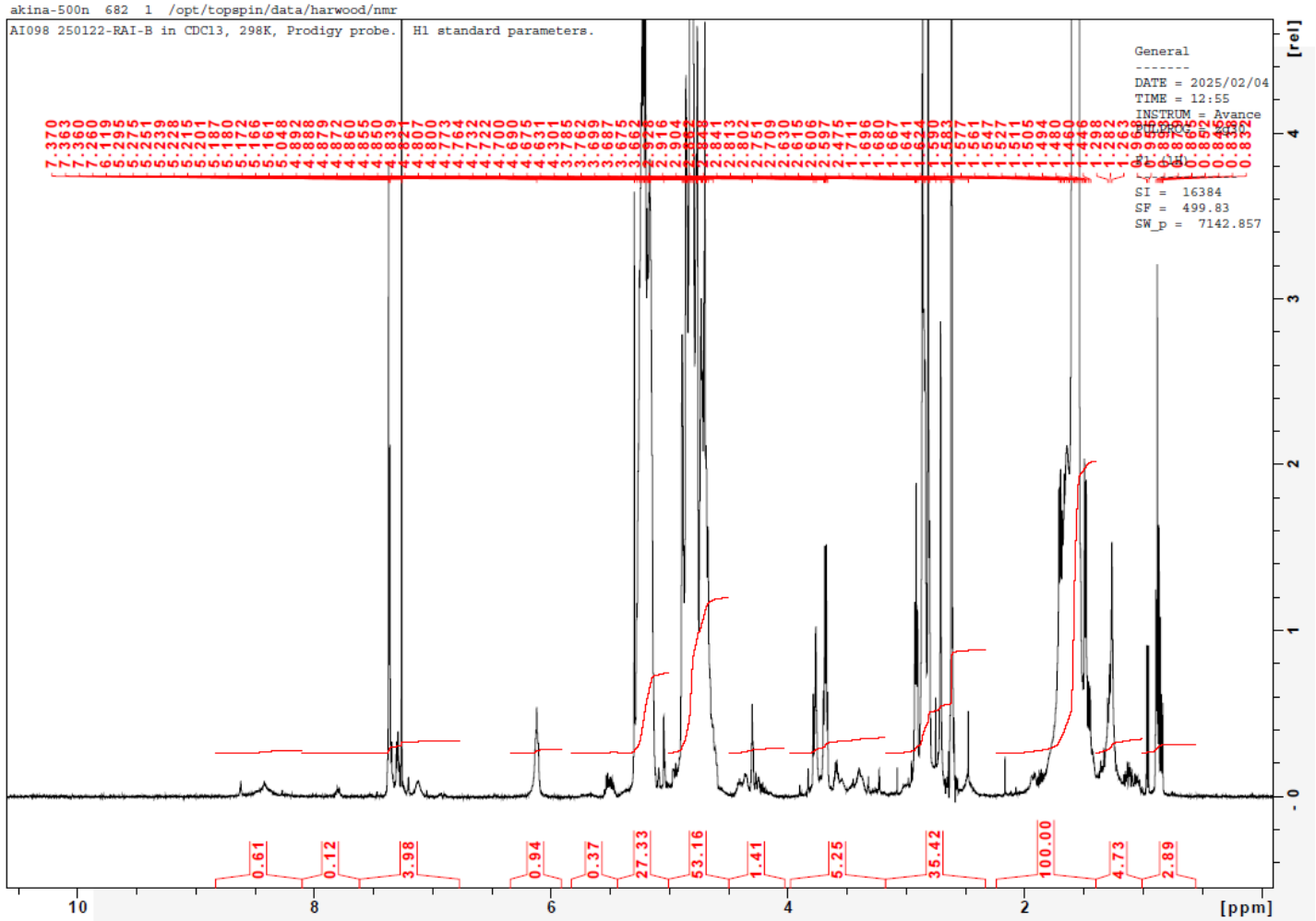


No. AI098 Certificate of Analysis

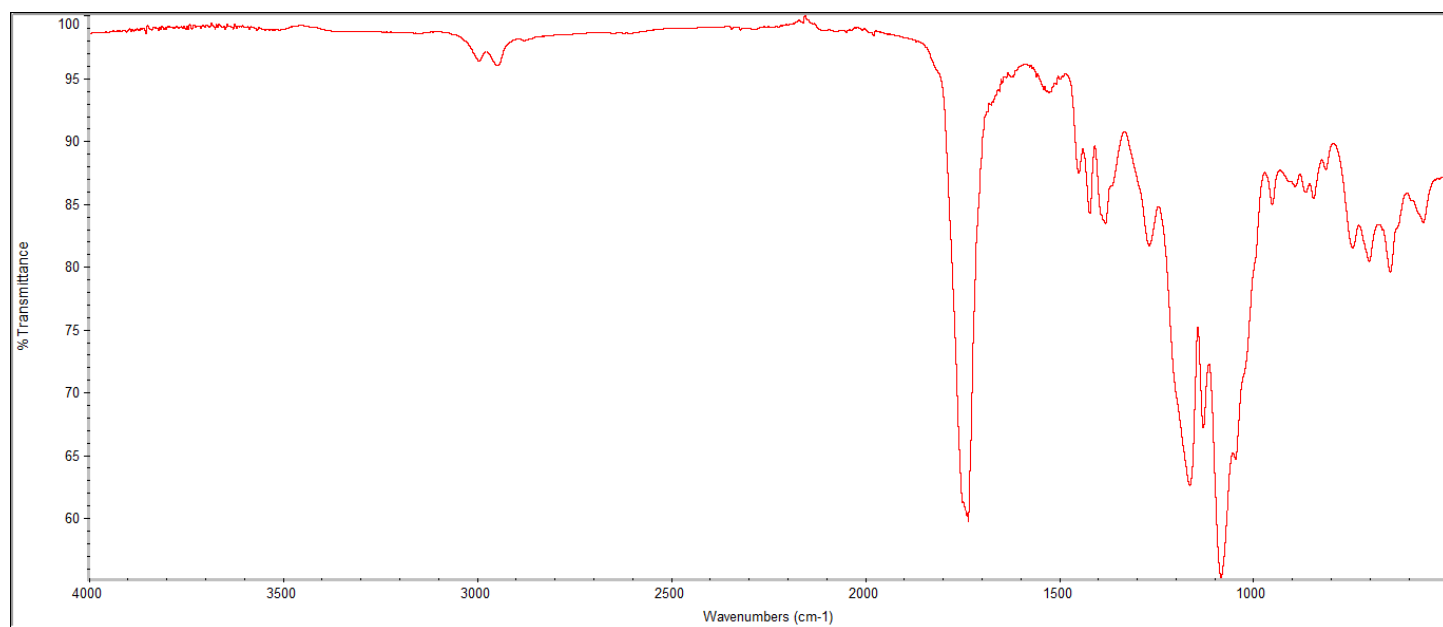
Product Name: Poly(lactide-co-glycolide)-histidine methyl ester endcap (Mn 1,000-5,000)
