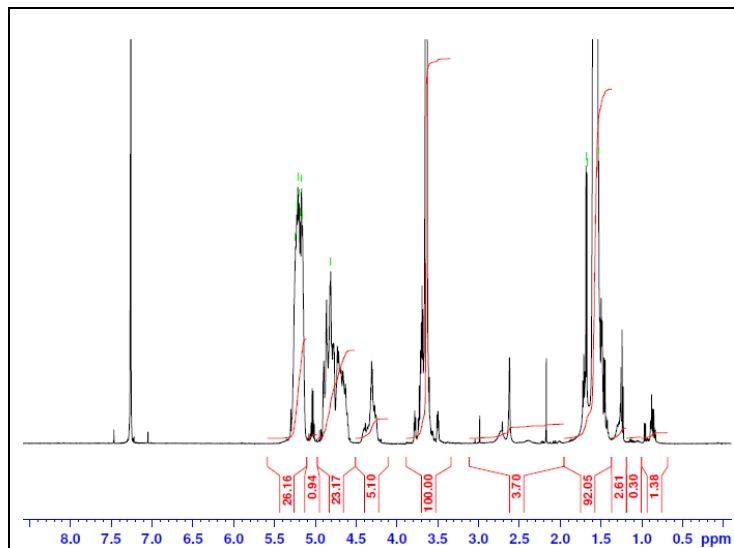


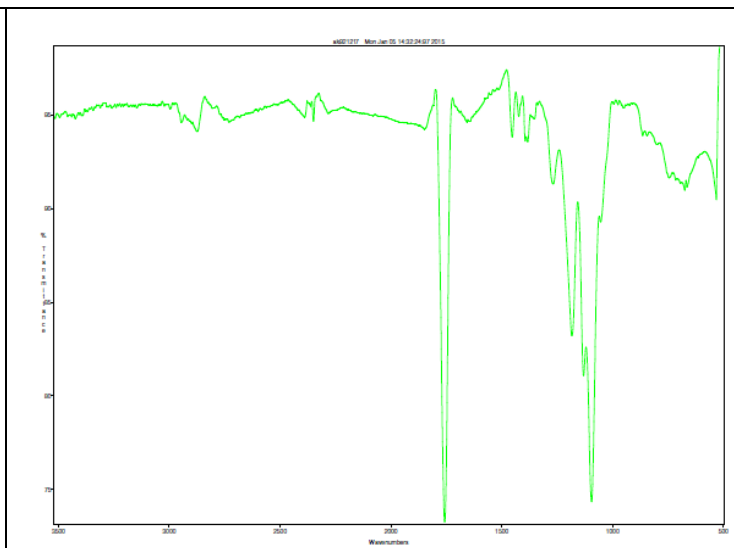
No. AK92

Certificate of Analysis

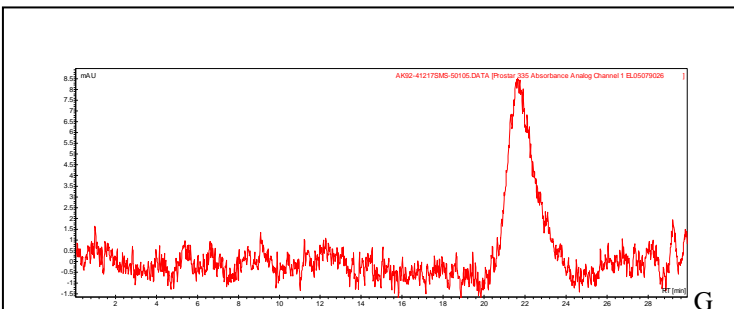
Product Name: Poly(lactic-co-glycolic acid)-*b*-Poly(ethylene glycol)-*b*-Poly(lactic-co-glycolic acid) copolymers (M_n 1,700:1,500:1,700 Da, 3:1, LA:GA) (Lot# 41217SMS)-REV:A dissolution



$^1\text{H-NMR}$ Spectrum of PLGA-PEG-PLGA copolymer in CDCl_3 (Varian Inova 500 MHz instrument), M_n NMR of PLGA copolymers:EG-LA/GA: 1,498-2,562/914 (34-36/16), LA/GA ratio: 74%/26% *Data provided by MFG.



FTIR Analysis: Collected from cast-film on salt-plate placed in Satellite FTIR (Thermo-Mattson) and analyzed in transmission mode.

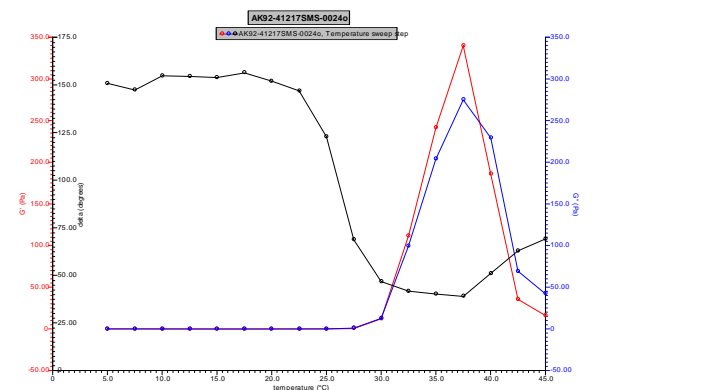


PC Analysis Method: Varian Prostar system with 1 ml/min DCM flow across two Phenogel 5 μm columns and one Resipore column (Agilent). Detection via UV/Vis, calibrated against polystyrene standards.

Polymer	M_n (GPC)	M_w (GPC)	PDI
PLGA-PEG-PLGA	4585	5874	1.28
PEG precursor*		1,485	

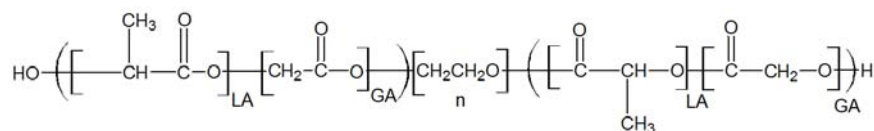
*Data provided by MFG.

Rheology performed on AR550 (TA instruments) with 60 mm 2 degree cone on 20% w/v polymer in water dissolved several 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 2.5 °C ranging from 5-45 °C with 3 minutes of temperature equilibration at each point.



Viscosity 20% w/v solution at 5°C | 0.1509 Pa.s

Structure of PLGA-PEG-PLGA copolymer



Material provided for research use only. Not for human use.