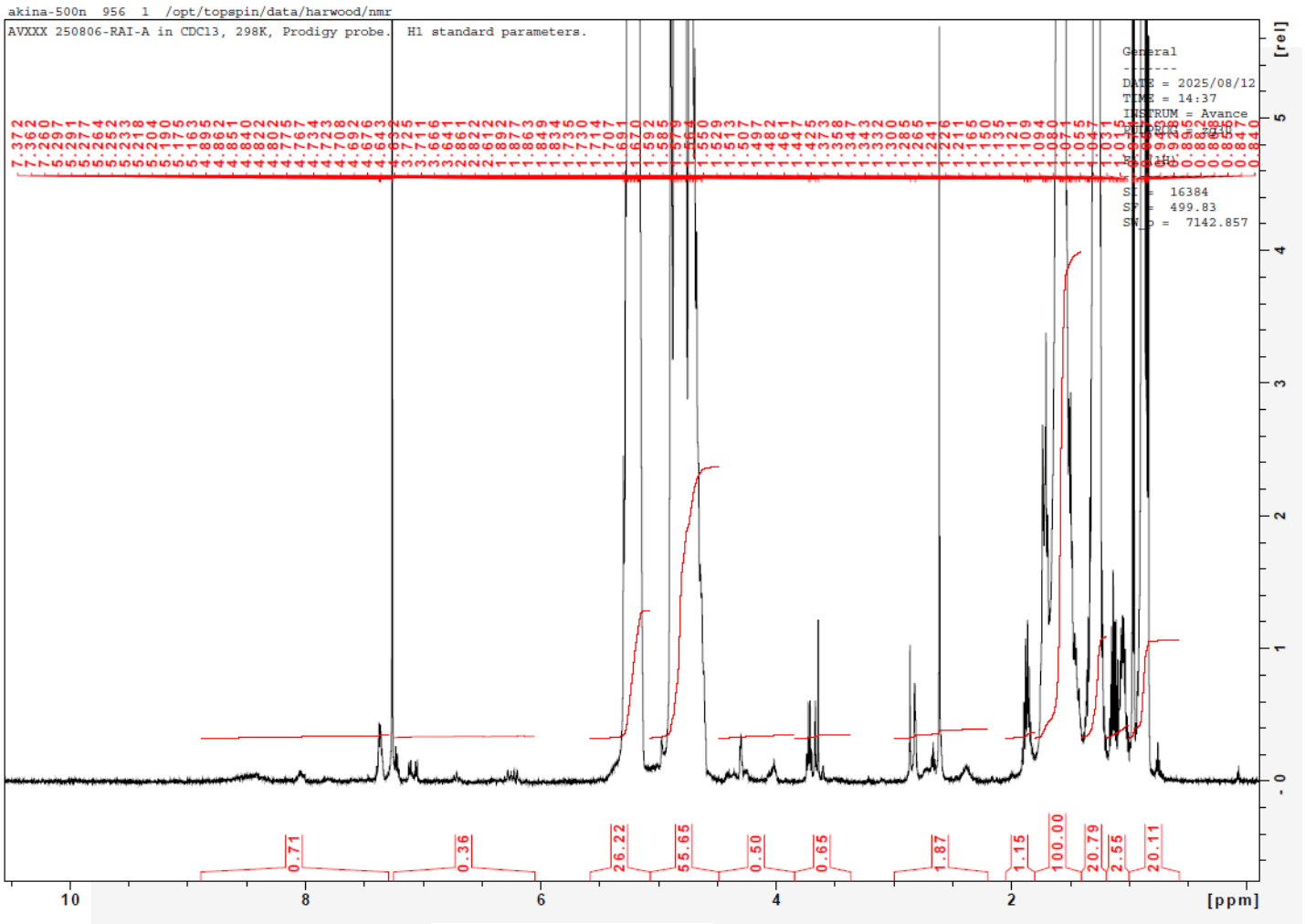
No. AV056 Certificate of Analysis

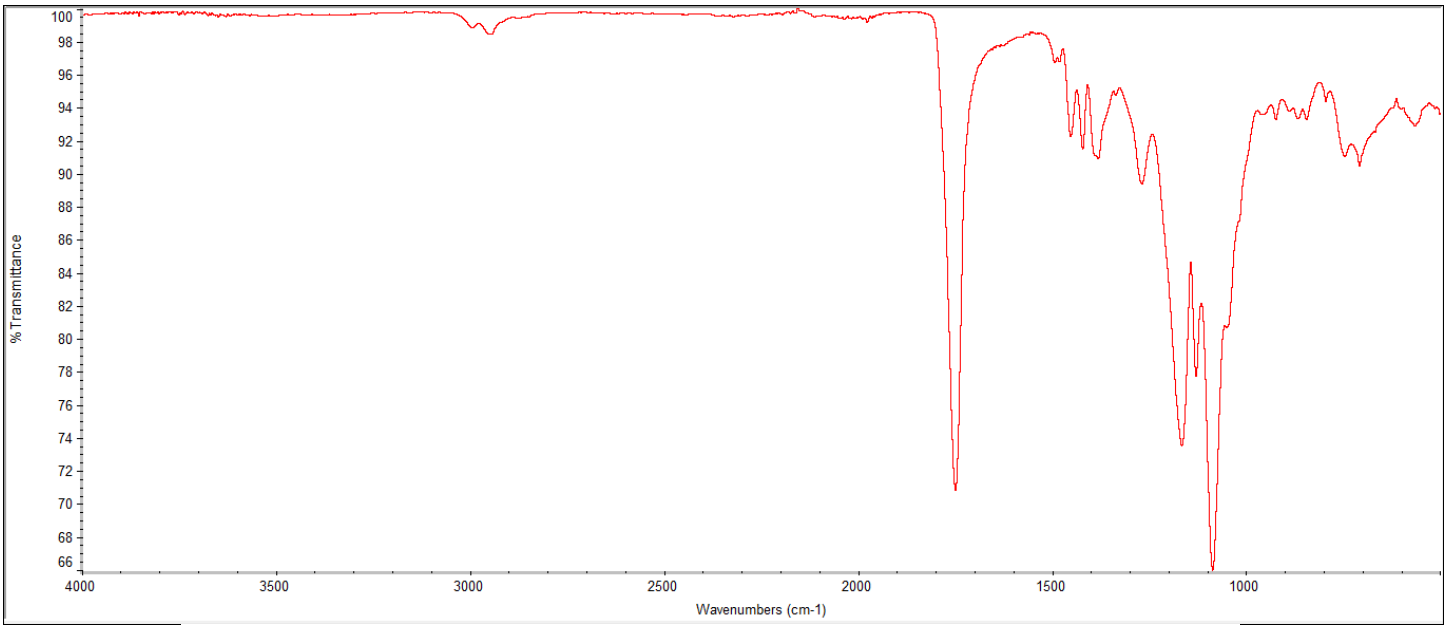
Product Name: Poly(lactide-co-glycolide)-Cyanine 5 (Mn 15,000-25,000Da)