 LA:GA 50:50) (Lot#: 250122RAI-B)

H-NMR



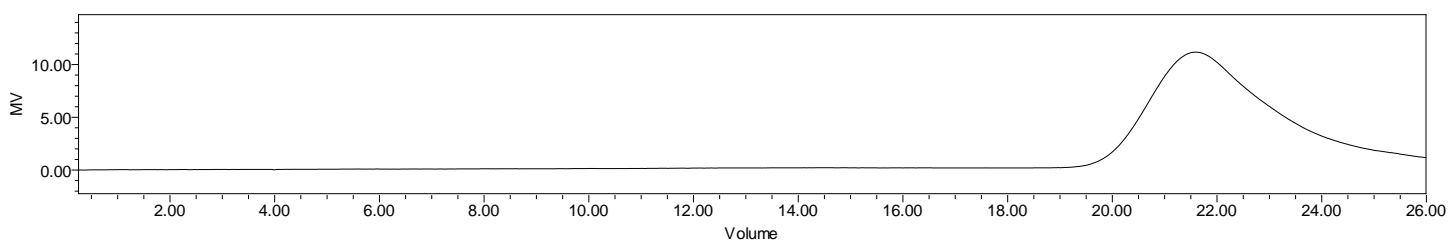
H-NMR Spectrum of copolymers in CDCl₃ (Bruker ≥300 MHz, PINMRF) NMR of PLGA-histidine copolymer: LA-GA =51%-49% molar ratio (LA:GA 56%44% w:w)

