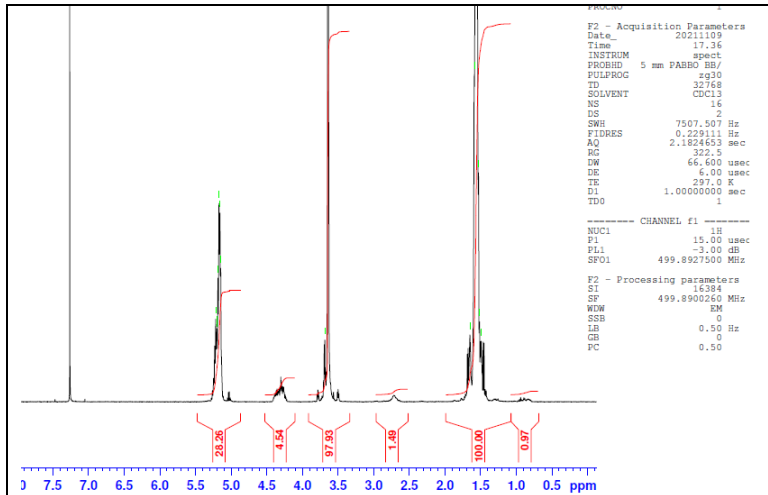


No. AK100

Certificate of Analysis



Product Name: Poly(DL-lactide)-*b*-Poly(ethylene glycol)-*b*-Poly(DL-lactide) triblock copolymers (Mw ~ 1,700:1,500:1,700) (Lot#: 211102AJP-A)

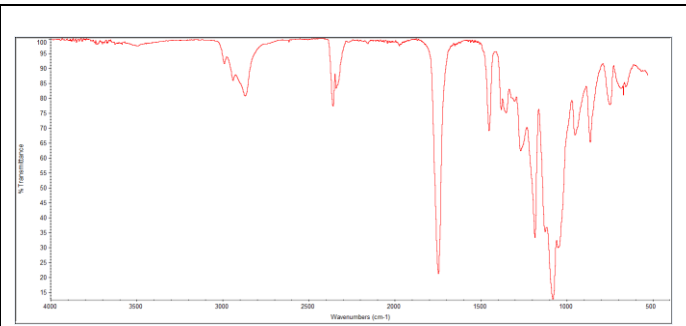


PROBHD 5 mm PABBO BB/
PULPROG zg30
TD 32768
SOLVENT CDCl3
NS 16
DS 2
SWH 7507.507 Hz
FIDRES 0.229111 Hz
AQ 2.1824653 sec
RG 322.5
RW 66.400 usec
DE 6.00 usec
TE 297.0 K
D1 1.0000000 sec
TDO 1

CHANNEL f1

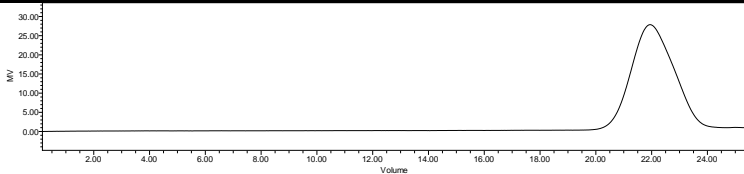
NUC1 13C
P1 15.00 usec
PL1 -3.00 dB
SFO1 499.8907000 MHz

F2 - Processing parameters
SI 15284
SF 499.8900260 MHz
WDW EM
SSB 0
LB 0.50 Hz
GB 0
PC 0.50

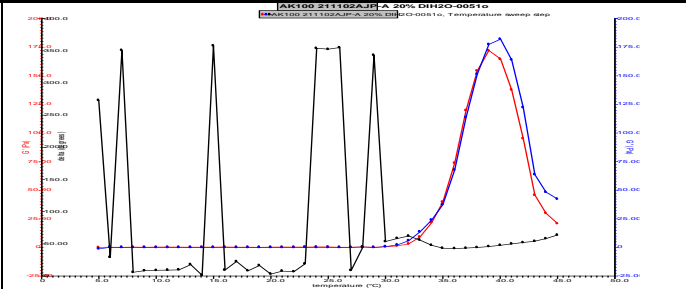


FTIR Analysis: Collected from Nicolet Avator 380 spectrometer with ATR Smart Orbit and analyzed in transmission mode.

H-NMR Spectrum of copolymers in CDCl3 (Bruker ≥300 MHz, PINMRF) NMR of PDLLA-PEG copolymer: EG/LA =34/39 (Mn EG/LA 1498*/2826 Da) *- from MFG data



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⁻¹) and 5°C was measured (1 minute 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.

Polymer	M _n (from GPC)	M _w (from GPC)	PDI
PDLLA-PEG	5333	6630	1.24
PEG precursor*	M _n 1485*		

*- from MFG data

Viscosity 20% w/v solution at 5°C **.01829 Pa/s**

Structure of PLA-PEG-PLA copolymers

