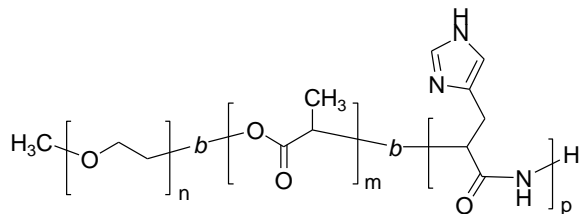


Sample name: Amino terminated Poly (Ethylene glycol methlether-b-lactide-b-Histidine)

Sample#: P40875A-mPEG-LA-HisNH₂

Structure:

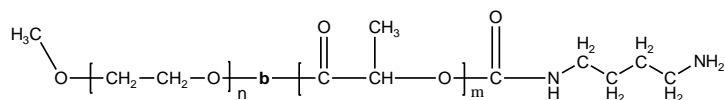


Composition:

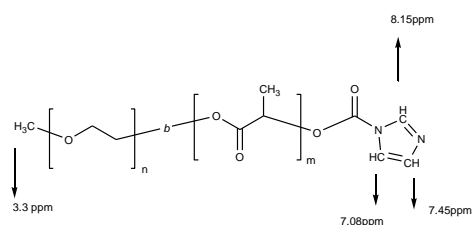
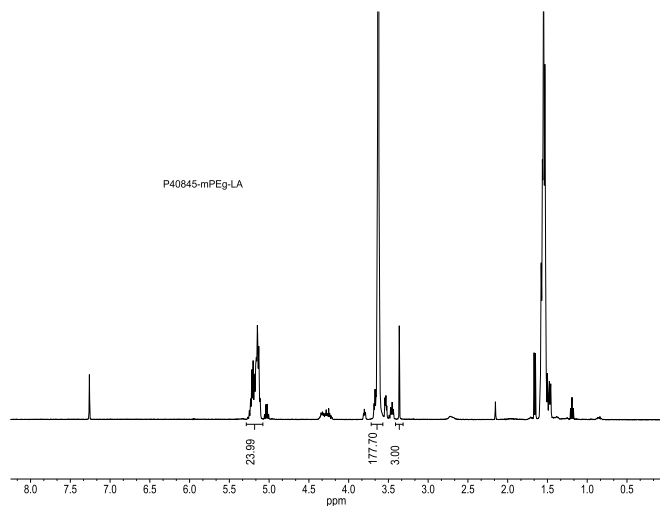
Mn x 10 ³ mPEG-b-LA-Histidine	PDI
2.0-b-1.6-b-4.5 From HNMR	< 1.3

Synthesis:

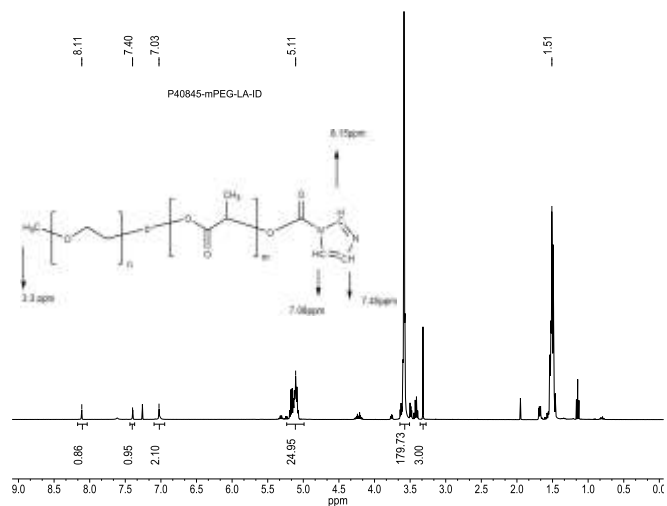
1. From using Amino functionalized PEG-LA



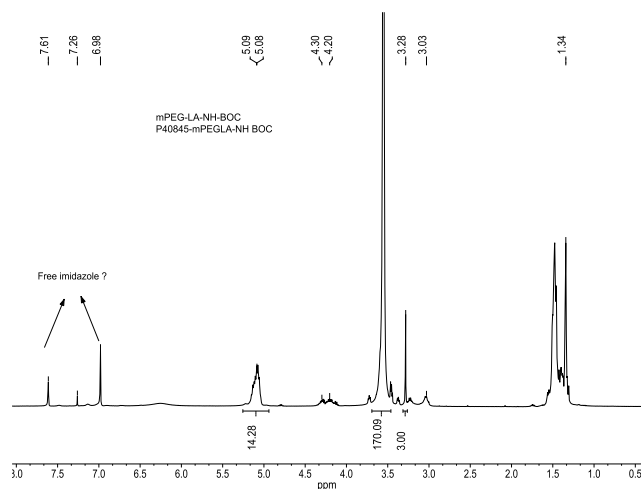
¹H-NMR Spectrum of the block copolymer: EOLA



