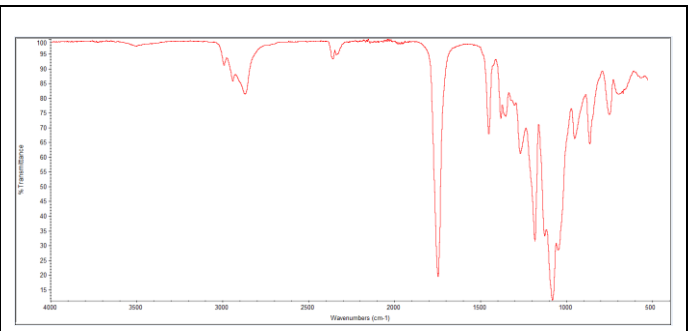
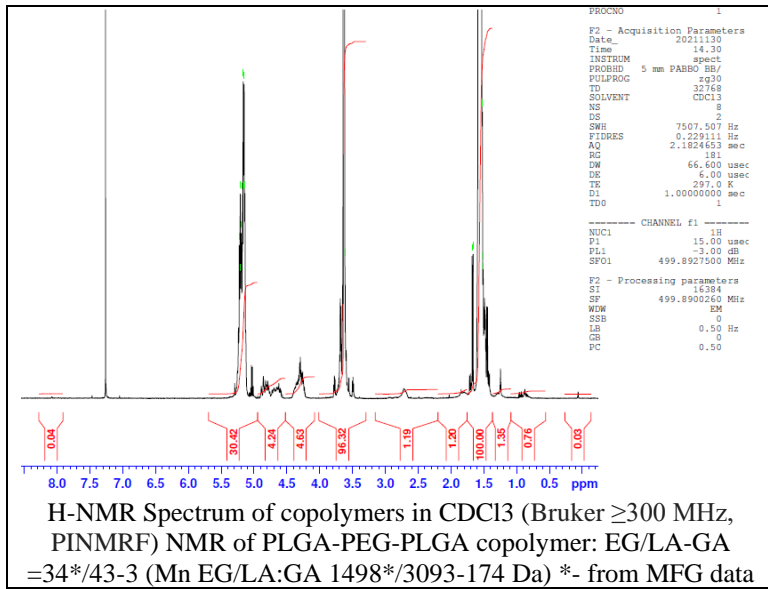


No. AK097

Certificate of Analysis

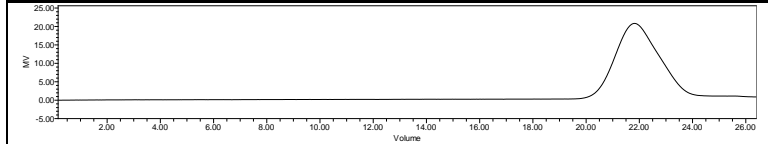


Product Name: Poly(lactide-co-glycolide)-b-Poly(ethylene glycol)-b-Poly(lactide-co-glycolide) 1700-1500-1700Da (LA:GA 15:1 (94%/6% LA/GA) (w:w))
Lot #211123RAI-A



FTIR Analysis: Collected from Nicolet Avator 380 spectrometer with ATR Smart Orbit and analyzed in transmission mode.

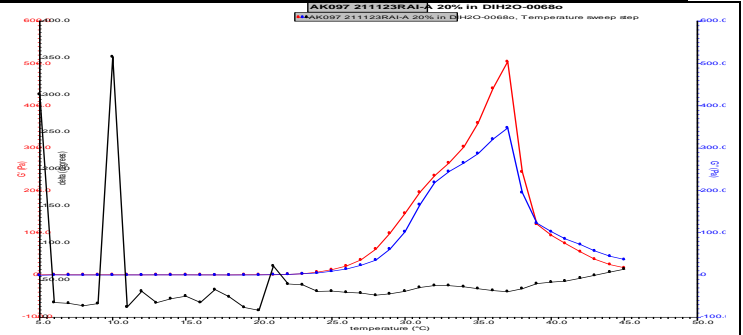
H-NMR Spectrum of copolymers in CDCl₃ (Bruker ≥300 MHz, PINMRF) NMR of PLGA-PEG-PLGA copolymer: EG/LA-GA =34*/43-3 (Mn EG/LA:GA 1498*/3093-174 Da) *- from MFG data



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	5896	7662	1.30
PEG precursor*	1485*		

*- from MFG data



Rheology performed on AR2000 (TA instruments) with 60mm 2degree cone on 20% w/v polymer in water dissolved over 3 days with stirring at 4°C. Viscosity of solution at 0.1 (sec⁻¹) and 5°C was measured (1 minute peak hold 5 second test intervals). Rheology performed by oscillating at constant 6.283 rad/s, 0.1% strain, in increments of 1°C ranging from 5-45°C with 1 minutes of temperature equilibration at each point.

Viscosity 20% w/v solution at 5°C	.08027 Pa/s
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• Structure of PLGA-PEG-PLGA

