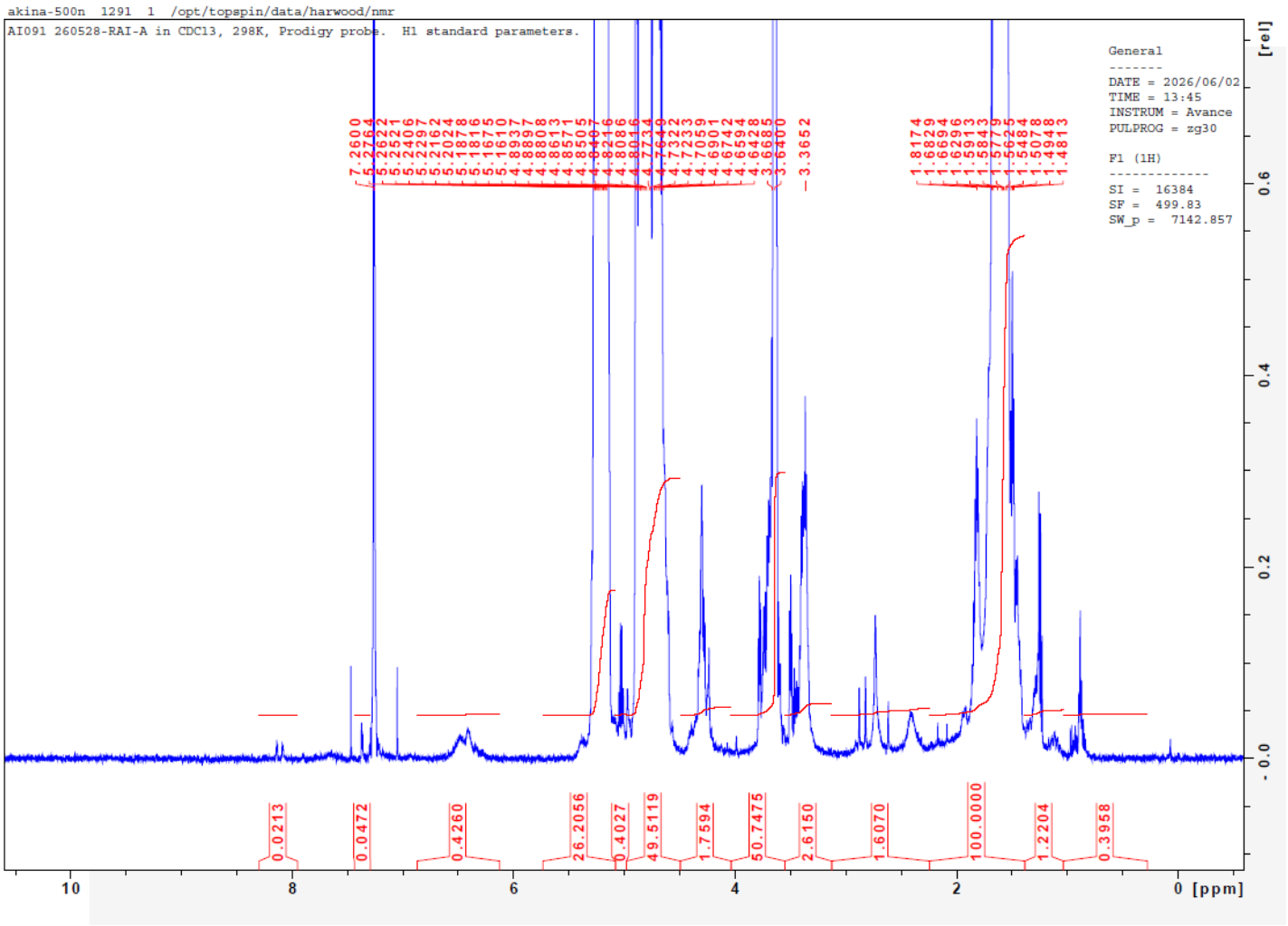
No. AI091 Certificate of Analysis

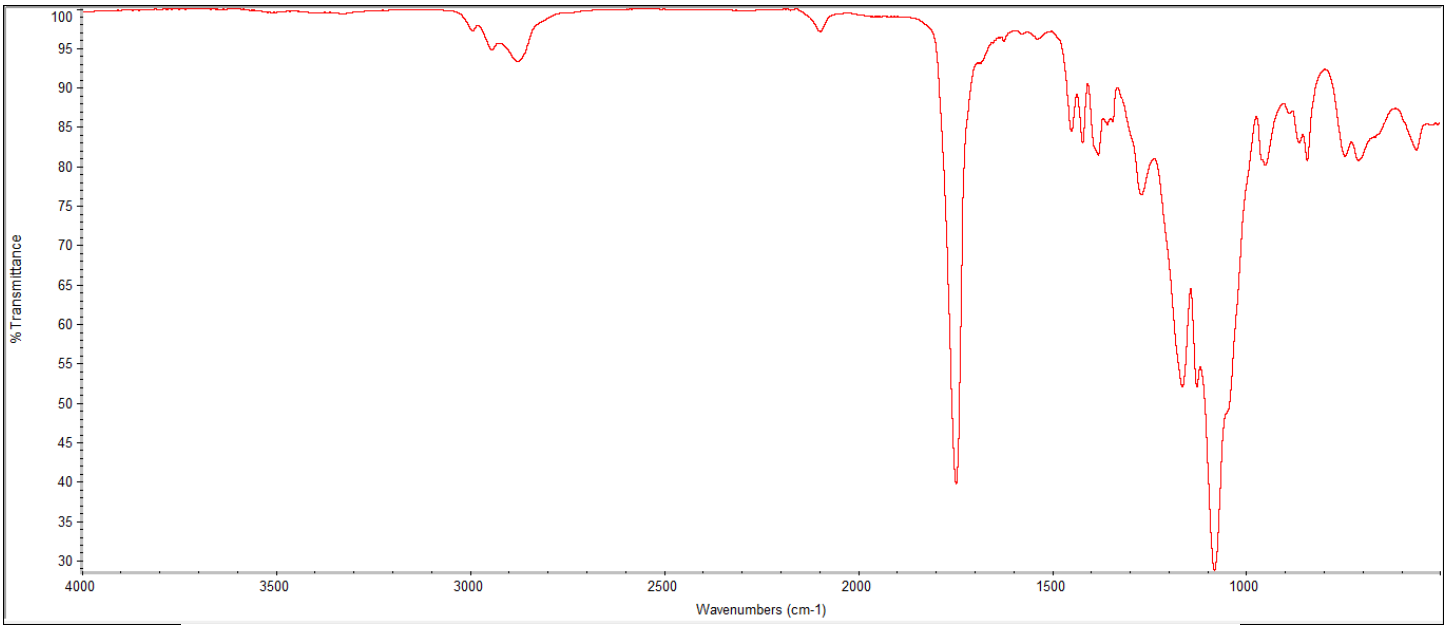
Product Name: Poly(lactide-co-glycolide)-b-Poly(ethylene glycol)-Azide copolymer (M_W ~ 30,000-5,000 Da) (Lot#: 260528RAI-A)

