

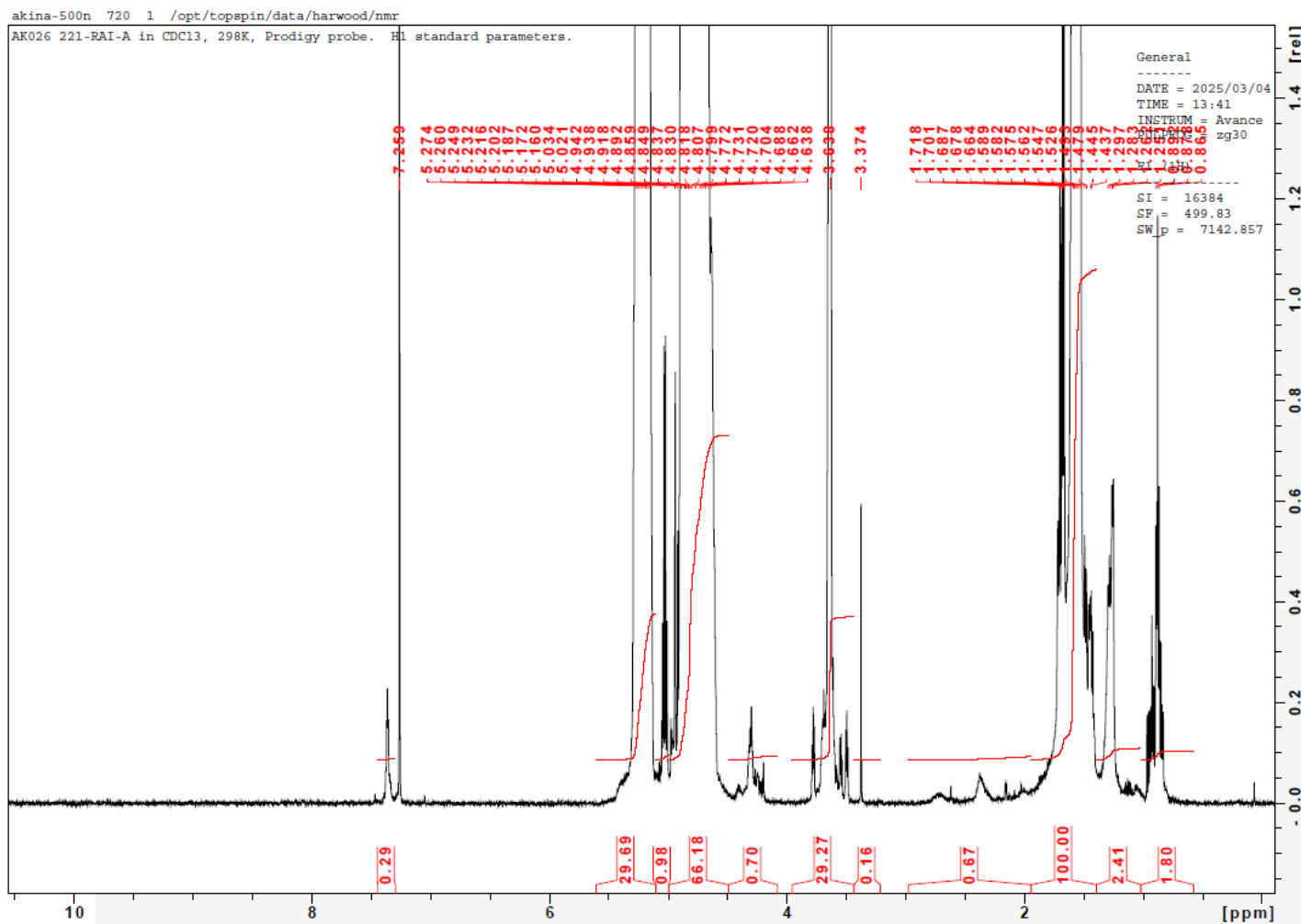
No. AK026

Certificate of Analysis



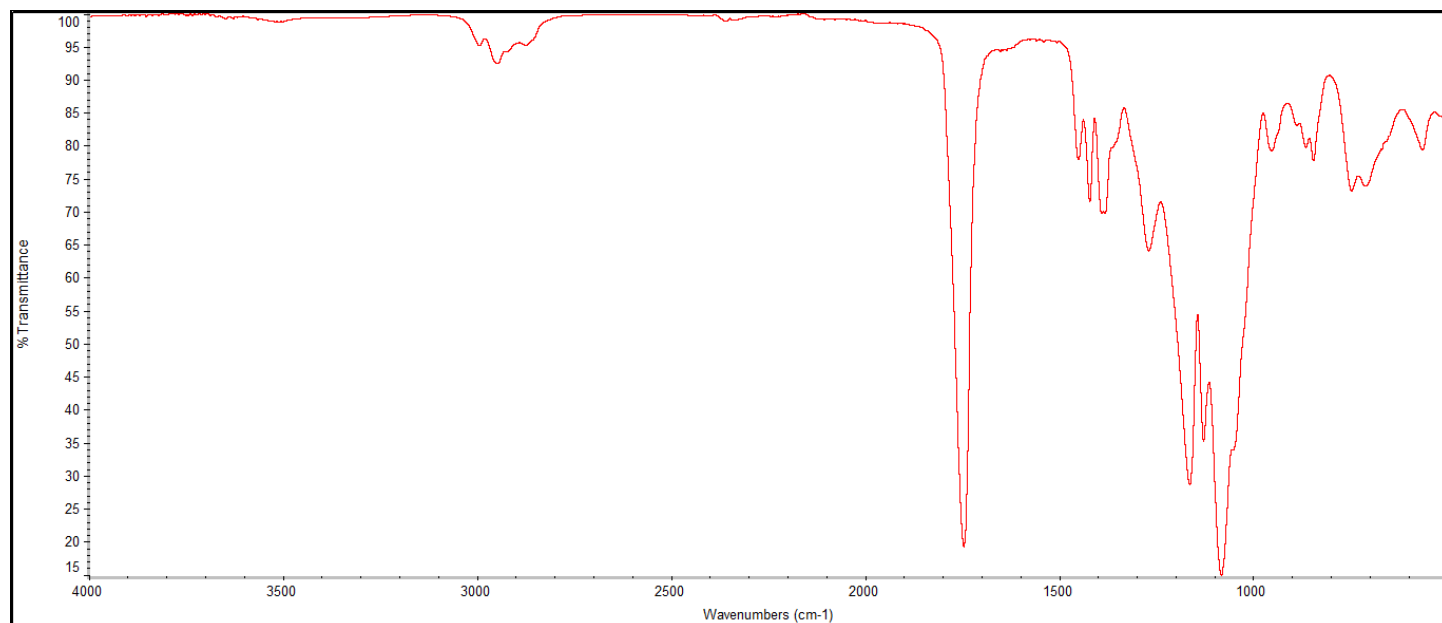
Product Name: Methoxy Poly(ethylene glycol)-Poly(lactide-co-glycolide)
(5,000-55,000 Da) (LA:GA 50:50) (Lot# 250221RAI-A)

H-NMR



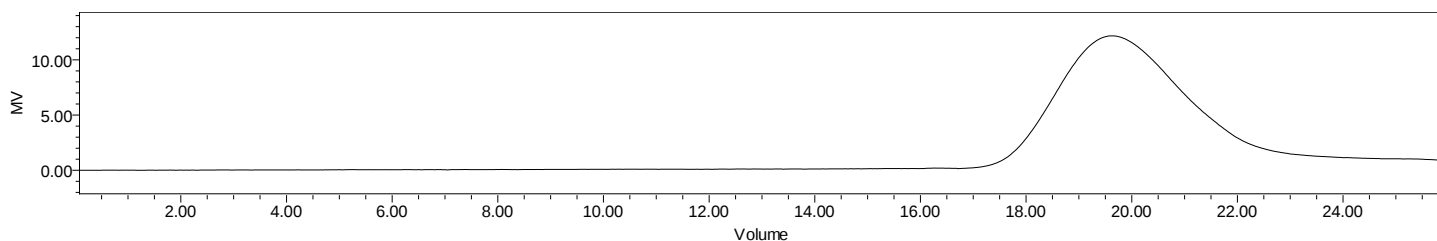
H-NMR Spectrum of copolymers in CDCl₃ (Bruker ≥300 MHz, PINMRF) NMR of mPEG-PLGA copolymer: EG*/LA-GA =117*/475-529 (Mn EG*/LA:GA 5154*/34180-30708 Da) LA:GA 53%:27% *from MFG data

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	29,184	38,560	1.32
PEG-Precursor*	M _w 4788*		

*- 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.