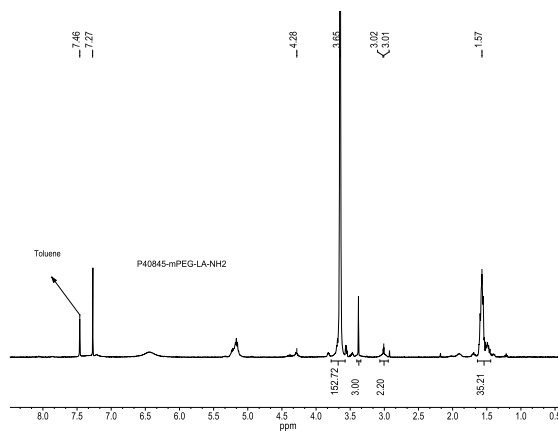
¹H-NMR Spectrum of the block copolymer EOLA-Imidazole



¹HNMR spectrum of BOC end functionalized mPEG-LA



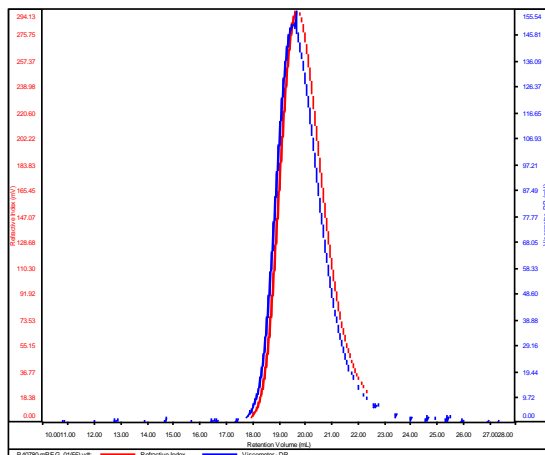
¹HNMR spectrum of amino end funtctionalized mPEG-LA



SEC of the mPEG block:

P40780-mPEG

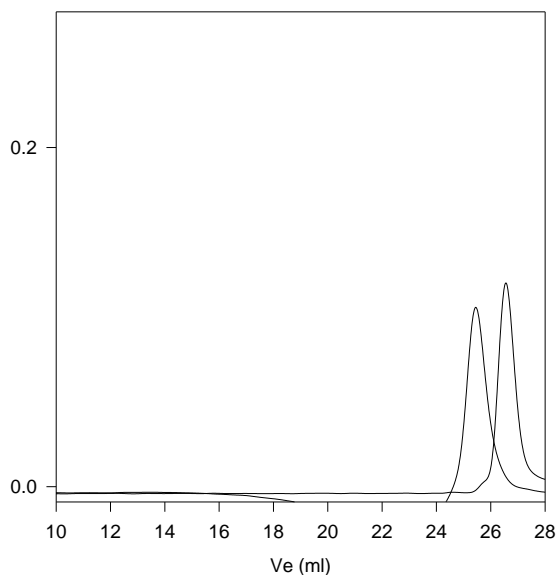
Conc	61.2910
dn/dc	0.0390
Solvent	DMF w 0.023M LiBr
Flow Rate	0.7000
Method	PS100K_2017-Oct11-0000.vcm



Sample	Mn	Mw	Mp	Mw/Mn	IV
P40780-mPEG_01(55).vdt	2,173	2,310	1,974	1.063	0.0566

SEC of the block copolymer:

P40845- mPEG-LA-NH2 (DL form)

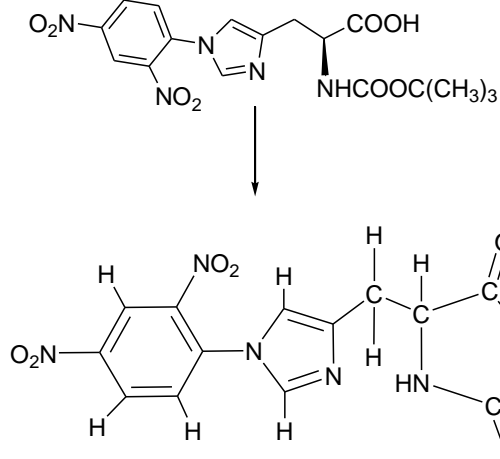


Size exclusion chromatography:

