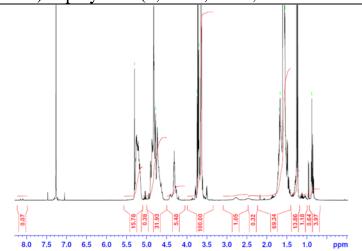
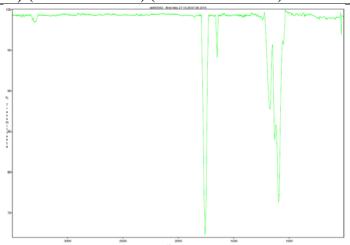
## No. AK085 Certificate of Analysis



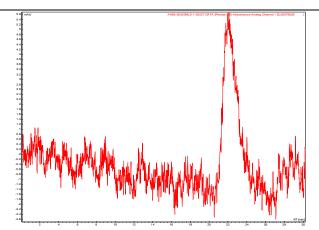
Product Name: Poly(lactic-co-glycolic acid)-*b*-Poly(ethylene glycol)-*b*-Poly(lactic-co-glycolic acid) copolymers (1,400-1,500-1,400 50:50 LA:GA) (Lot# 50520MLS) (REV:A NMR Data)



H-NMR Spectrum of PLGA-PEG-PLGA triblock copolymer in CDCl3 (Varian Inova 300 MHz instrument), NMR of PLGA-PEG-PLGA repeat units: EG-LA/GA: 34\*-21/22 (M<sub>n</sub> HNMR: 1498\*-1545/1260)(\*-MFG data)

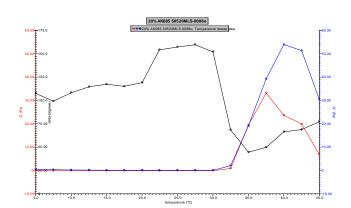


FTIR Analysis: Collected from cast-film on KBR salt-plate placed in Satellite FTIR (Thermo-Mattson) and analyzed in transmission mode.



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

Polymer	$M_n$	$M_{ m w}$	PDI
PLGA-PEG-PLGA	4,337	5,607	1.29
PEG (1500) precursor	MFG provided: M <sub>n</sub> - Da* 1485-1500		



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. Viscosity at 20°C: 0.5966 Pa.s

## Structure of PLGA-PEG-PLGA triblock copolymers

$$+ O - \left( \begin{array}{c|c} CH_3 & O \\ \hline CH - CH - C - O \end{array} \right) \begin{array}{c} CH_2 - CH_2 - O \\ \hline CH_2 - CH_2 - O \end{array} \right) \begin{array}{c} CH_2 - CH_2 - O \\ \hline CH_3 \end{array} \begin{array}{c} CH_2 - CH_2 - O \\ \hline CH_3 \end{array} \begin{array}{c} CH_2 - CH_2 - O \\ \hline CH_3 \end{array} \begin{array}{c} CH_2 - CH_2 - O \\ \hline CH_3 \end{array} \begin{array}{c} CH_2 - CH_2 - O \\ \hline CH_3 \end{array} \begin{array}{c} CH_2 - CH_2 - O \\ \hline CH_3 - CH_3 - O \\ \hline CH_3$$

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