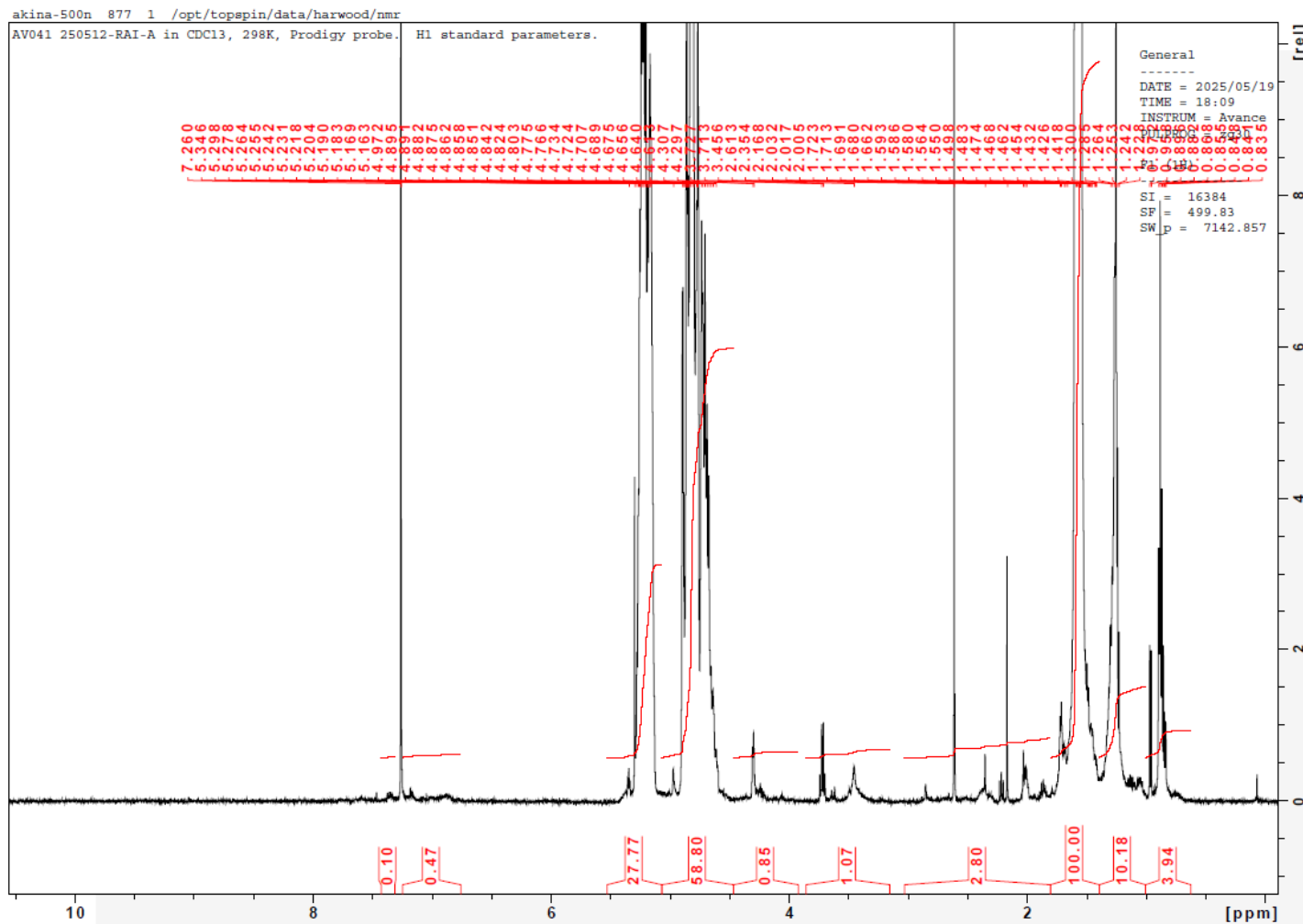


No. AV041 Certificate of Analysis

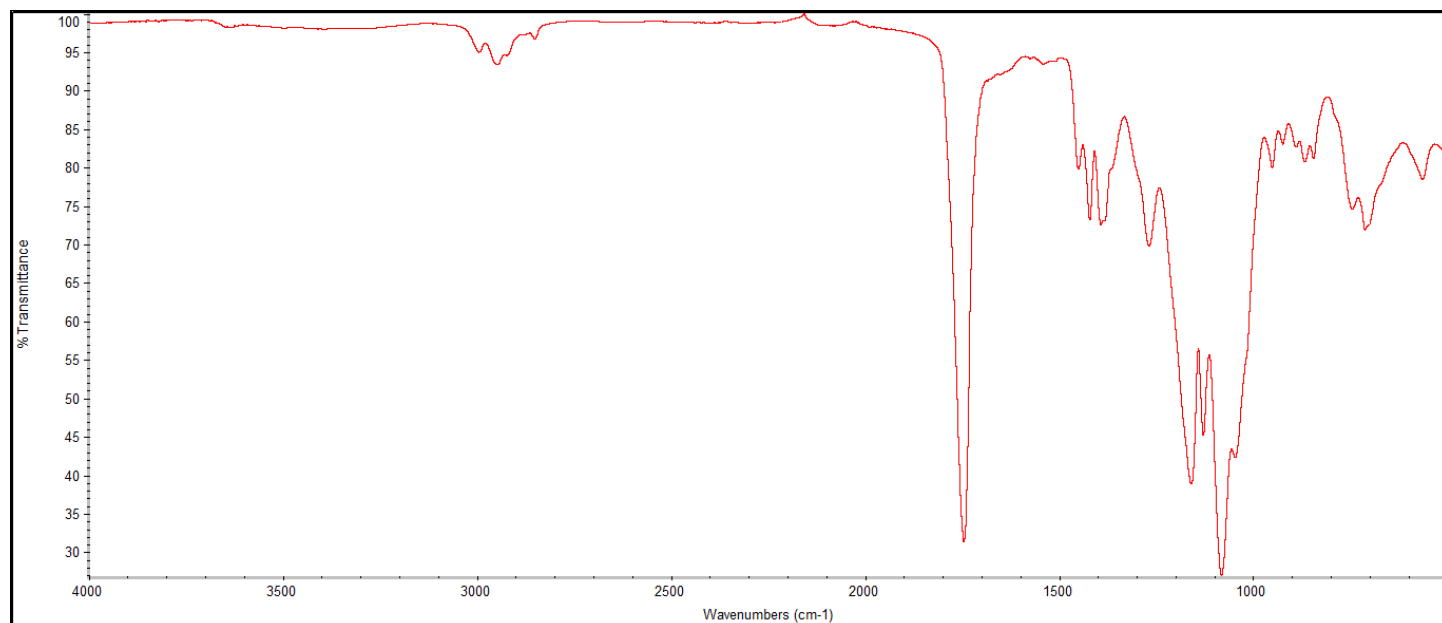
Product Name: Poly(lactide-co-glycolide)-Cyanine 7 (L:G 50:50)
(Mn 15,000-35,000Da) (Lot#: 250512RAI-A)

H-NMR



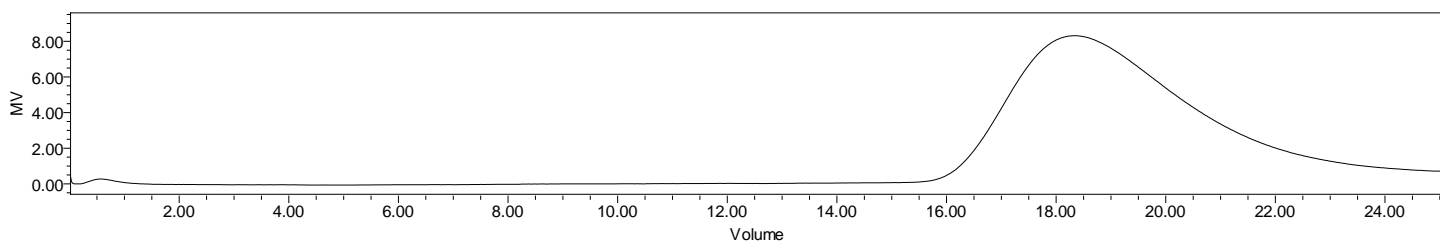
H-NMR Spectrum of copolymers in CDCl₃ (Bruker ≥300 MHz, PINMRF) NMR of PLGA-CY7 copolymer: LA-GA =49%-51% (LA:GA 54%:46%)

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-CY7	33,226	44,133	1.33

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.

