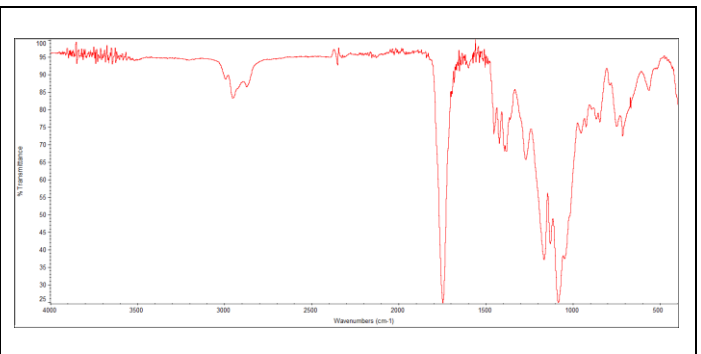
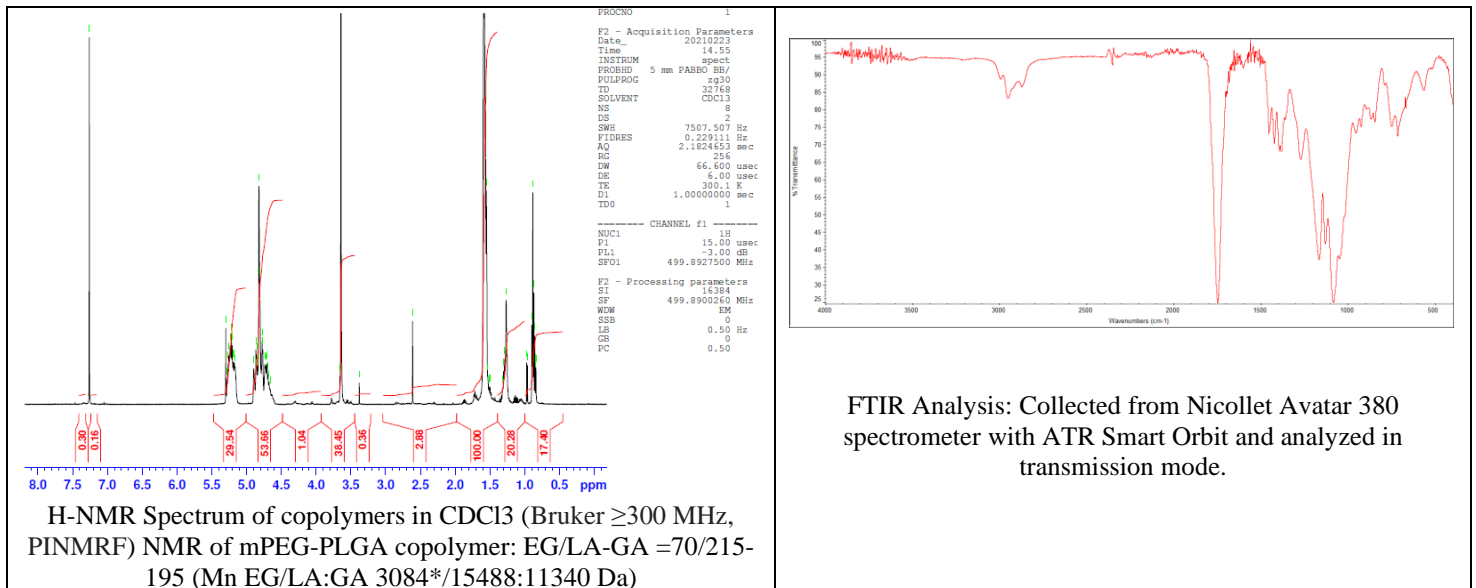


No. AV042

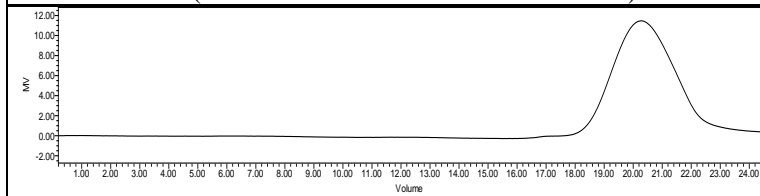
Certificate of Analysis



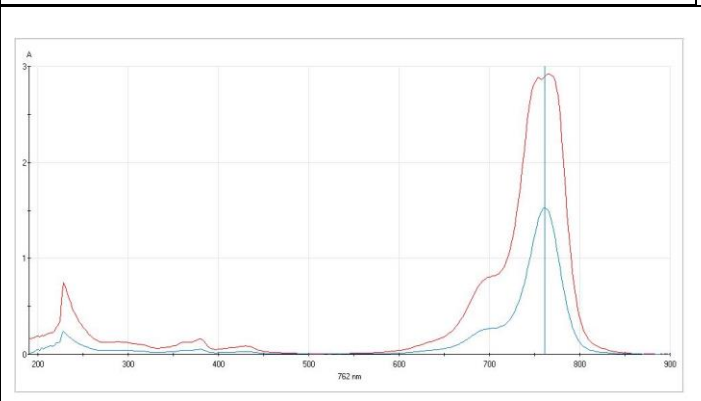
Product Name: Methoxy-Poly(ethylene glycol)-b-Poly(lactide-co-glycolide)-CY7 copolymers ($M_w \sim 3,000-20,000$ Da) (Lot#: 210212RAI-B)



FTIR Analysis: Collected from 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.



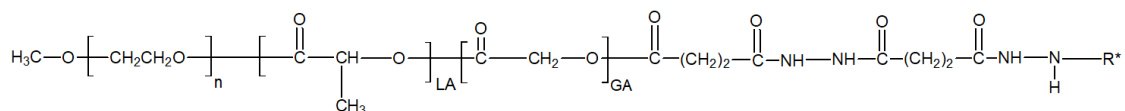
UV-Vis Analysis PLGA-CY5

Analysis method: Scan from 190-900nm in 2nm increments of 0.45 mg/ml PLGA-CY5 solution in DCM against DCM blank.

Polymer	M_n (from GPC)	M_w (from GPC)	PDI
mPEG_PLGA	18,034	25,197	1.40
mPEG precursor*	3072*		

*- from MFG data

Structure of mPEG-PLGA-CY7



“R*” - Cyanine-7 Dye molecule

Dye content: Testing of absorbance of polymer in DCM at 762 nm as compared to a series of CY7-NHS standards has indicated a dye content of: 10.89 $\mu\text{g}/\text{mg}$ polymer.