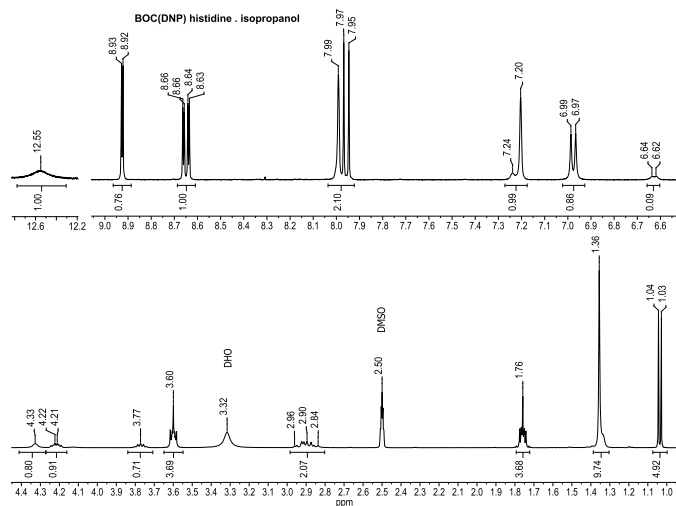
- Poly(ethylene glycol), $M_n=2100$, $M_w=2100$, $PI=1.06$
 - Block Copolymer PEO(2000)-b-PLA(1600), $PI=1.13$
- Composition from 1H NMR
Dp: EO(45 units)-b-LA (22 units)

Dinitro Phenyl histidine N-carboxy anhydride (NCA (DNP) Histidine) was prepared from BOC (DNP)

Histidine isopropanol presented as below scheme:

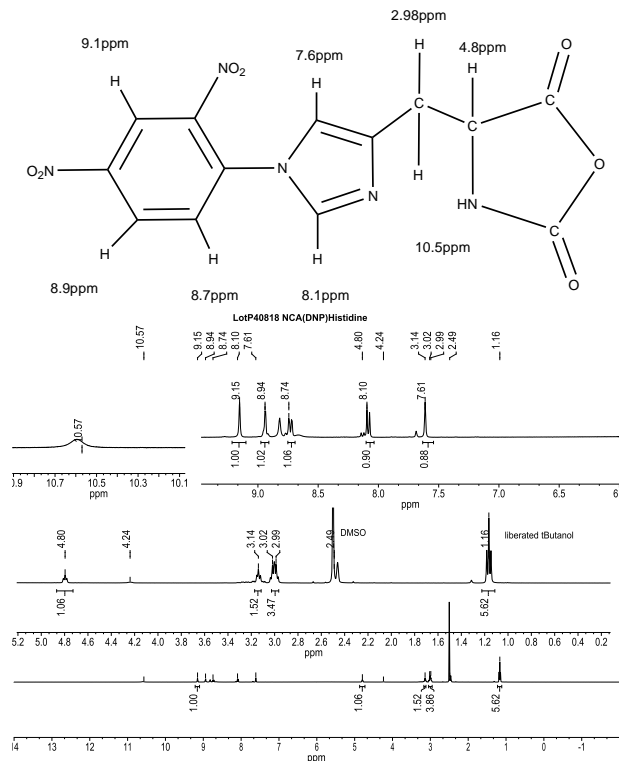


1H NMR of BOC (DNP) Histidine. Isopropanol run in dMSO d6;

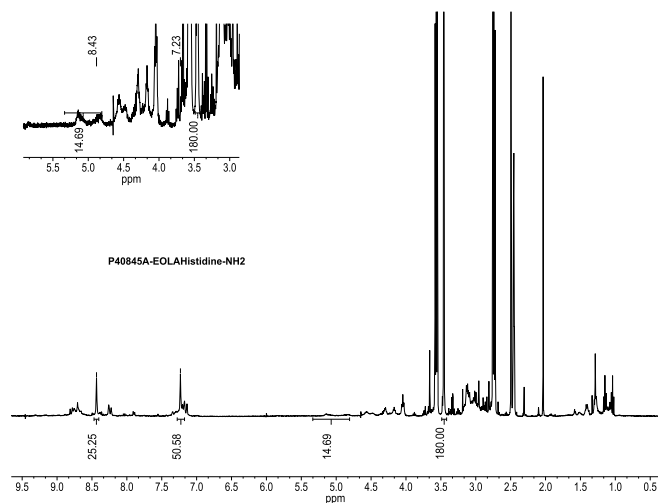


HNMR of NCA (DNP) Histidine run in dMSO d6;

Chemical Shifts in d6 dMSO



HNMR of the polymer after removing DNP moiety:



HNMR of mPEG-LA-DNP (Histidine)-NH2;

