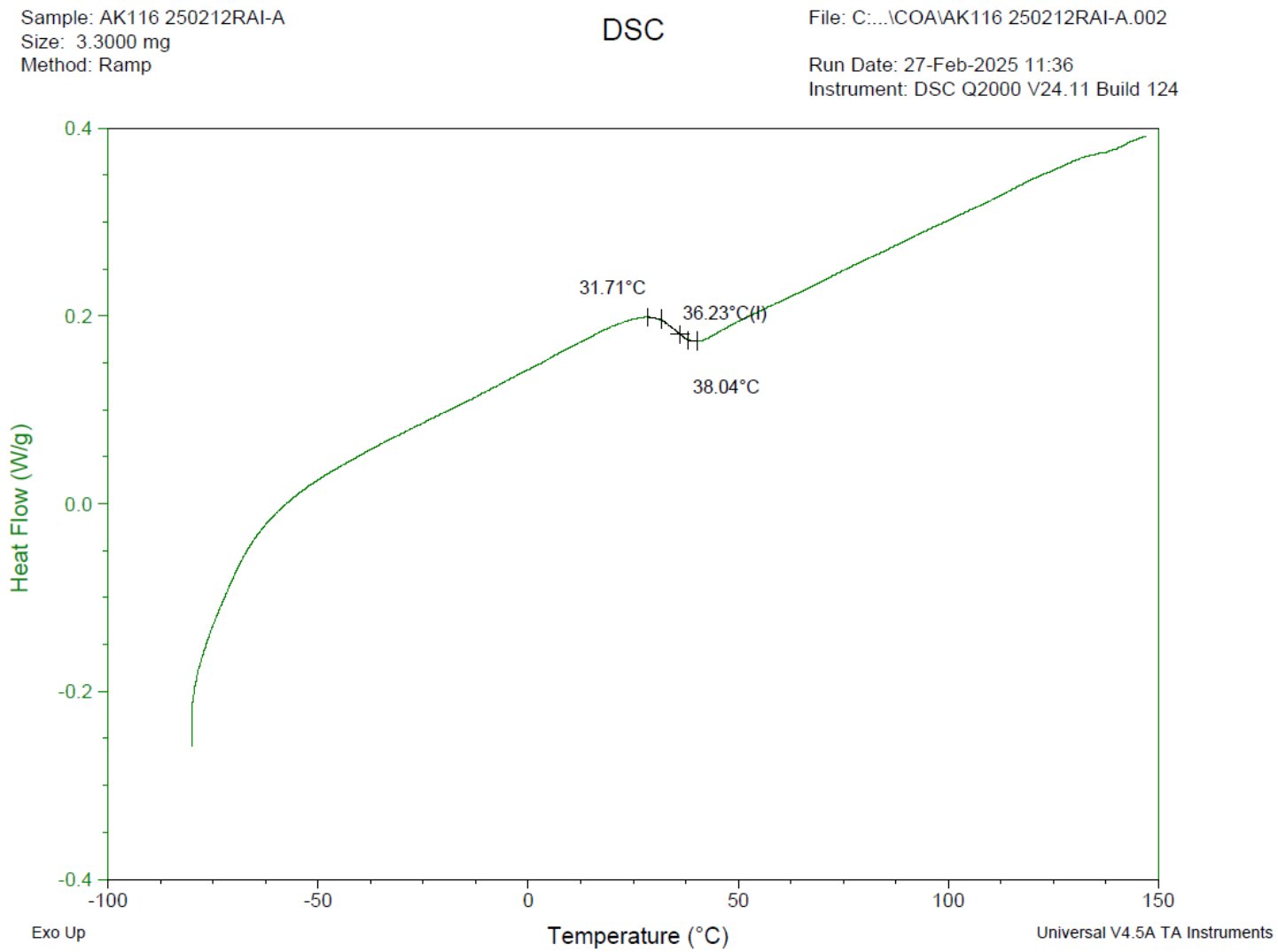


Polymer	M_n (from GPC)	M_w (from GPC)	PDI
mPEG-PLGA	42,122	55,326	1.31
PEG-Precursor*	5165*		

*- from MFG data

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.

DSC

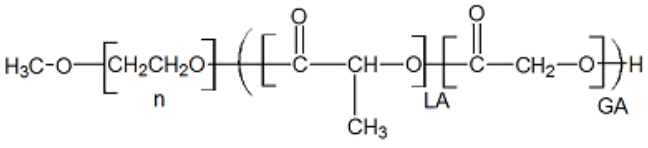


DSC Testing: 1-5 mg sample tested in crimped aluminum pan on a TA Instruments Model Q2000 with procedure equilibraion 100 °C, isothermal 5 minutes, equilibrate -80 °C, data on, ramp 10 °C/min to 150 °C. Tg = 36.23 °C

IV

Inherent Viscosity: 0.368 ± 0.129 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