H-NMR



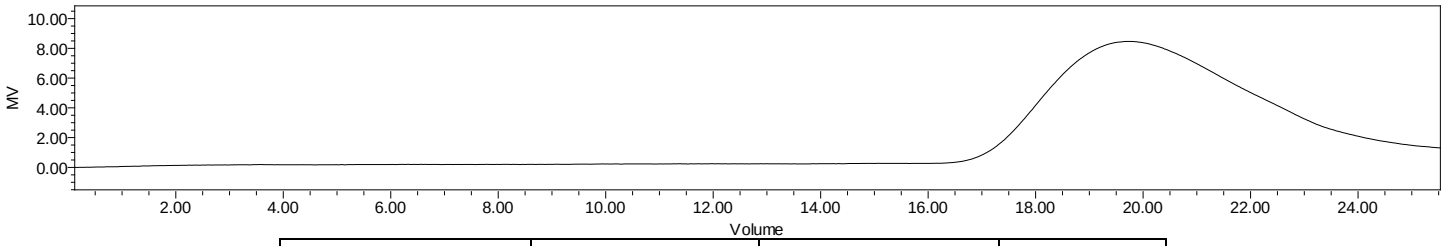
H-NMR Spectrum of copolymers in CDCl3 (Bruker ≥300 MHz, PINMRF) NMR of PLGA copolymer: EG*/LA-GA =102*/211-199 (Mn EG*/LA:GA 4494*/15170-11552 Da) LA:GA 57%:43% *from MFG data

