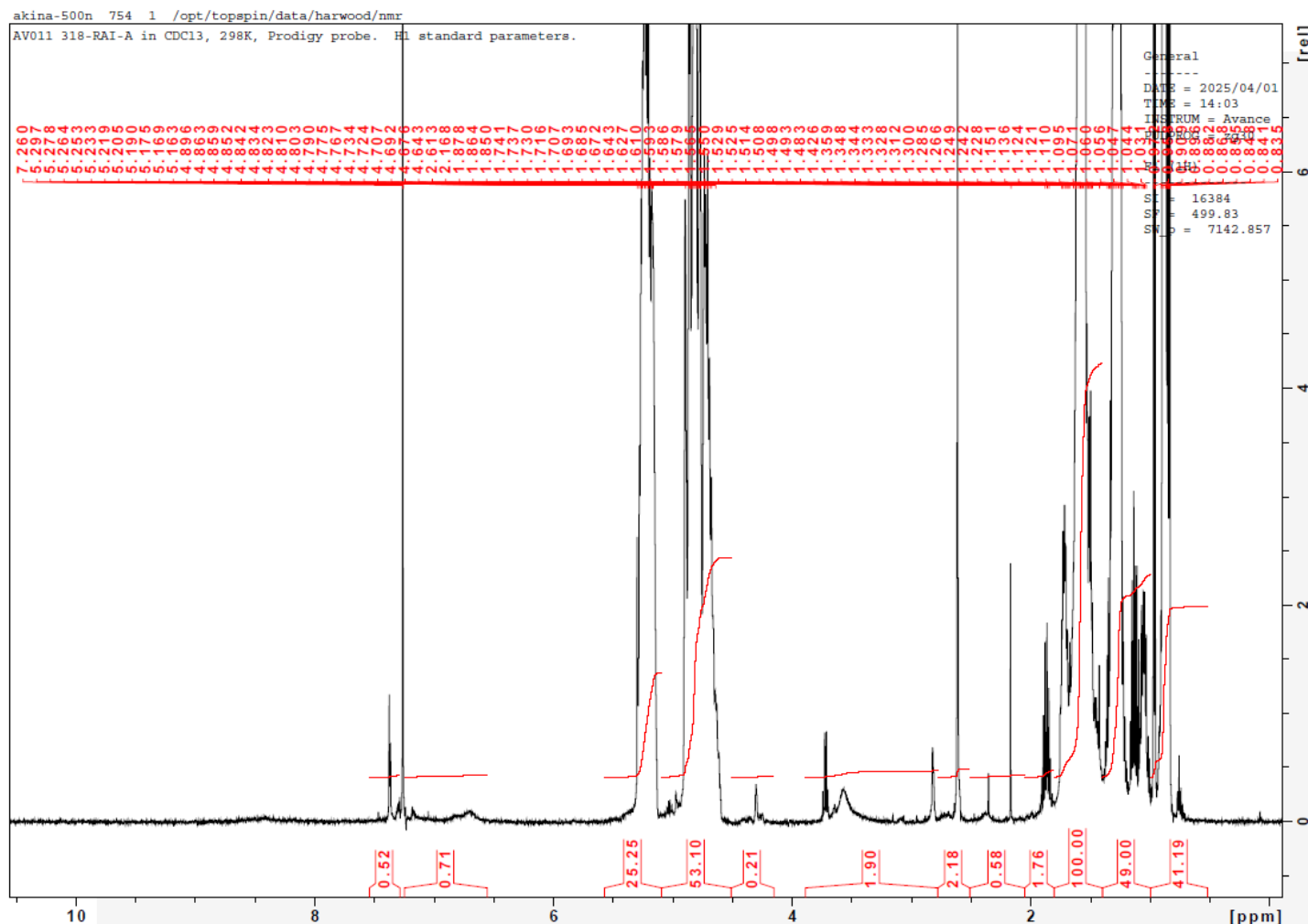


# No. AV011 Certificate of Analysis

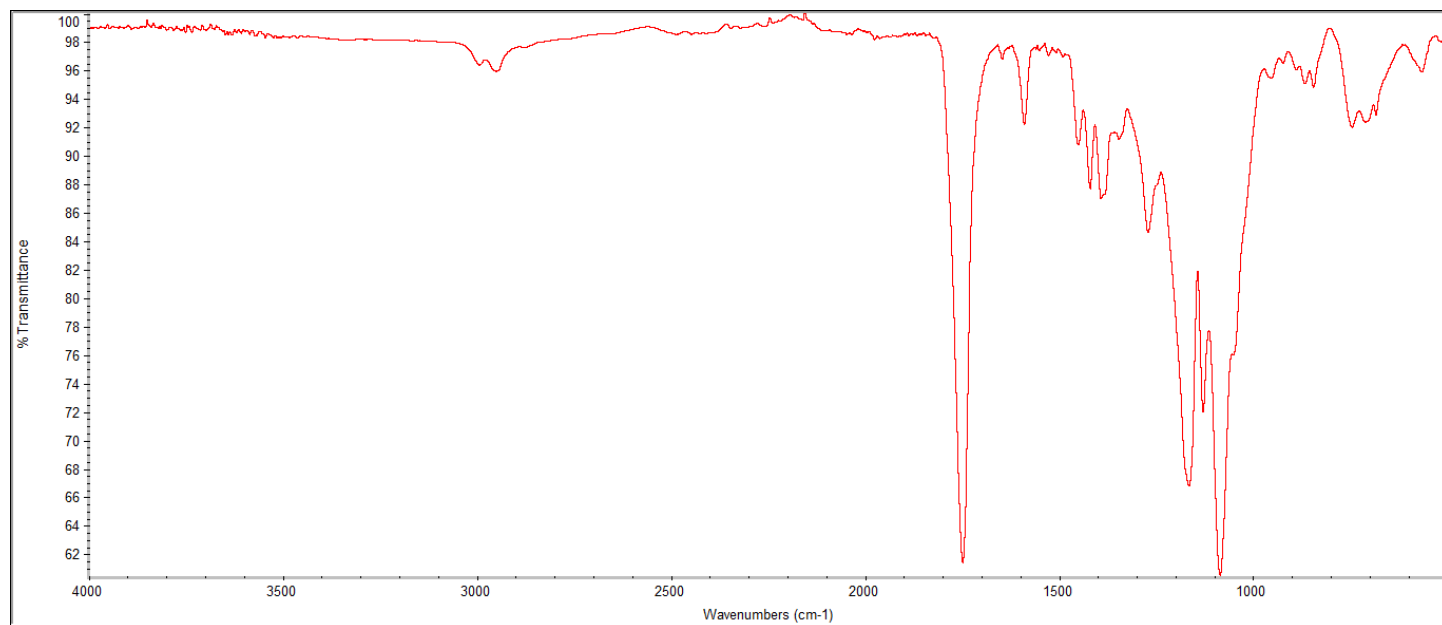
Product Name: Poly(lactic-co-glycolic acid) copolymer-Rhodamine-B conjugate  
(M<sub>n</sub> 10,000 - 30,000 Da) LA:GA 50:50 (Lot#: 250318RAI-A)

## H-NMR



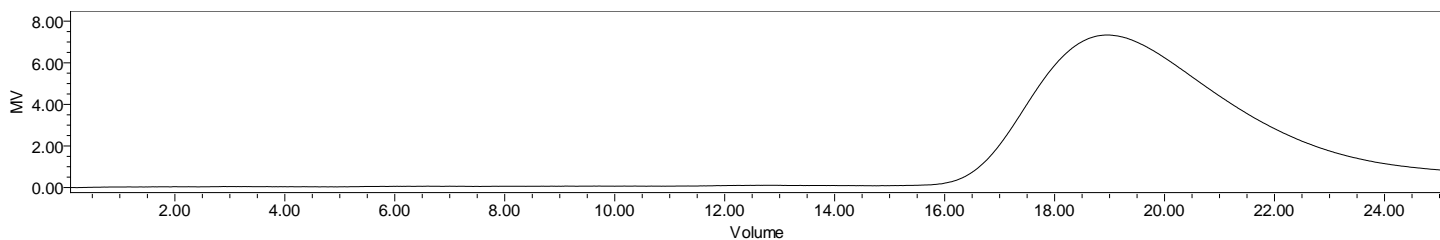
H-NMR Spectrum of copolymers in CDCl<sub>3</sub> (Bruker ≥300 MHz, PINMRF) NMR of PLGA copolymer: LA-GA =49%-51% molar ratio (LA:GA 54%:46% w:w)

## FTIR



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

## GPC-ES



Polymer	M <sub>n</sub> (from GPC)	M <sub>w</sub> (from GPC)	PDI
PLGA-Rhodamine	26,469	35,102	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.

