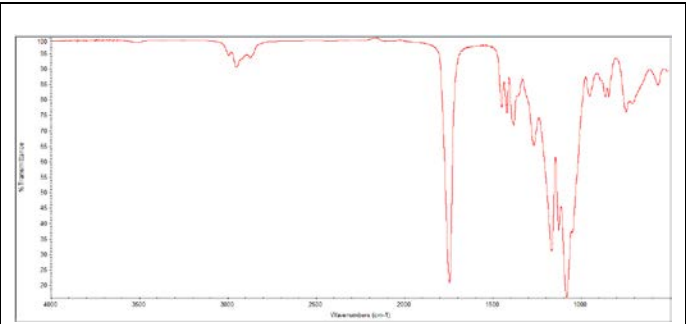
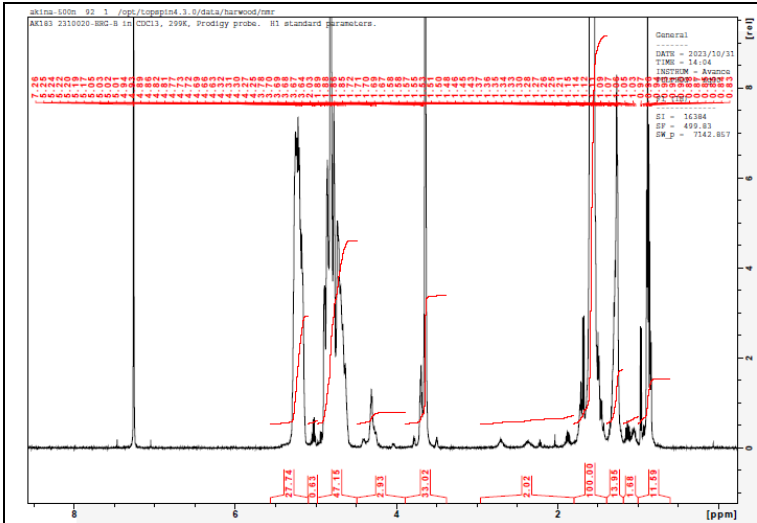


No. AK183

Certificate of Analysis

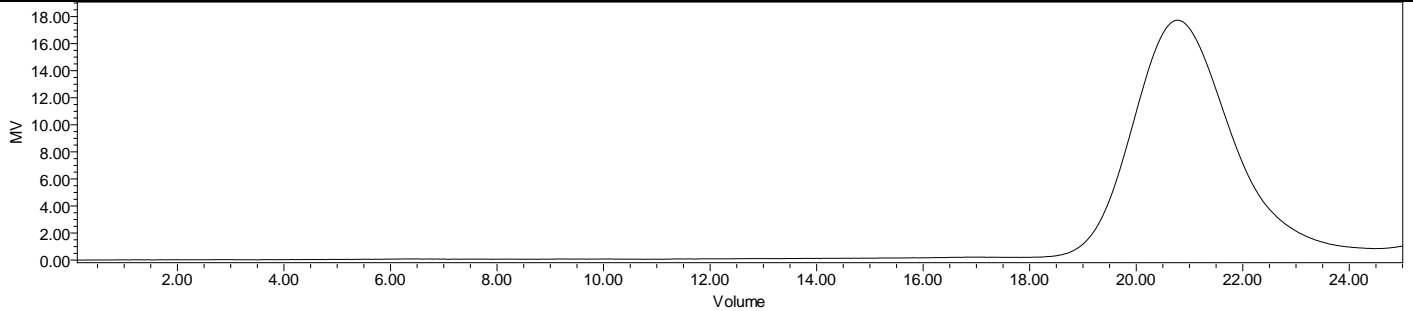


Product Name: Poly(lactic-co-glycolic acid)-*b*-Poly(ethylene glycol)-*b*-Poly(lactic-co-glycolic acid) copolymers (4500-1000-4500 Da) (Lot# 231020ERG-B)



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

H-NMR Spectrum of copolymers in CDCl₃ (Bruker ≥300 MHz, PINMR) NMR of PLGA-PEG-PLGA copolymer: EG/LA-GA =23*/77-66 (Mn EG/LA:GA 1013*/5565-3812 Da)

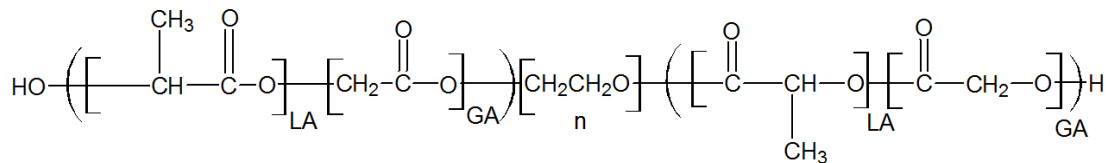


GPC-ES Analysis Method: Waters Breeze 2 system with 1 ml/min THF flow across three GPC columns. Detection via refractive index, calibrated against polystyrene standards.

Polymer	M _n (from GPC)	M _w (from GPC)	PDI
PLGA-PEG-PLGA	11,736	15,624	1.33
PEG precursor*	Mn 1013*		

*- from MFG data

• Structure of PLGA-PEG-PLGA triblock copolymers



Approved By:
Amie Tyler
Quality Manager