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-histidine	4563	7531	1.65

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

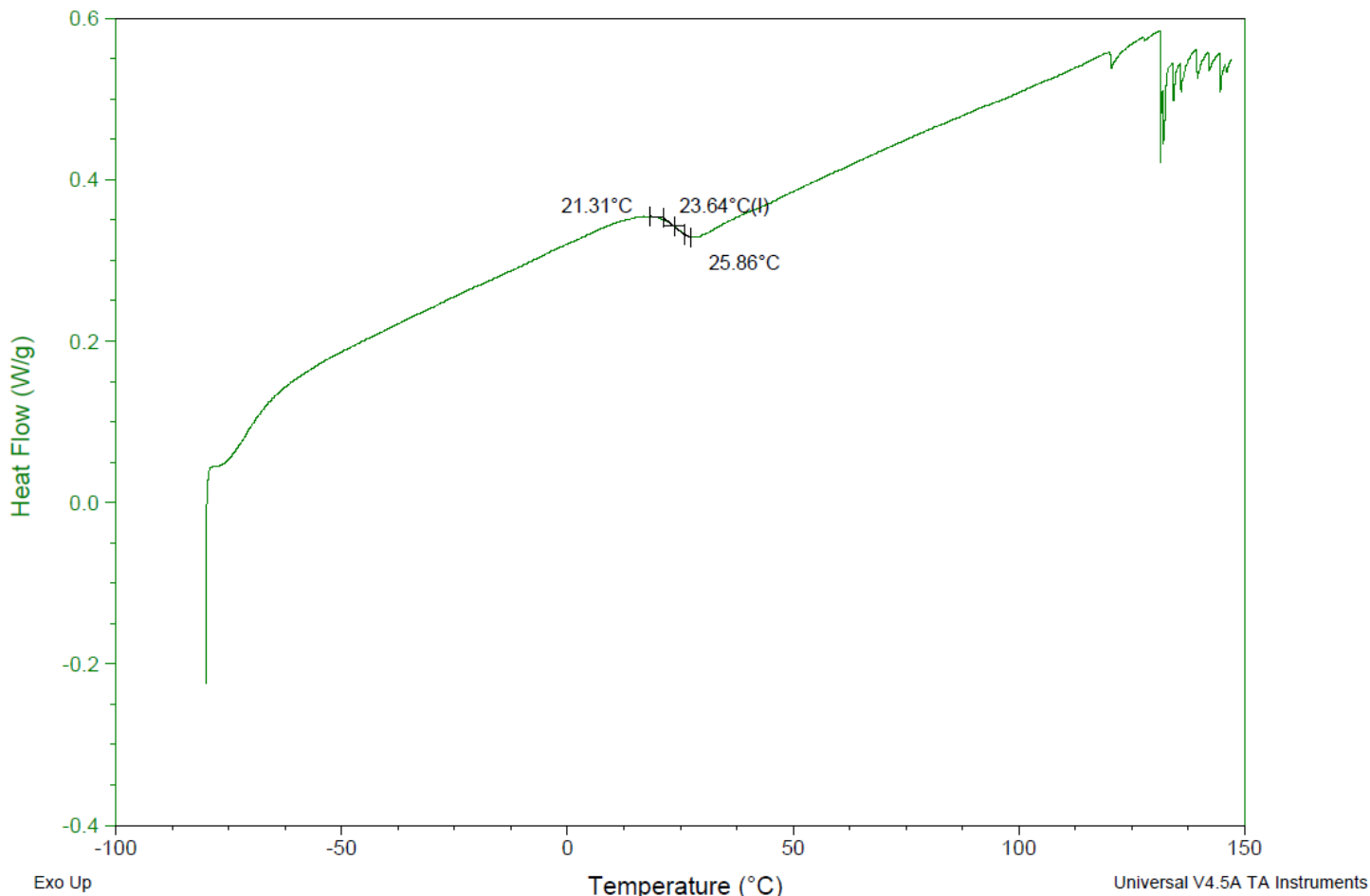
Sample: AI098 250122RAI-B
Size: 3.4000 mg
Method: Glass Transition-simple

DSC

File: C:\COA\AI098 250122RAI-B.001

Run Date: 28-Jan-2025 12:38

Instrument: DSC Q2000 V24.11 Build 124

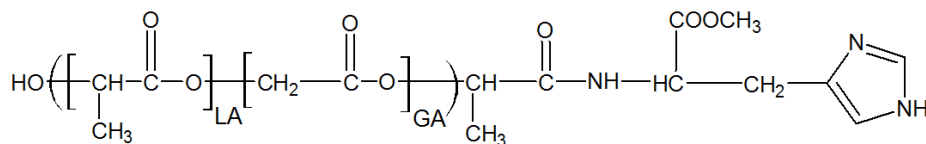


DSC Testing: 1-5 mg sample tested in crimped aluminum pan on a TA Instruments Model Q2000 with procedure equilibraion 100 °C, isothermal 5 minutes, equilibrate -80 °C, data on, ramp 10 °C/min to 150 °C. Tg = 23.64 °C

IV

Inherent Viscosity: 0.086 ± 0.005 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