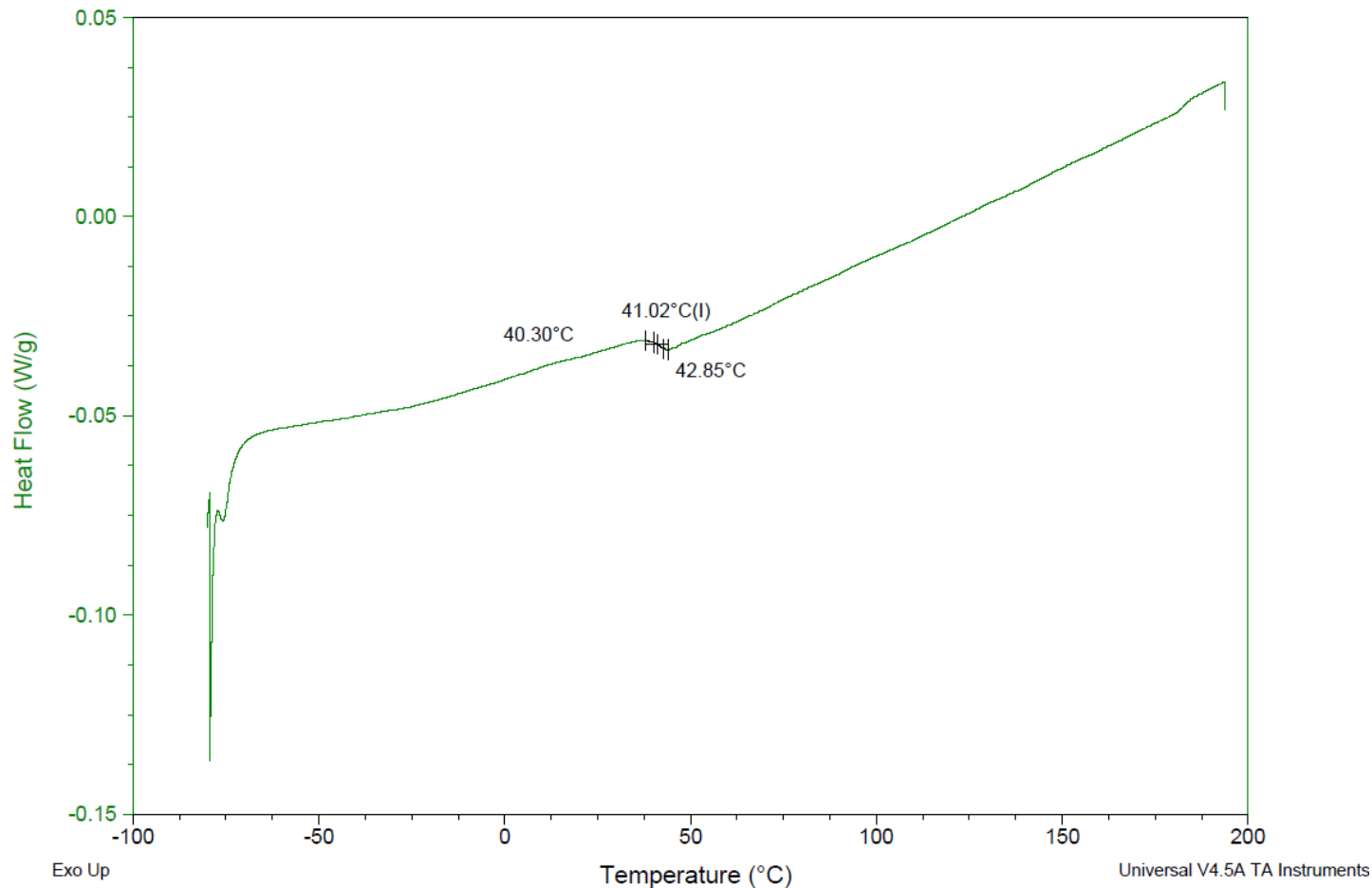
# DSC

Sample: AV011 250318RAI-A  
Size: 3.0000 mg  
Method: Conventional MDSC

## DSC

File: C:\COA\AV011 250318RAI-A.002

Run Date: 03-Apr-2025 14:07  
Instrument: DSC Q2000 V24.11 Build 124

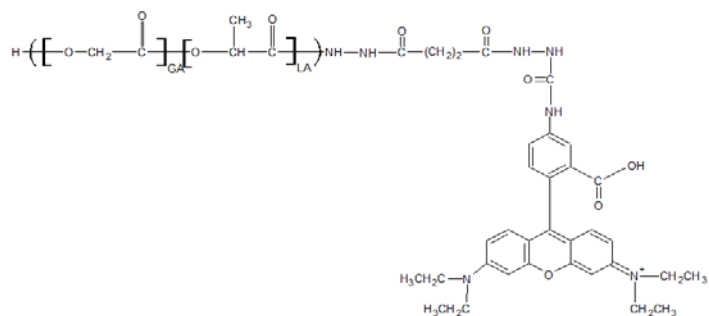


DSC Testing: 1-5 mg sample tested in crimped aluminum pan on a TA Instruments Model Q2000 with procedure equilibraion 100 °C, isothermal 5 minutes, equilibrate -80 °C, data on, ramp 10 °C/min to 150 °C. Tg = 41.02 °C

## IV

**Inherent Viscosity:**  $0.189 \pm 0.009$  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