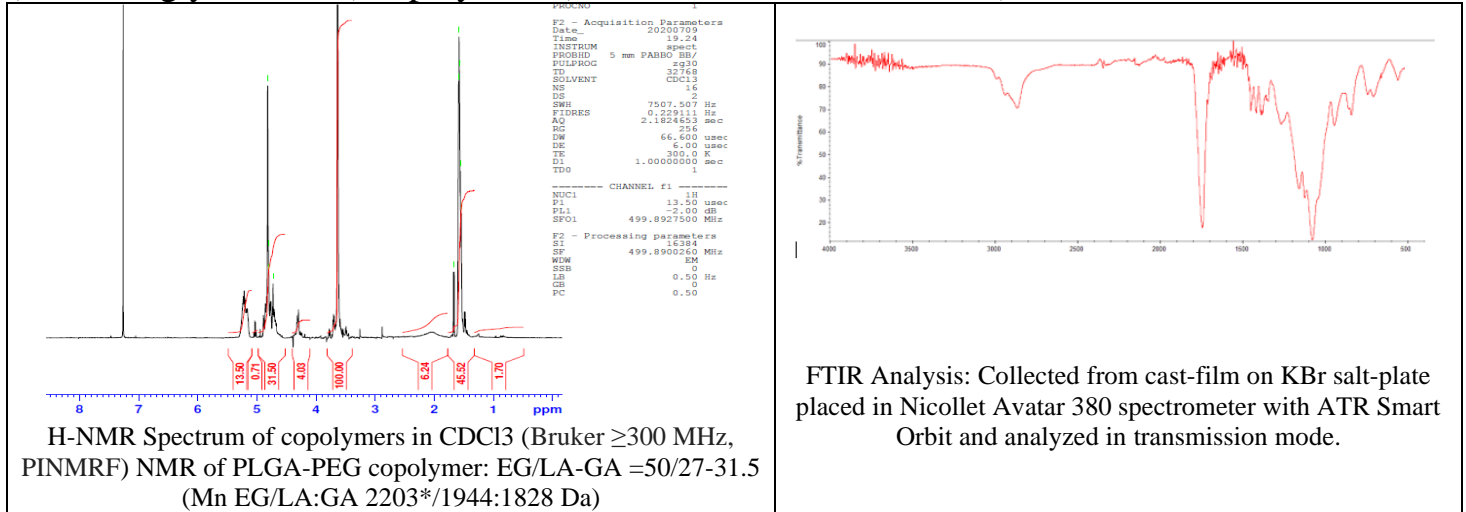


No. AK040

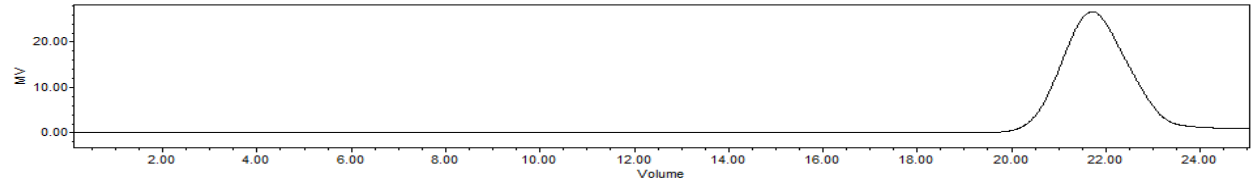
# Certificate of Analysis



Product Name: Poly(lactic-co-glycolic acid)-*b*-Poly(ethylene glycol)-*b*-Poly(lactic-co-glycolic acid) copolymers (2000-2000-2000,1:1 LA:GA) (Lot# 200701SLG-B)



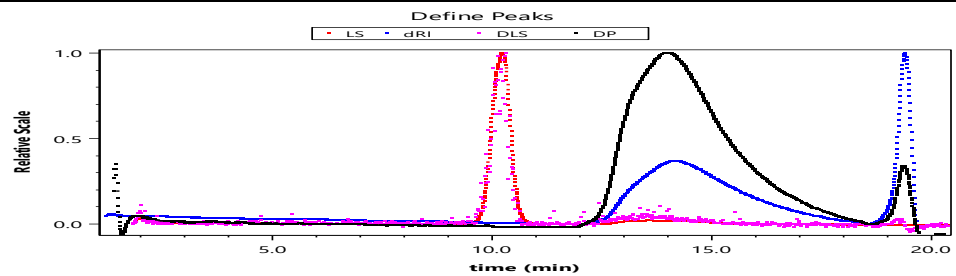
FTIR Analysis: Collected from cast-film on KBr salt-plate placed in Nicolet Avatar 380 spectrometer with ATR Smart Orbit and analyzed in transmission mode.



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.

Polymer	M <sub>n</sub> (from GPC)	M <sub>w</sub> (from GPC)	PDI
PLGA-PEG-PLGA	6776	8326	1.23
PEG precursor*		2205*	

\* - from MFG data



GPC-4D Analysis Method: Agilent 1260 Infinity II system 0.6 ml/min Acetone flow across TSKgel GMHHR-L, 7.8 mm x 30 cm. Detection Dawn Heleos II (MALLS), Optilab T-rex (RI), Dynapro nanostar (DLS), and Viscostar III (viscosity), universal calibration (Wyatt).

Polymer	M <sub>n</sub> (from GPC-4D)	M <sub>p</sub> (from GPC-4D)	M <sub>w</sub> (from GPC-4D)	Radius (r(avg), nm)	Intrinsic viscosity ([η](avg), mL/g)
PLGA-PEG-PLGA	5,054	6,112	9,529	1.8	11.756

\* - Due to differences in methodology, Results from GPC-4D universal calibration will be different from those obtained from GPC-ES. The data from GPC-4D analysis is provided for customer information only.

• **Structure of PLGA-PEG-PLGA triblock copolymers**

