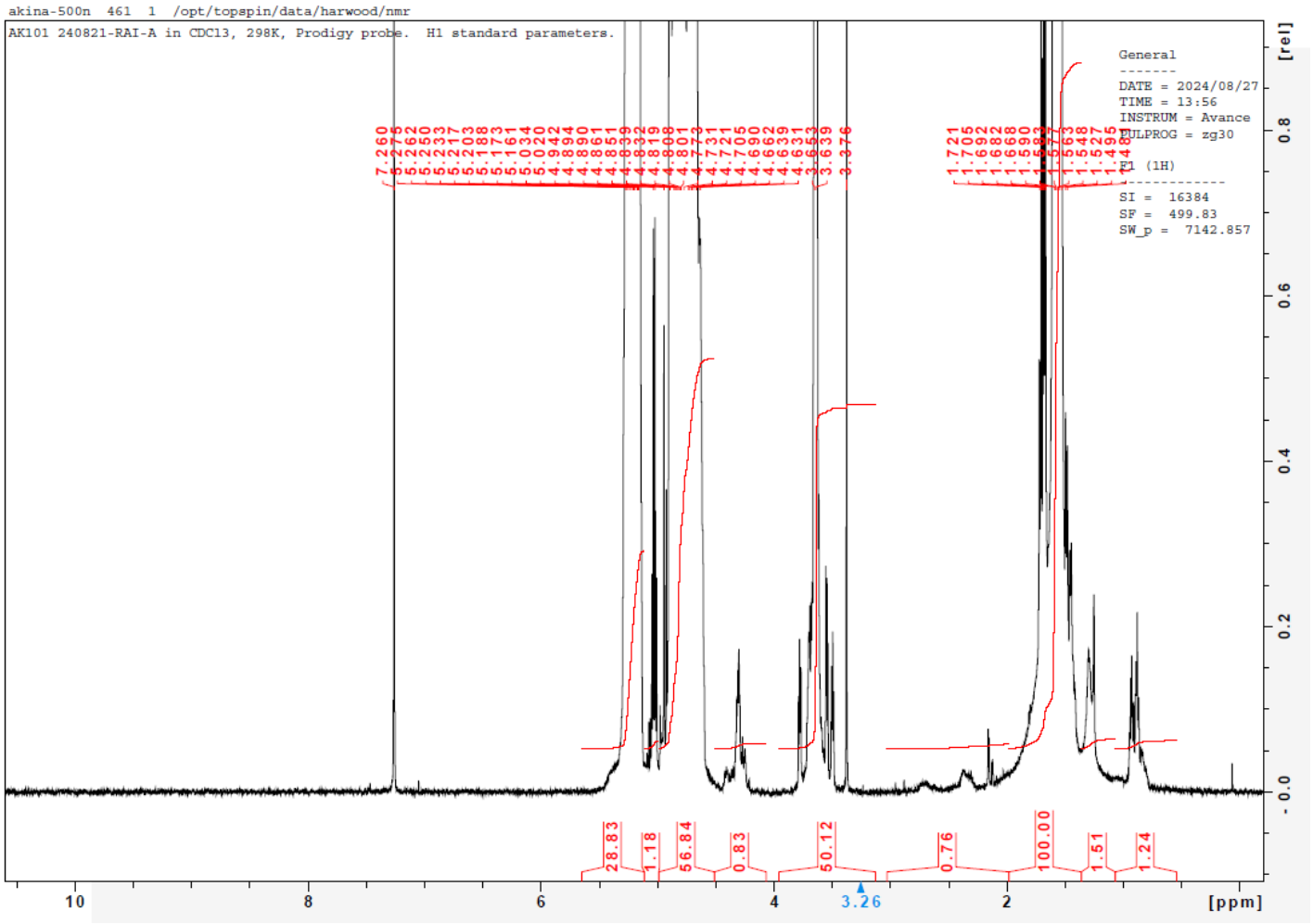
No. AK101 Certificate of Analysis

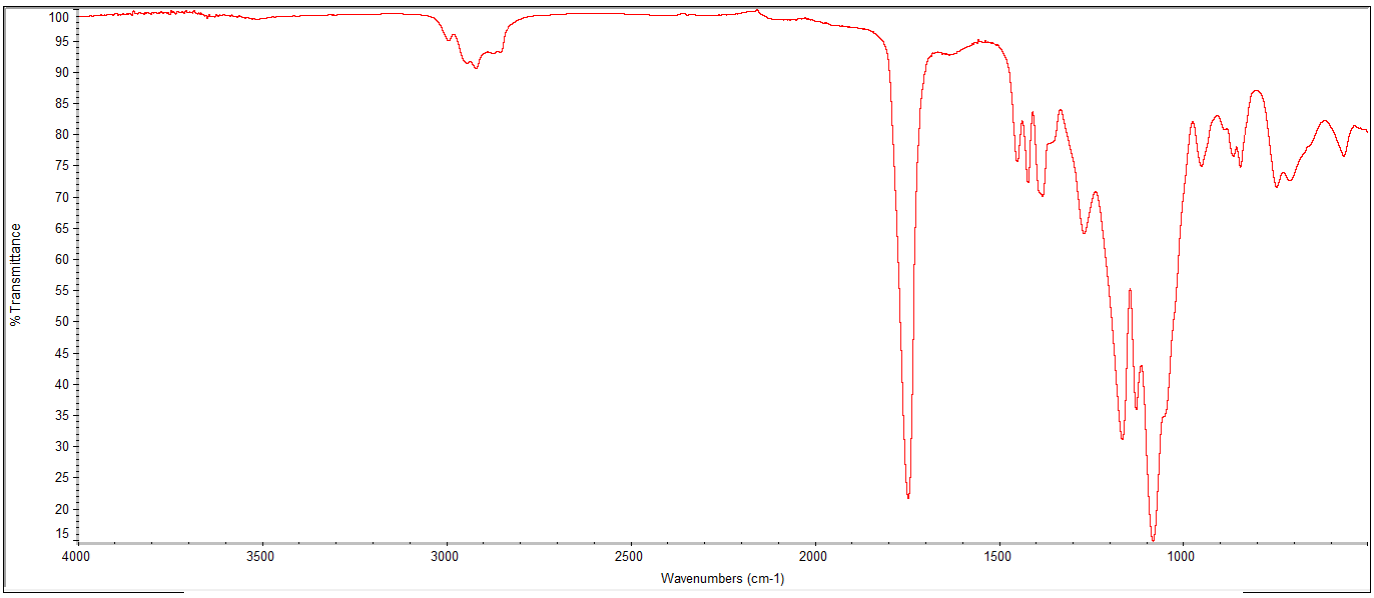
Product Name: Methoxy Poly(ethylene glycol)-*b*-Poly(D,L-lactide-co-glycolide) copolymer (M_w 3,000:20,000 Da, 50:50 LA:GA) (Lot#: 240821RAI-A)