FTIR



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

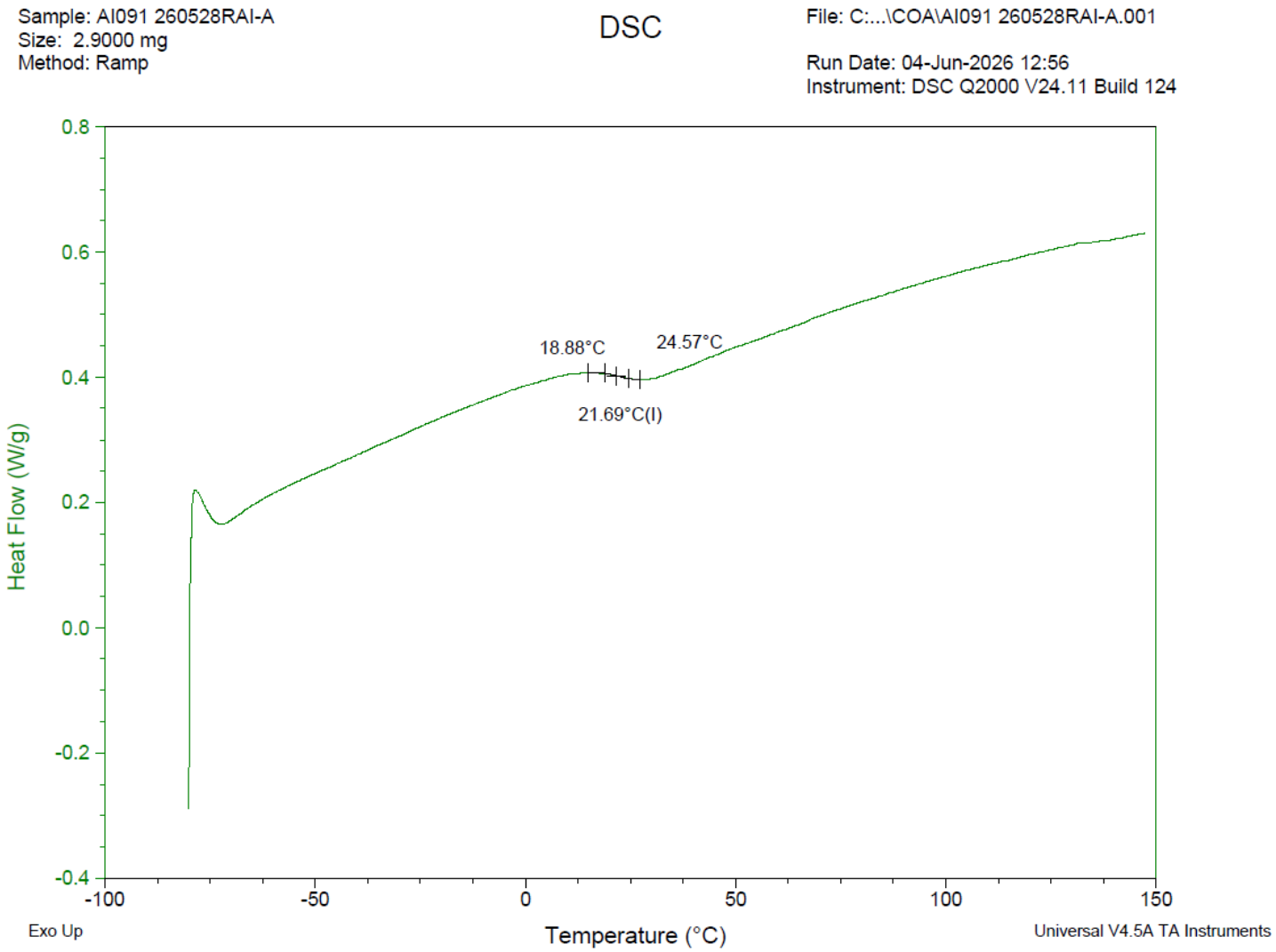
GPC-ES



Polymer	M_n (from GPC)	M_w (from GPC)	PDI
PLGA-PEG-Azide	21,350	27,797	1.30
PEG-precursor*	4500*		

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

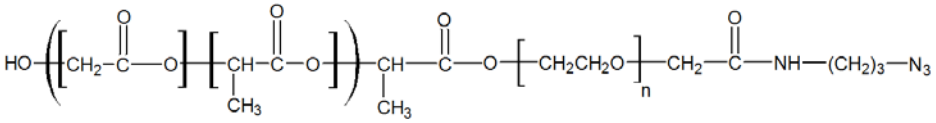


DSC Testing: 1-5 mg sample tested in crimped aluminum pan on a TA Instruments Model Q2000 with procedure equilibraion 100 °C, isothermal 5 minutes, equilibrate -80 °C, data on, ramp 10 °C/min to 150 °C. Tg = 21.69 °C

IV

Inherent Viscosity: 0.268 ± 0.008 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