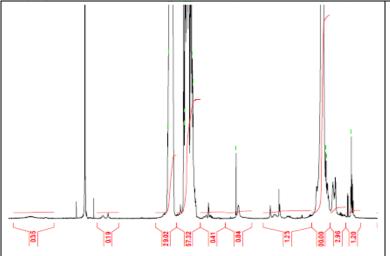
No. AV011

Certificate of Analysis

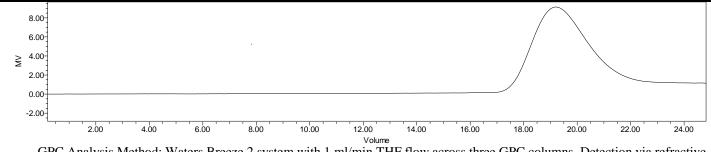


Product Name: Poly(lactic-co-glycolic acid) copolymer-Rhodamine-B conjugate (Mn 10,000-30,000 Da) (Lot#: 180419RAI-A)



H-NMR Spectrum of copolymers in CDC13 (Varian Inova 500 MHz instrument) NMR of PLGA copolymer: LA/GA = 56%/44% molar ratio (50%/50% w/w)

FTIR Analysis: Collected from cast-film on KBr salt-plate placed in Nicollet Avatar 320 spectrometer 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 _n (from	M _w (from	PDI
	GPC)	GPC)	
PLGA-Rhodamine	29,670	42,312	1.42

*- from MFG data

• Structure of PLGA-Rhodamine B copolymers

Dye Content: Testing of absorbance of polymer in DCM solution at 543 nm as compared to series of RITC standards has indicated a dye content of: 3.12 μg/mg polymer.