H-NMR



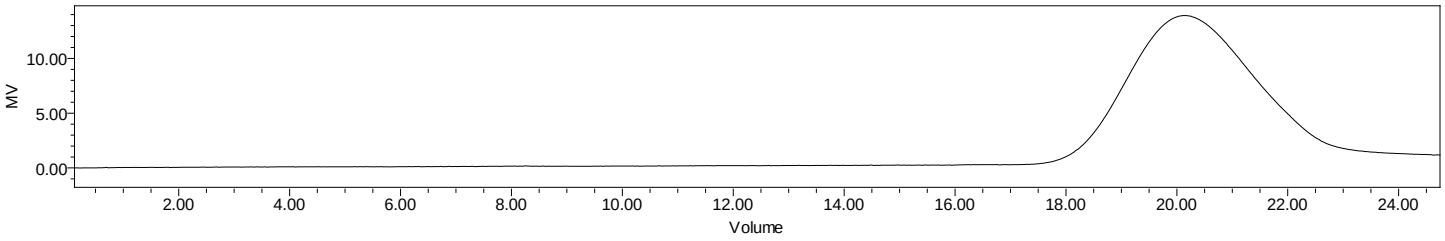
H-NMR Spectrum of copolymers in CDCl3 (Bruker ≥300 MHz, PINMRF) NMR of mPEG-PLGA copolymer: EG/LA-GA =70*/161-159 (Mn EG/LA:GA 3084*/11596-9215 Da) LA:GA 56%:44% *- from MFG data

