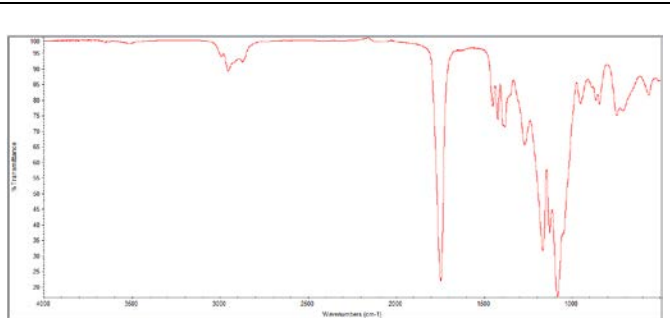
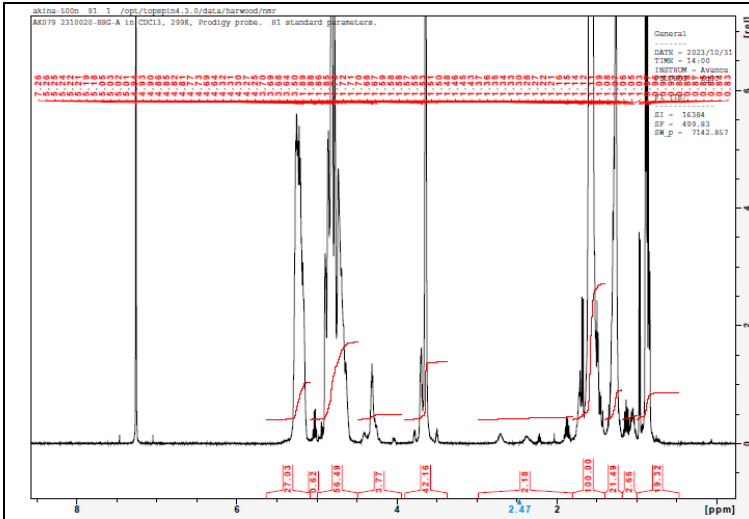


# No. AK079

# Certificate of Analysis

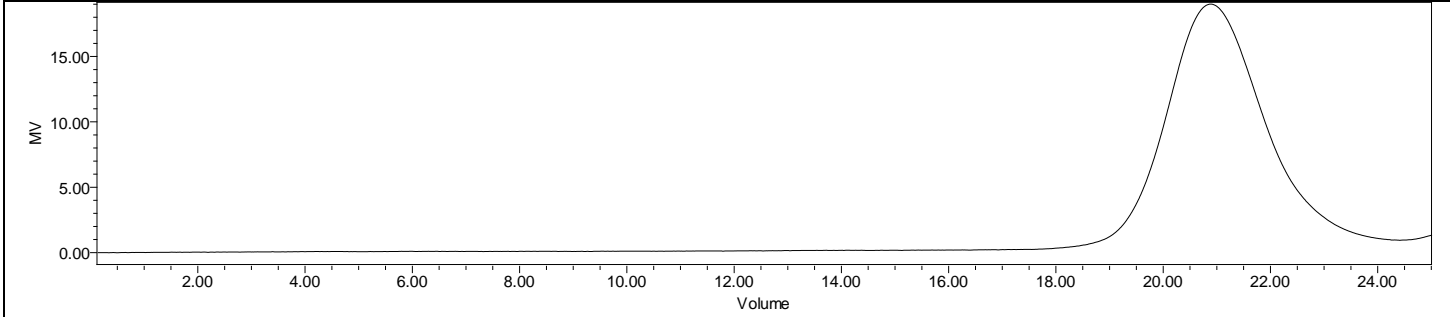


Product Name: Poly(lactic-co-glycolic acid)-*b*-Poly(ethylene glycol)-*b*-Poly(lactic-co-glycolic acid) copolymers (4000-1000-4000 Da) (Lot# 231020ERG-A)



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

H-NMR Spectrum of copolymers in CDCl<sub>3</sub> (Bruker ≥300 MHz, PINMRF) NMR of PLGA-PEG-PLGA copolymer: EG/LA-GA =23\*/59-62 (Mn EG/LA:GA 1013\*/4247-3577 Da)

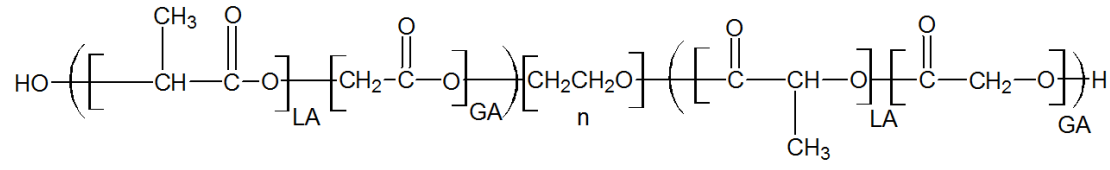


GPC-ES Analysis Method: Waters Breeze 2 system with 1 ml/min THF flow across three GPC columns. Detection via refractive index, calibrated against polystyrene standards.

Polymer	M <sub>n</sub> (from GPC)	M <sub>w</sub> (from GPC)	PDI
PLGA-PEG-PLGA	10,430	14,083	1.35
PEG precursor*	Mn 1013*		

\*- from MFG data

## • Structure of PLGA-PEG-PLGA triblock copolymers



Approved By:  
*Amie Tyler*  
Quality Manager