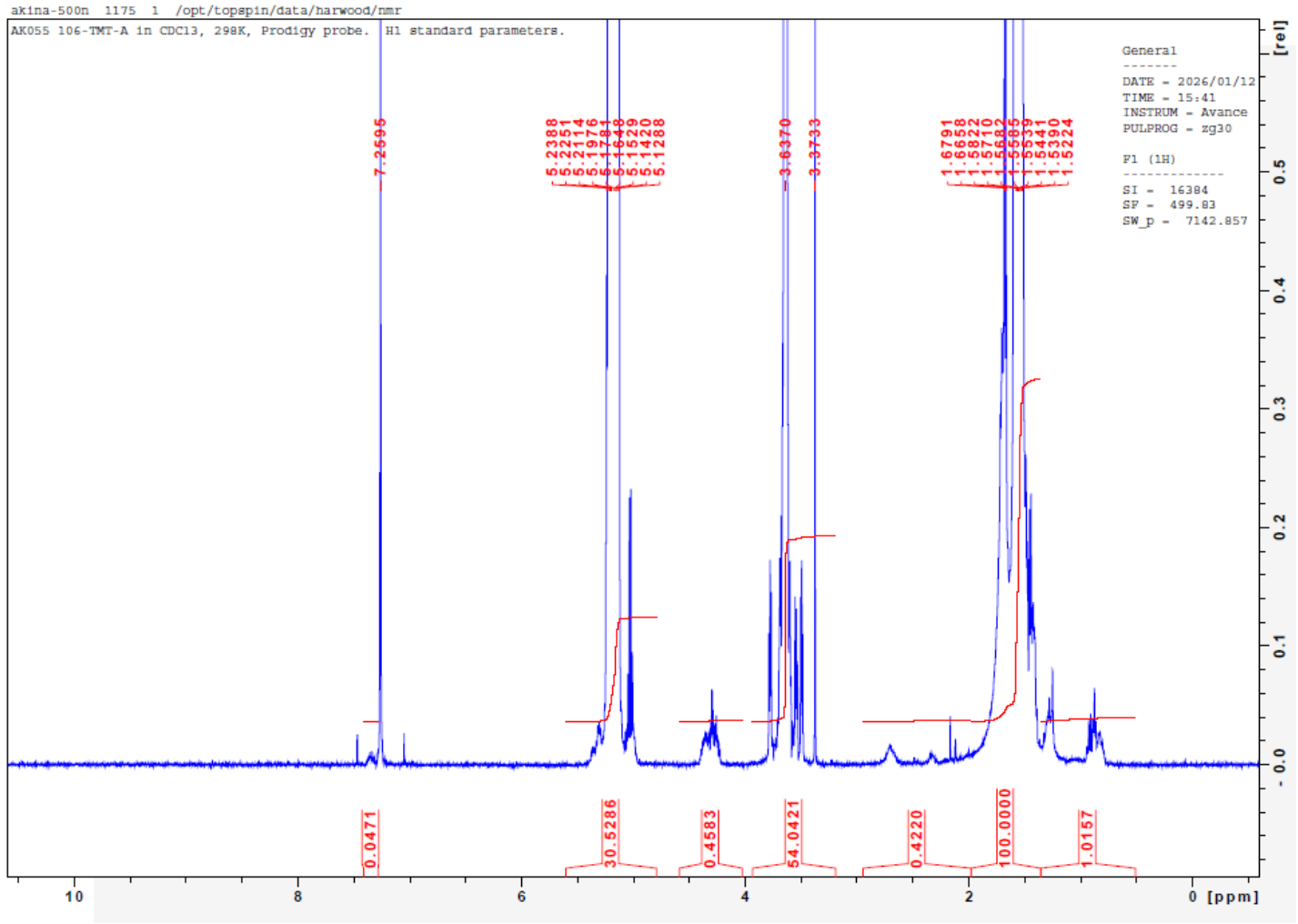
No. AK055 Certificate of Analysis

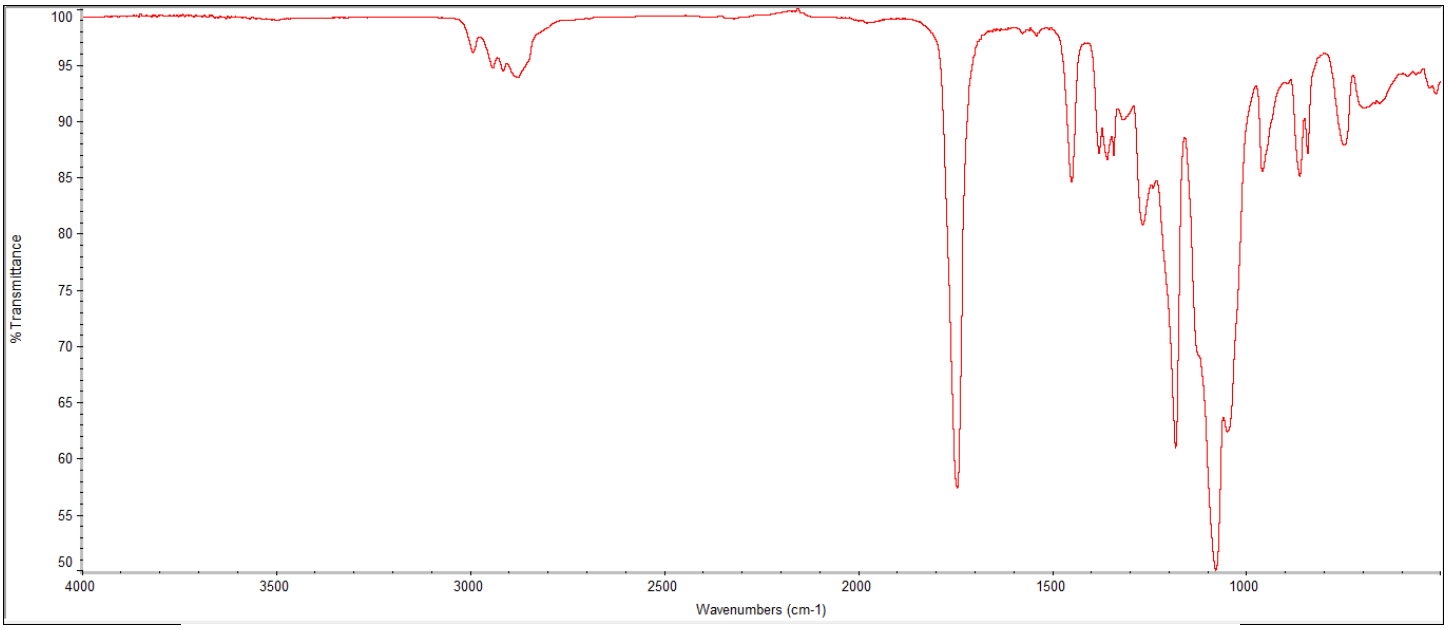
Product Name: Methoxy Poly(ethylene glycol)-b-Poly((D,L) lactic acid) copolymers (5,000:18,000Da) (Lot#: 260106TMT-A)

