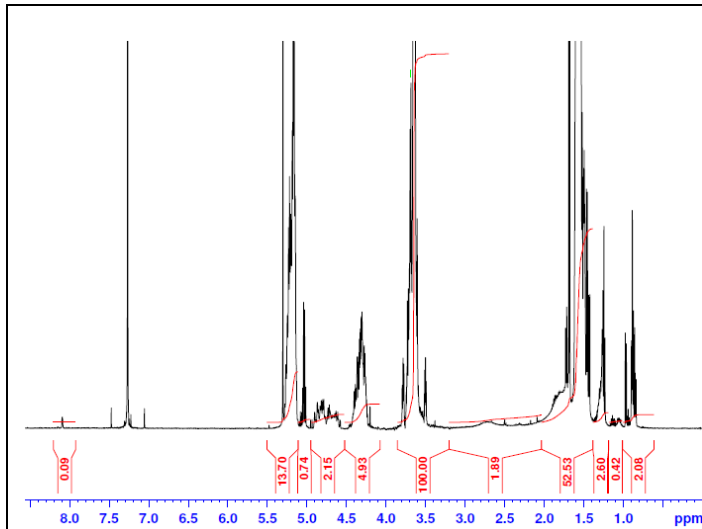
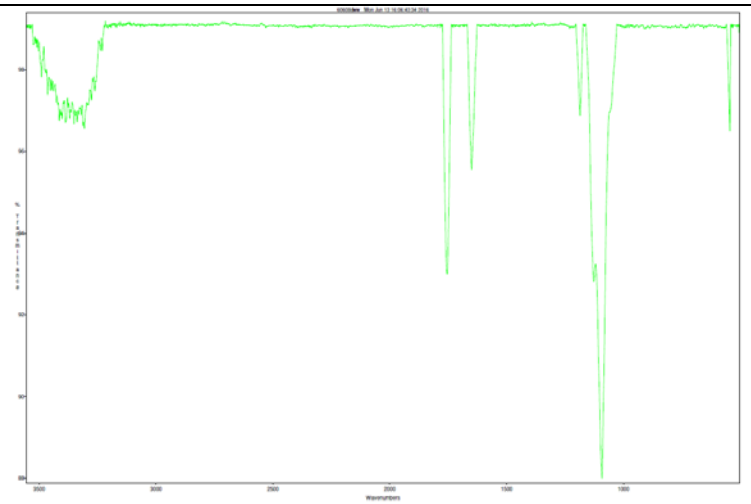


# No. AK117 Certificate of Analysis

Product Name: Poly(lactic-co-glycolic acid)-*b*-Poly(ethylene glycol)-*b*-Poly(lactic-co-glycolic acid) copolymers (Mw~ 750:1,500:750 Da, LA:GA 15:1) (Lot# 60608DWW-A)

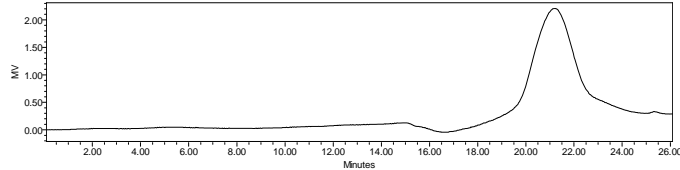


H-NMR Spectrum of PLGA-PEG-PLGA triblock copolymer in CDCl<sub>3</sub> (Varian Inova 500 MHz instrument), NMR of PLGA-PEG-PLGA repeat units: EG-LA/GA: 34\*-19/1 (Mn HNMR: 1,498\*-1,342/85)(\* -MFG data)



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

## GPC



Analysis Method: Waters Breeze 2 system with 1 ml/min DCM flow across two Phenogel 5µm columns and one PLgel Resipore column (Agilent). Detection via refractive index, calibrated against polystyrene standards.

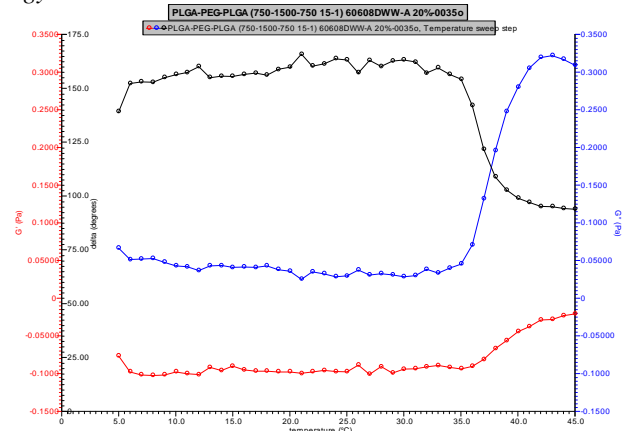
Polymer	Mn (GPC)	Mw (GPC)	PDI
PLGA-PEG-PLGA	4,205	6,396	1.52
PEG precursor	Mn – 1,484*		

\* - MFG provided data.

## Rheology

Rheology performed on AR550 (TA instruments) with 60mm 2degree cone on 20% w/v polymer in distilled water dissolved over 2 days with shaking at 4C. Viscosity of solution at 0.1 (sec-1) and 5C 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 2.5C ranging from 5-45C with 3 minutes of temperature equilibration at each point.

### Rheology Chart



Viscosity 20% w/v solution at 5C

Below detectable limit

## Structure of PLGA-PEG-PLGA copolymer

