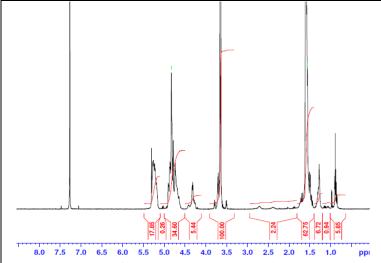
No. AK019

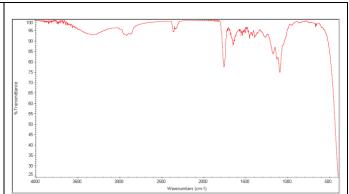
Certificate of Analysis

PolySciTech A Division of Akina, Inc.

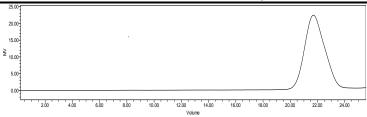
Product Name: Poly(lactide-co-glycolide)-b-Poly(ethylene glycol)-b-Poly (lactide-co-glycolide) copolymers (1,500-1,500, 50:50 LA:GA) (Lot# 181018RAI-A)



H-NMR Spectrum of copolymers in CDCl3 (Varian Inova 500 MHz instrument) NMR of PLGA copolymer: EG-LA/GA = 34-24/24 (Mn EG-LA/GA 1498-1748/1366)



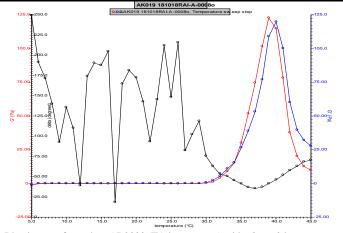
FTIR Analysis: Collected from cast-film on KBr salt-plate placed in Nicollet Avatar 320 spectrometer and analyzed in transmission mode.



GPC 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	5725	7114	1.24
PEG-precursor		1498*	

^{*-} 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 (1minute 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	Below detectable
	limit

• Structure of PLGA-PEG-PLGA triblock copolymers

