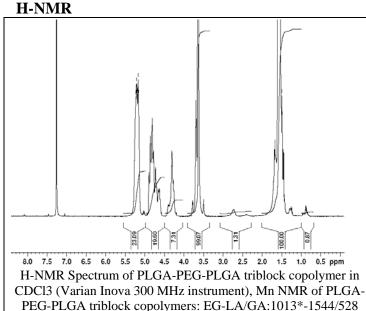
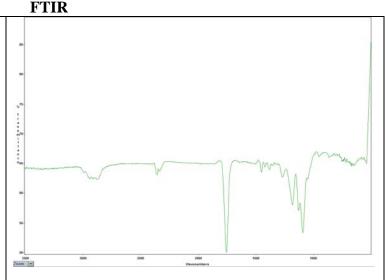
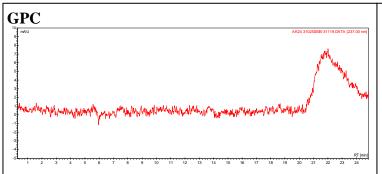
No. AK 24 Certificate of Analysis

Product Name: Poly(lactic-co-glycolic acid)-b-Poly(ethylene glycol)-b-Poly(lactic-co-glycolic acid) copolymers (Mn ~ 1100-1000-1100 Da, 3:1 La:Ga) (Lot# 31025SMS)





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



(EG-LA/GA residues: 23*-21/9) (*-data from MFG)

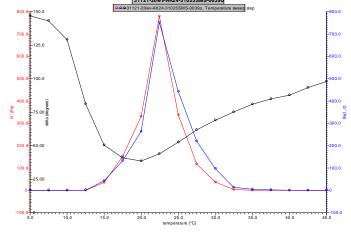
Analysis Method: Varian Prostar system with 1 ml/min DCM flow across one PLGel Mixed-D column and one PLGel Mixed-E column and one phenogel 5u column (Agilent). Detection via UV/Vis, calibrated against polystyrene standards.

Polymer	M_n (GPC)	M_w (GPC)	PDI
PLGA-PEG-PLGA	3506	5494	1.57

Rheology

Rheology performed on AR550 (TA instruments) with 60mm 2degree cone on 20% w/v polymer in water dissolved overnight with stirring 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 0.004594 Pa.s

Structure