FTIR



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

GPC-ES

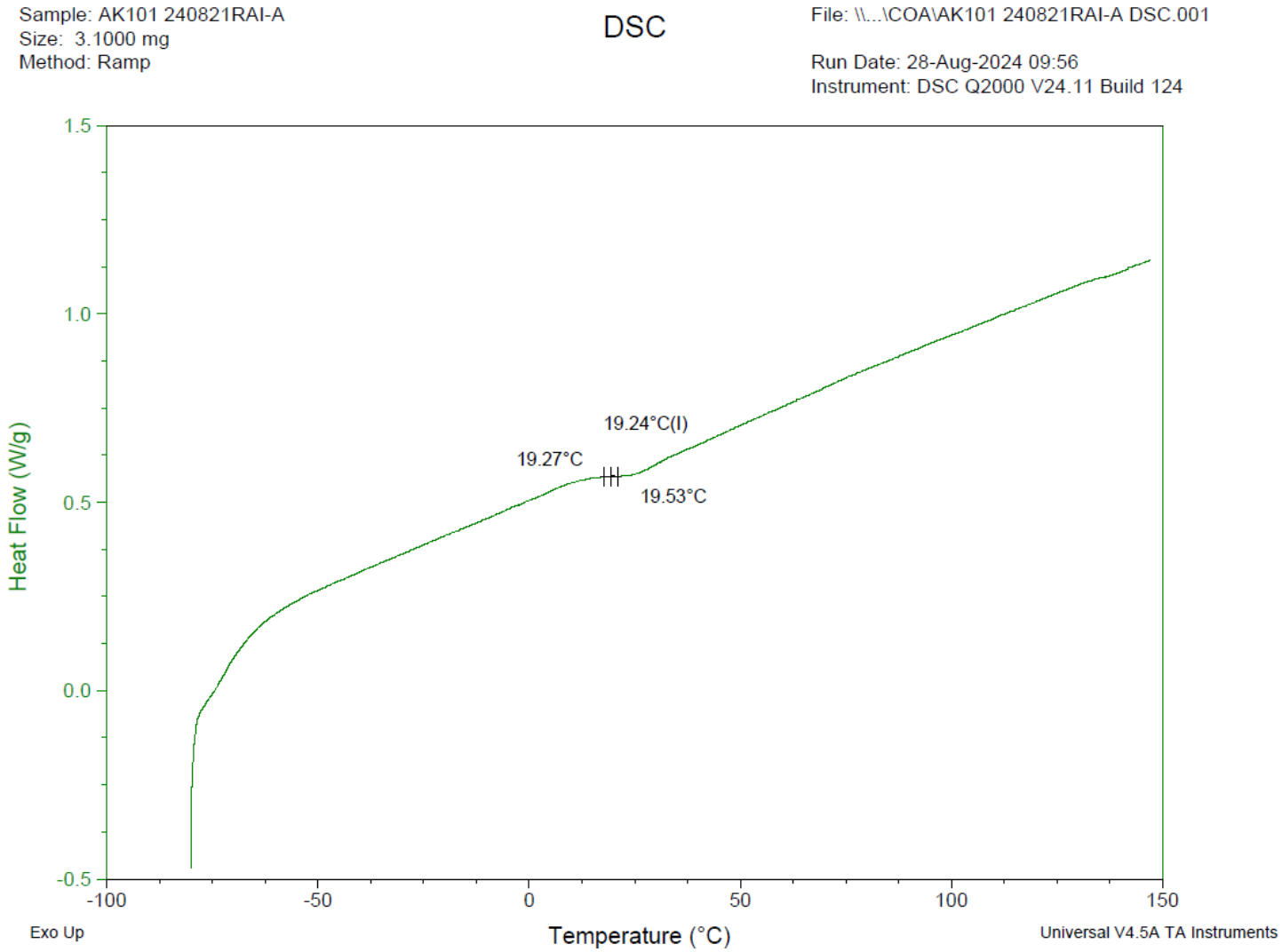


Polymer	M_n (from GPC)	M_w (from GPC)	PDI
mPEG-PLGA	14,622	22,313	1.66
mPEG-Precursor*	3072*		

*- 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

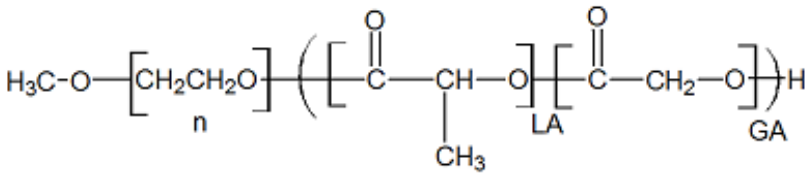


DSC Testing: 1-5 mg sample tested in crimped aluminum pan on a TA Instruments Model Q2000 with procedure equilibraion 100 °C, isothermal 5 minutes, equilibrate -80 °C, data on, ramp 10 °C/min to 150 °C. Tg = 19.24 °C

IV

Inherent Viscosity: 0.233 dL/g (calculated from kinematic viscosity at 2% w/v acetone on Rheosense microVISC, n=3) at 25ºC

Structure of mPEG-PLGA copolymers



Approved By:
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