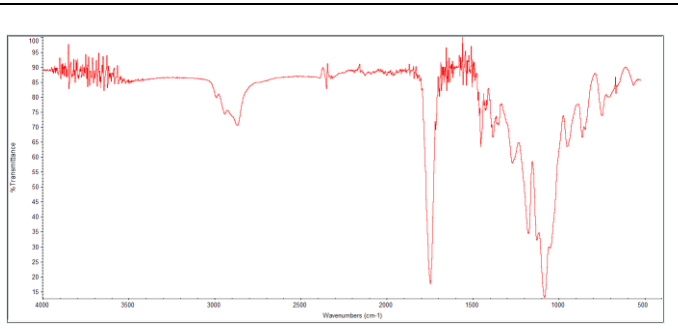
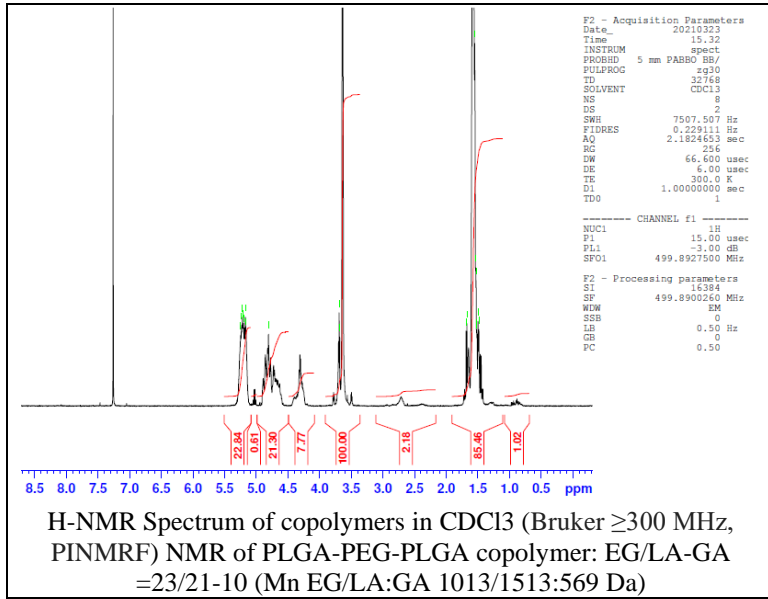


# No. AK024

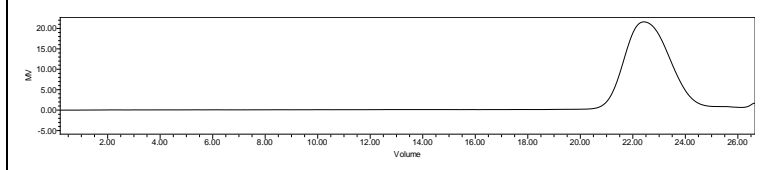
# Certificate of Analysis



Product Name: Poly(lactic-co-glycolic acid)-*b*-Poly(ethylene glycol)-*b*-Poly(lactic-co-glycolic acid) copolymers ( $M_n \sim 1,100$ - $1,000$ - $1,100$  Da, 3:1 LA:GA)  
(Lot# 210312RAI-A)

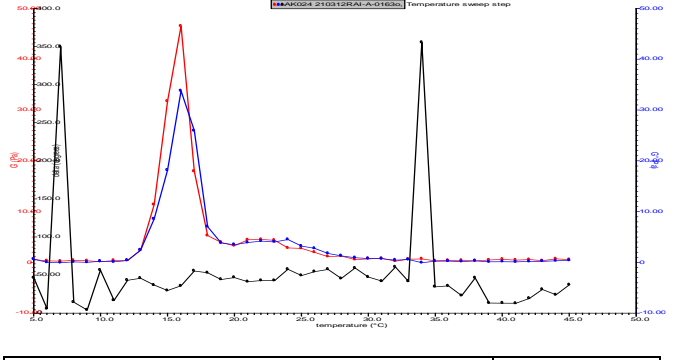


FTIR Analysis: Collected Nicolet Avatar 380 spectrometer with ATR Smart Orbit and analyzed in transmission mode.



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.

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<sup>-1</sup>) 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 5°C .02235 Pa/s

Polymer	$M_n$ (from GPC)	$M_w$ (from GPC)	PDI
PLGA-PEG-PLGA	3725	4652	1.25
PEG precursor*	1011*		

\*- from MFG data

## Structure of PLGA-PEG-PLGA

