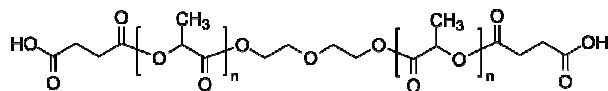


Sample Name:
Poly(DL-lactide), α,ω -bis(carboxy)-terminated

Sample # P18511B2-LA2COOH

Structure:

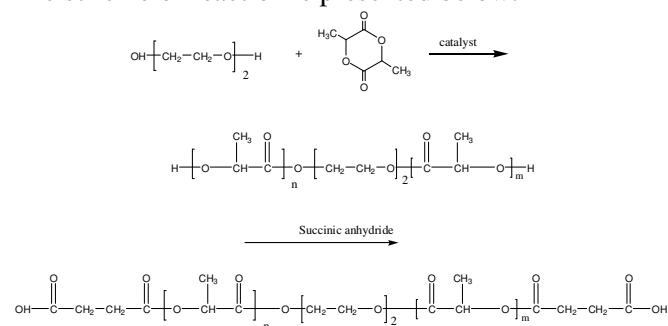


Composition:

$M_n \times 10^3$ (g/mol) [acc. to NMR]	M_w/M_n
4.0	1.3

Synthesis procedure:

The scheme of reaction is presented below:



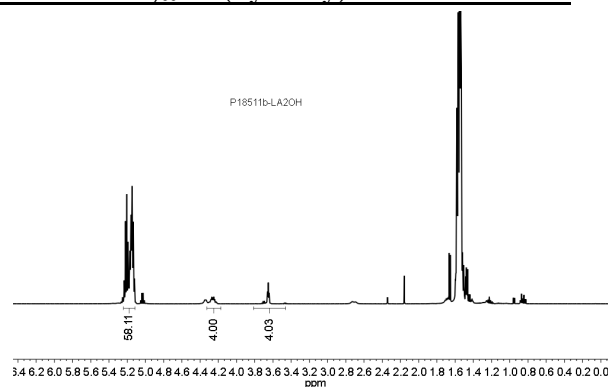
Characterization:

The molecular weight was calculated from ^1H NMR data by comparing peak areas of ethylene glycol protons at ~4.3 ppm and polylactide protons at ~5.1 ppm. The polydispersity index (M_w/M_n) was obtained by size exclusion chromatography (SEC) of the polymer before its functionalization.

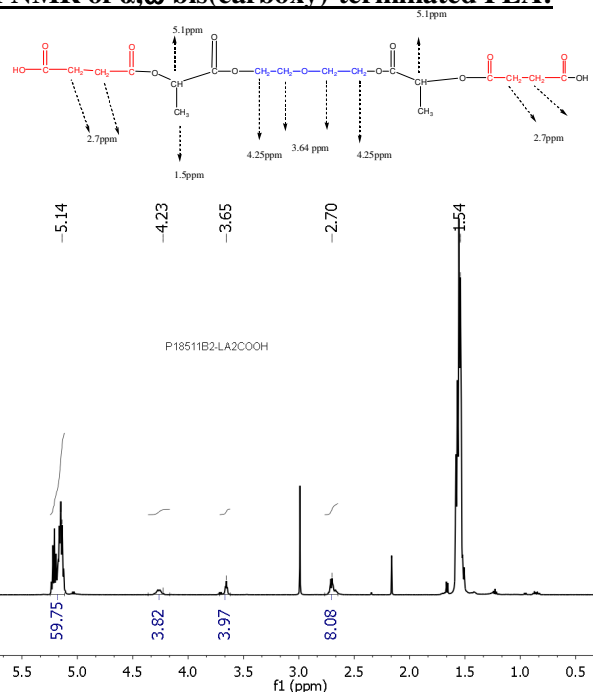
Solubility:

The polymer is soluble in toluene, THF, chloroform, DCM; and is insoluble in methanol, hexanes and ether.

^1H NMR of α,ω -bis(hydroxy)-terminated PLA:



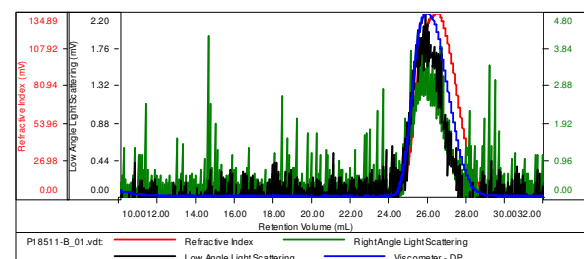
^1H NMR of α,ω -bis(carboxy)-terminated PLA:



SEC of α,ω -bis(hydroxy)-terminated poly(lactide):

Sample ID: P18511B-LA 2OH (DL form)

Concentration (mg/mL)	16.3362
Sample dn/dc (mL/g)	0.0460
Method File	PS80K-Feb25-2014-0000.vcm
Column Set	3x PL 1113-6300
System	System 1



Sample	M_n	M_w	M_p	M_w/M_n	IV
P18511-B_01.vdt	3,741	5,105	4,712	1.364	0.2283