(Lot#: 250806RAI-A) (LA:GA 50:50)

H-NMR



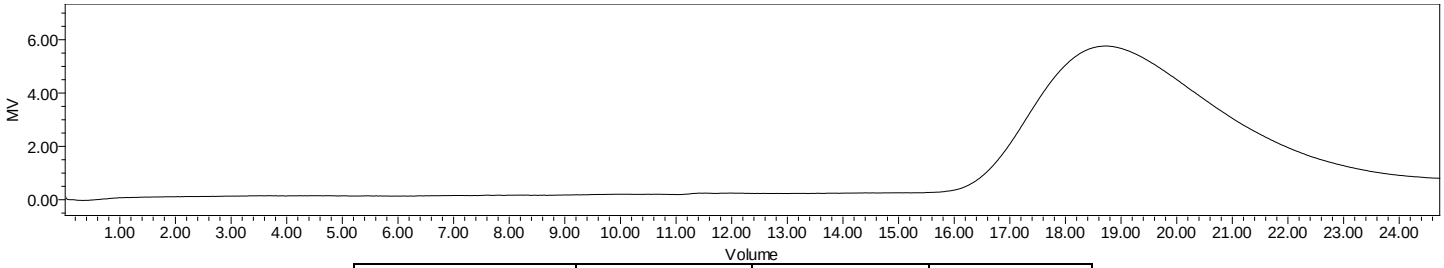
H-NMR Spectrum of copolymers in CDCl3 (Bruker ≥300 MHz, PINMRF) NMR of PLGA-CY5 copolymer: LA-GA =49%-51% molar ratio (LA:GA 54%:46%w:w)