H-NMR



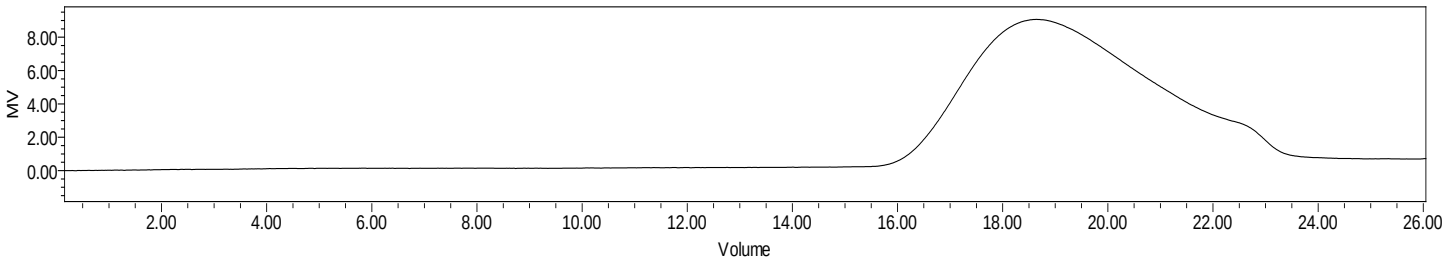
H-NMR Spectrum of copolymers in CDCl3 (Bruker ≥300 MHz, PINMRF) NMR of mPEG-P(DL)LA copolymer: EG*/LA =117*/264 (Mn EG*/LA 5154*/19035 Da) *- from MFG data