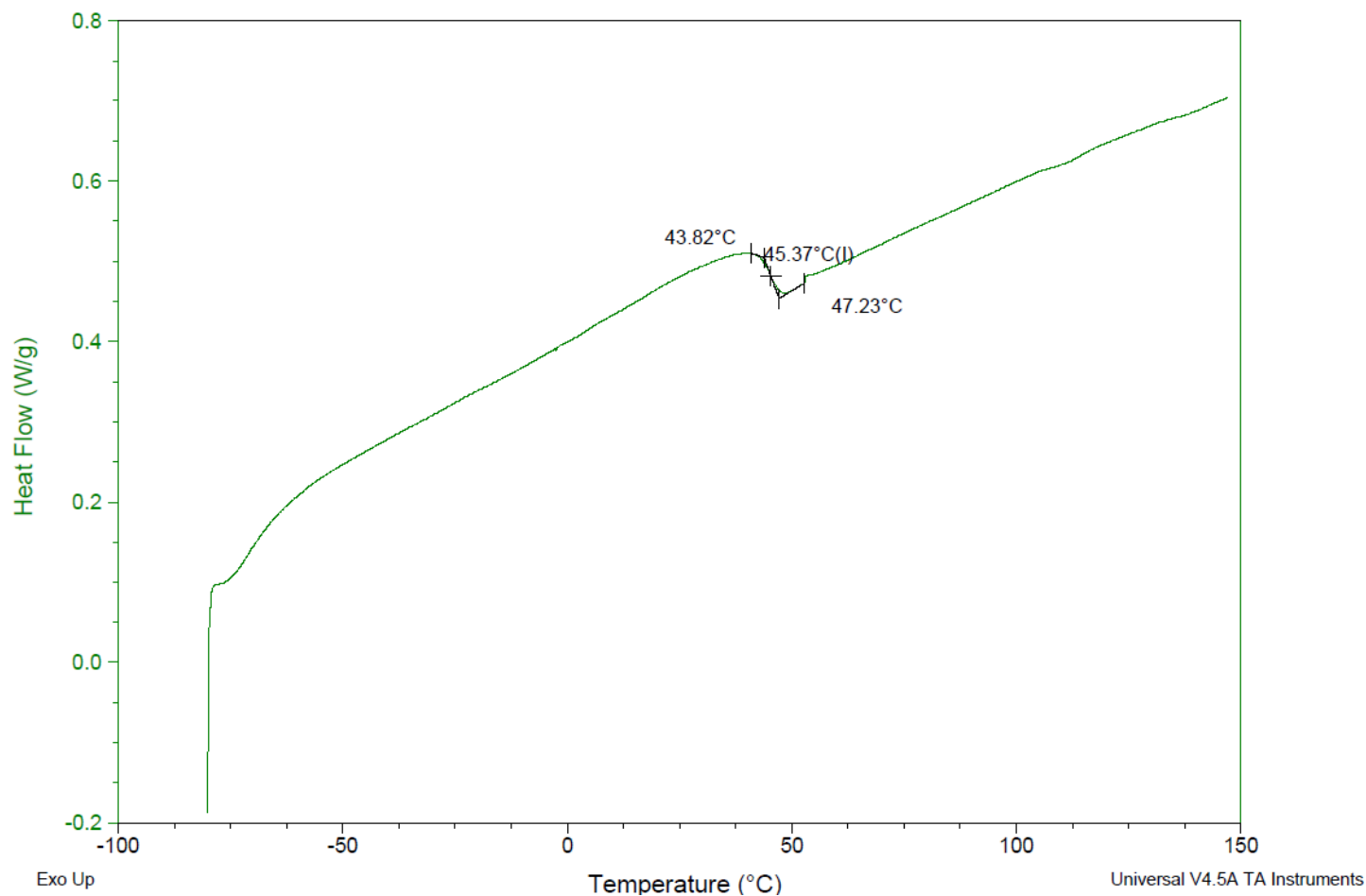
DSC

Sample: AV041 250512RAI-A
Size: 5.0000 mg
Method: Ramp

DSC

File: C:\...\COA\AV041 250512RAI-A.001

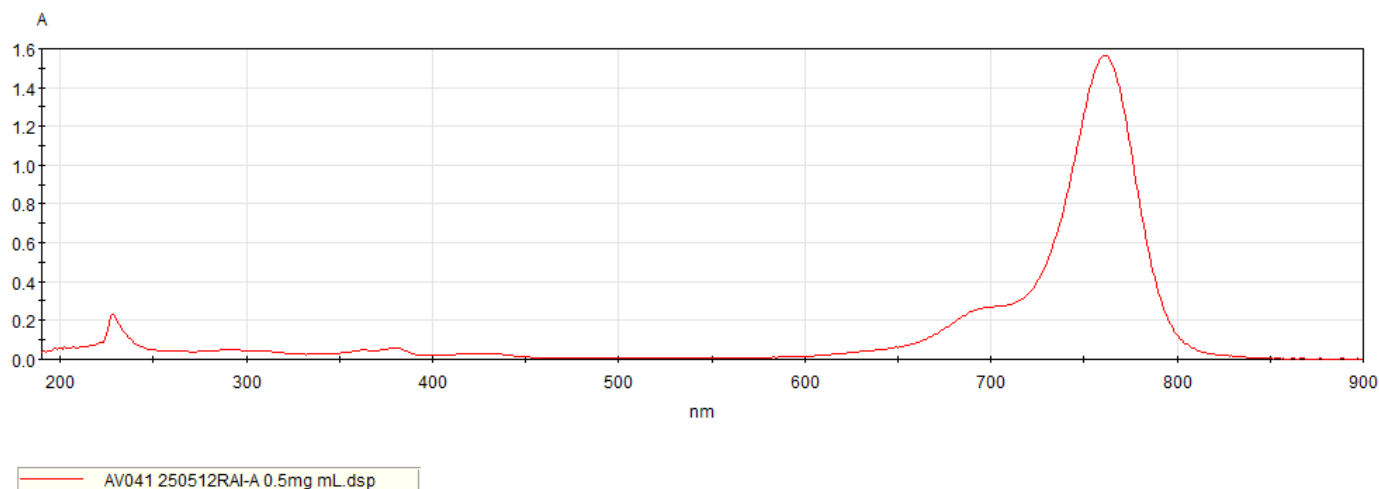
Run Date: 16-May-2025 10:18
Instrument: DSC Q2000 V24.11 Build 124



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 = 45.37 °C

UV-Vis Analysis PLGA-CY7

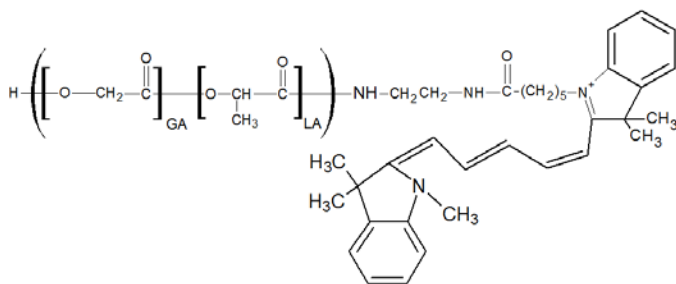
Analysis method: Scan from 190-900nm in 2nm increments of 0.50 mg/ml PLGA-CY5 solution in DCM against DCM blank. 5.665 µg/mg



IV

Inherent Viscosity: 0.228 ± 0.049 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