FTIR



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

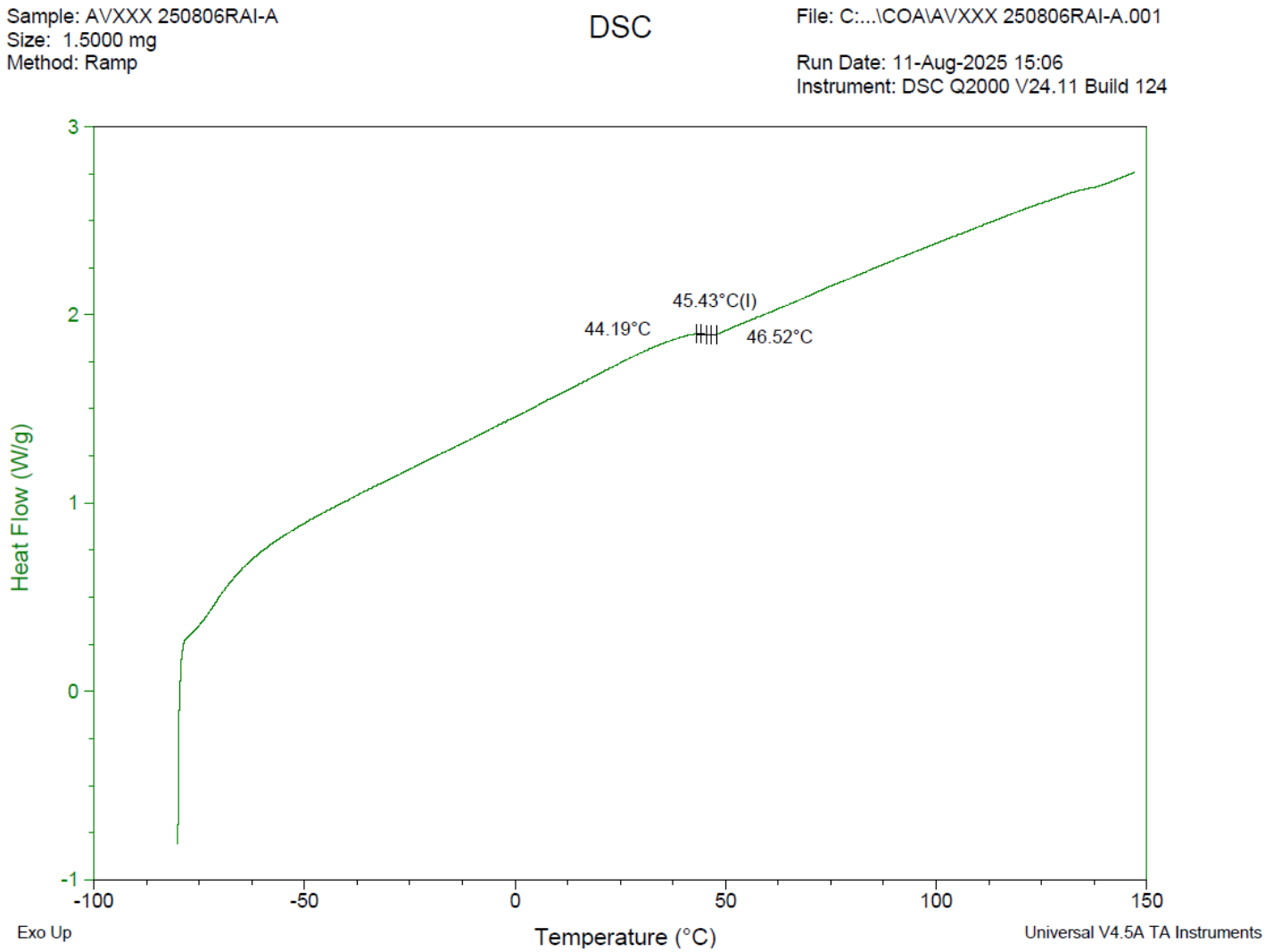
GPC-ES



Polymer	M_n (from GPC)	M_w (from GPC)	PDI
PLGA-CY5	23,994	35,526	1.48

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

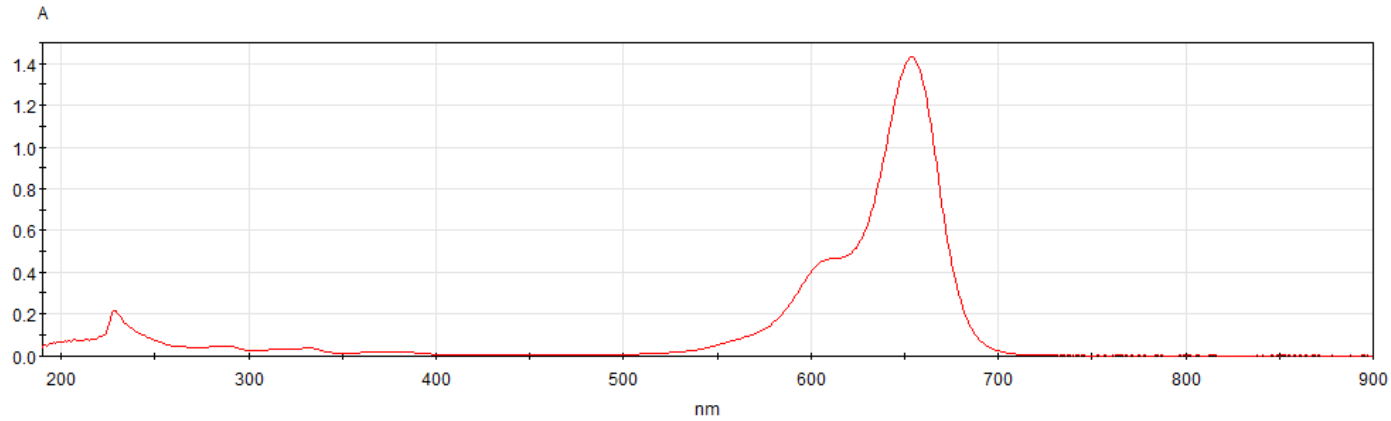


DSC Testing: 1-5 mg sample tested in crimped aluminum pan on a TA Instruments Model Q2000 with procedure equilibraion 100 °C, isothermal 5 minutes, equilibrate -80 °C, data on, ramp 10 °C/min to 150 °C. Tg = 45.43 °C

IV

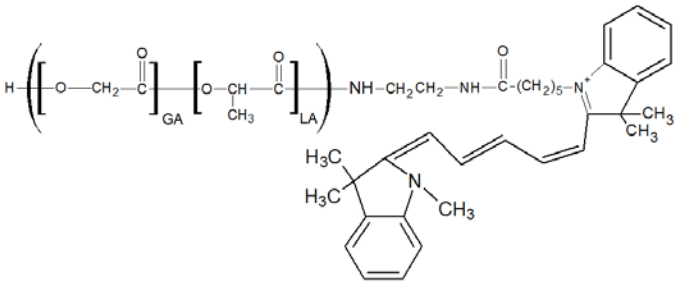
Inherent Viscosity: 0.191 ± 0.014 dL/g (calculated from kinematic viscosity at 2% w/v Acetone on Rheosense microVISC, n=3) at 25ºC.

UV-Vis Analysis PLGA-CY5



Analysis method: Scan from 190-900nm in 1nm increments of 0.25 mg/mL PLGA-CY5 solution in DCM against DCM blank. Testing of absorbance at 653 nm as compared to a series of CY5 standards has indicated a dye content of 200.56 µg/mL.

Structure of copolymers



Approved By:
Amie Tyler
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