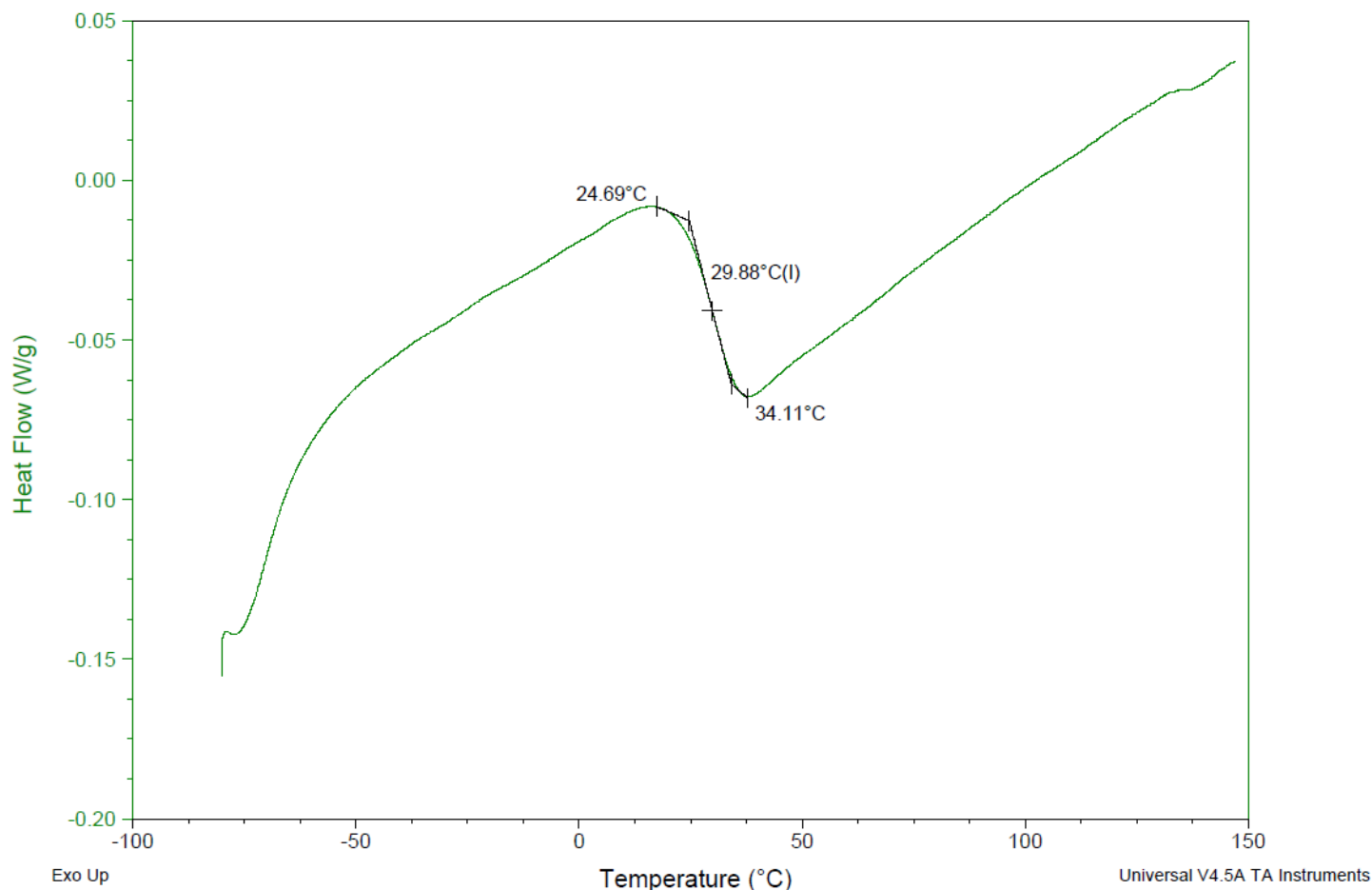
DSC

Sample: AK026 250221RAI-A DSC
Size: 4.8000 mg
Method: Ramp

DSC

File: C:\...\COA\AK026 250221RAI-A DSC.001

Run Date: 27-Feb-2025 14:06
Instrument: DSC Q2000 V24.11 Build 124

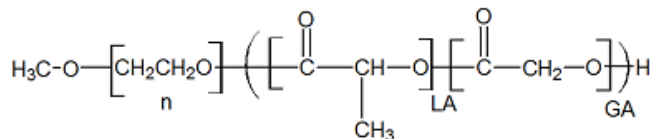


DSC Testing: 1-5 mg sample tested in crimped aluminum pan on a TA Instruments Model Q2000 with procedure equilibraion 100 °C, isothermal 5 minutes, equilibrate -80 °C, data on, ramp 10 °C/min to 150 °C. Tg = 29.88°C

IV

Inherent Viscosity: 0.233 ± 0.026 dL/g (calculated from kinematic viscosity at 2% w/v Acetone on Rheosense microVISC, n=3) at 25°C.

Structure of copolymers



Approved By:
Amie Tyler
Quality Manager