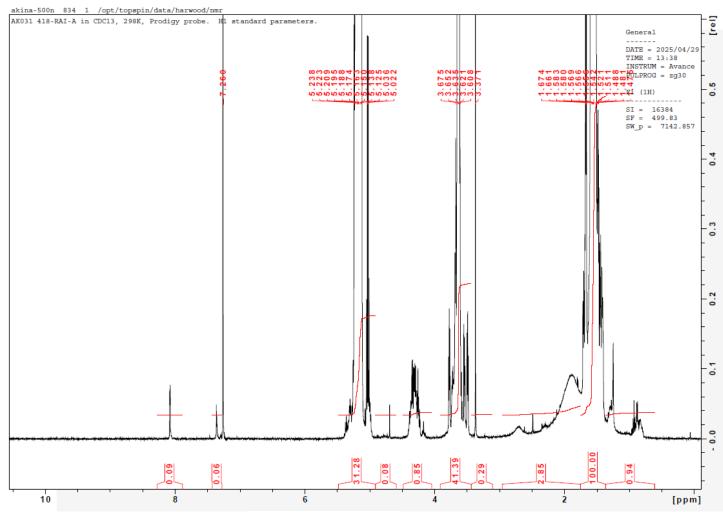


# No. AK031 Certificate of Analysis

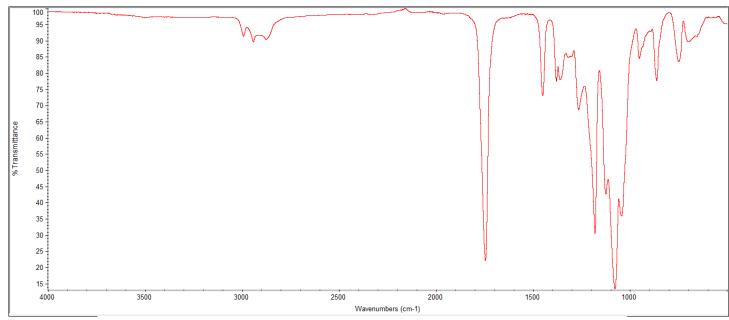
Product Name: Methoxy Poly(ethylene glycol)-*b*-Poly((D,L)-lactic acid) diblock copolymers (5,000:35,000Da) (Lot#: 250418RAI-B)

## H-NMR



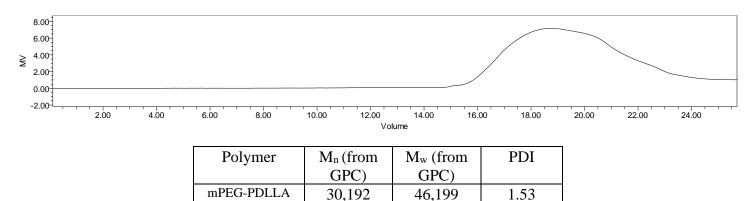
**H-NMR** Spectrum of copolymers in CDCl3 (Bruker ≥300 MHz, PINMRF) NMR of PLGA-PEG copolymer: EG\*/LA =117\*/354 (Mn EG\*/LA 5154\*/25465 Da)

# **FTIR**



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

#### **GPC-ES**



**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. \*- from MFG data

5165\*

PEG-Precursor\*

## **DSC**

Sample: AK031 250418RAI-A

Size: 3.7000 mg

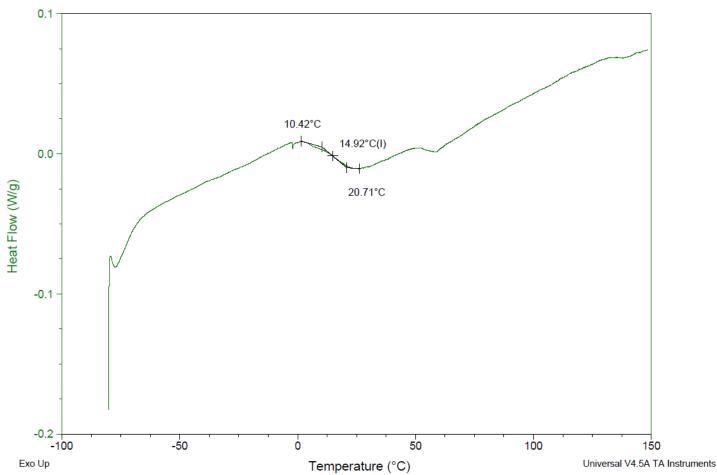
Method: Modulate-no-egb

DSC

File: C:...\COA\AK031 250418RAI-A DSC.002

Run Date: 01-May-2025 10:34

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 = 14.92 °C

#### IV

**Inherent Viscosity:**  $0.203 \pm 0.037$  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