FTIR



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

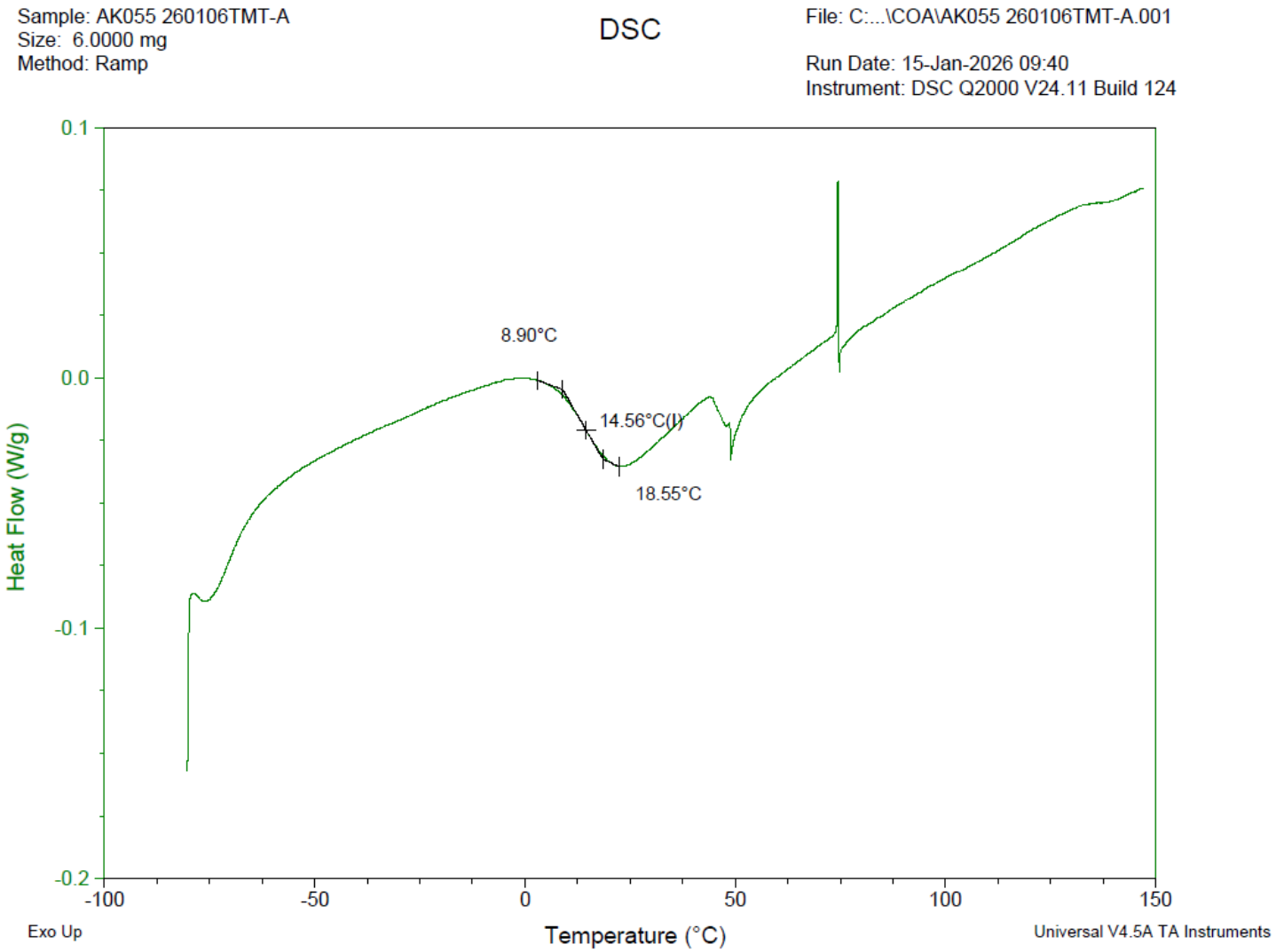
GPC-ES



Polymer	M_n (from GPC)	M_w (from GPC)	PDI
mPEG-P(DL)LA	25,750	38,029	1.48
mPEG-Precursor*	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

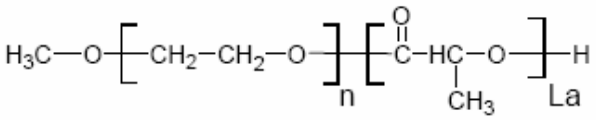


DSC Testing: 1-5 mg sample tested in crimped aluminum pan on a TA Instruments Model Q2000 with procedure equilibraion 100 °C, isothermal 5 minutes, equilibrate -80 °C, data on, ramp 10 °C/min to 150 °C. Tg = 14.56 °C

IV

Inherent Viscosity: 0.171 ± 0.006 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