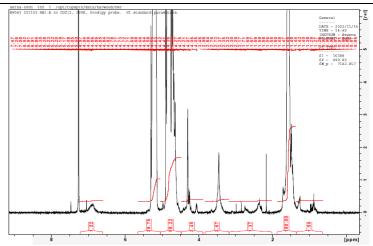
## No. AV043

## Certificate of Analysis

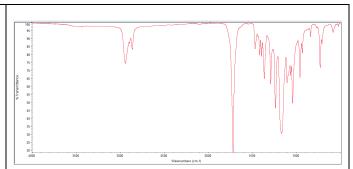


Product Name: Poly(lactide-co-glycolide) – 800CW copolymer

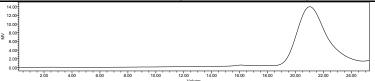
(Mn: 10,000-15,000 Da) (Lot# 231103RAI-A)



H-NMR Spectrum of copolymers in CDCl3 (NMReady-60e, Nanalysis 60 MHz) NMR of PLGA-800CW Copolymer: LA:GA 51%:49% molar ratio (LA:GA 56%:44% w-w)

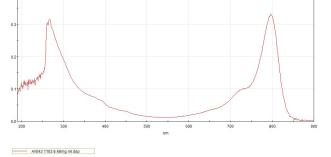


FTIR Analysis: Collected from IS5 ID7-ATR spectrometer (ThermoFisher) and analyzed in transmission mode.



GPC-ES 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	$M_n$ (from	M <sub>w</sub> (from	PDI
	GPC)	GPC)	
PLGA-800CW	10,068	13,672	1.36



Dye Content: Absorbance (8.48mg/mL) w/v sample in DMSO against DMSO blank at indicated wavelengths. Testing of absorbance of polymer in DMSO solution at 797nm as compared to series of 800CW-NHS ester standards has indicated a dye content of: 0.177 μg/mg polymer.

## • Structure of PLGA-800CW copolymer

$$HO = \begin{bmatrix} O & O & O \\ C & -CH_2 - O \end{bmatrix}_{GA} = \begin{bmatrix} O & O & O \\ C & -CH_2 - O \end{bmatrix}_{LA} = \begin{bmatrix} O & O & O \\ C & -CH_2 - NH_2 -$$

"R" – ethylene bridge

"DYE" – 800CW reacted ester (LiCor, P/N: 929-70020,  $C_{50}H_{54}N_3Na_3O_{17}S_4$ )

Approved By: Amie Tyler Quality Manager