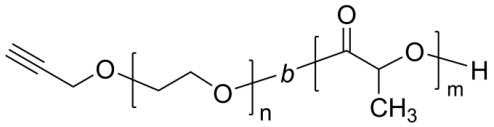
Sample Name: **Poly(ethylene oxide)-b-poly(lactide), α-alkyne-terminated**

Sample: **P43760-AlkyneEOLA**

Structure:



Composition:

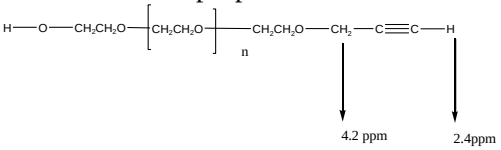
Mn x 10^3	PDI
2.0-b-1.0	1.27

Synthesis Procedure:
α-hydroxy ω-alkyne terminated poly(ethylene glycol) was synthesized and used for the synthesis of Alkyne-EG-b-LA(DL) form

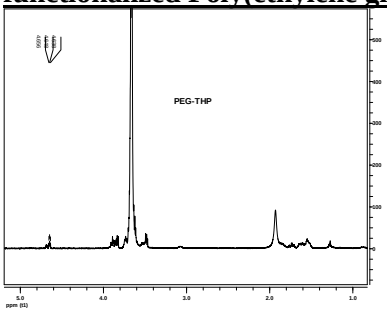
Characterization:
The molecular weight and polydispersity index of this polymer were determined by size exclusion chromatography (SEC) using a Varian liquid chromatograph equipped with a UV and refractive index detector.

Functionality:
Functionality of the polymer was determined by H NMR analysis or FT-IR spectroscopy

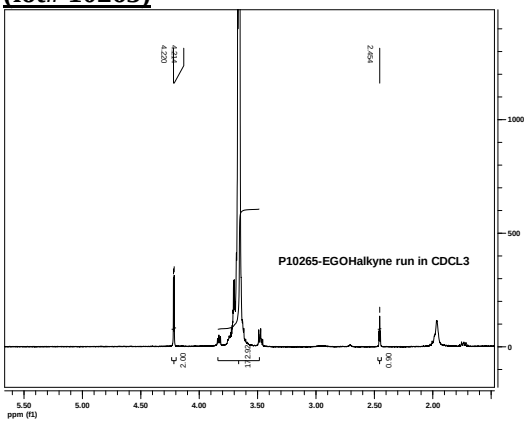
Solubility:
Polymer is soluble in water, methanol and ethanol, THF, $CHCl_3$. It is precipitated out from cold ethanol, isopropanol, hexane and ether.



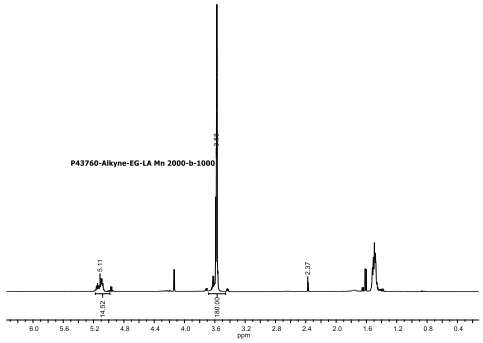
HNMR spectrum of α pyran ω- OH end functionalized Poly(ethylene glycol)



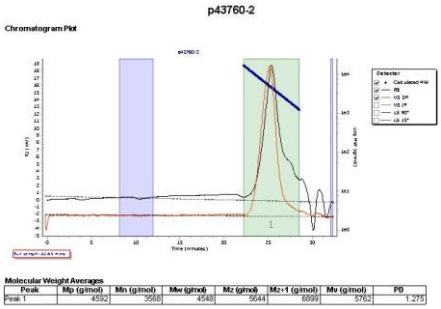
NMR Sepctrum of the EGOH-alkyne sample: (lot# 10265)



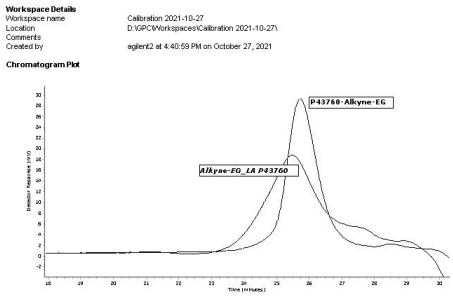
HNMR spectrum of the Sample:



SEC elugram of the Sample:



FTIR spectrum of the Sample:



References:

S. K. Varshney, J.X. Zhang, US patent US Pat. 7,009,033 B2 2006
Hterofunctional Polyethylene glycol and Poly ethylene oxide , process for their Manufacture