

Product Profile

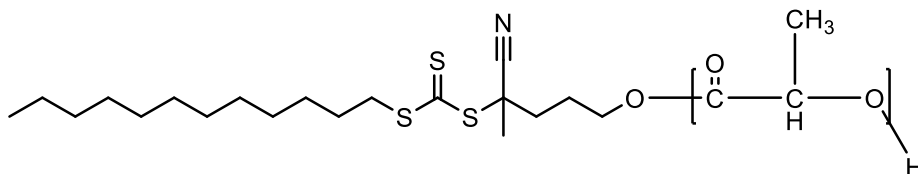
Identification

Product Name: **Poly(L-lactide), 4-cyano-4-[(dodecylsulfanylthiocarbonyl)sulfanyl]pentonate terminated**

Synonym(s): **PLLA RAFT terminated, RAFT-PLA**

Sample #: **P45613-LLA-RAFT**

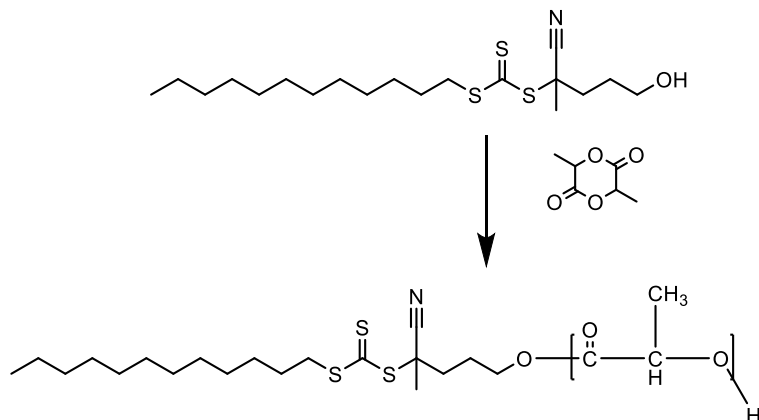
Product Chemical Architecture:



Composition:

Mn x 10 ³	Mw/Mn (PDI)
5.0	1.15

Method of Synthesis



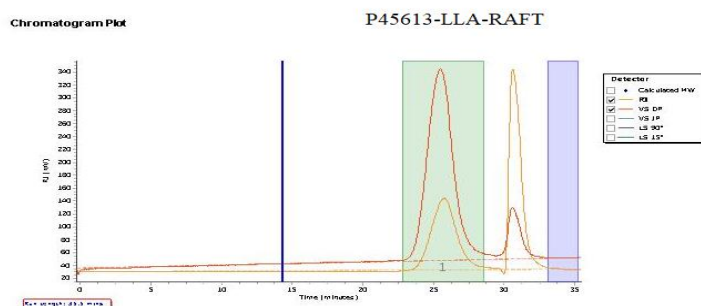
Solubility in different solvents

THF	√		
CHCl ₃	√	DMF	√
Toluene-Hot	√		

Purification of Polymer By Soxhlet in Hexane

Validation of Architecture:

A. Gel Permeation Chromatography (GPC), SEC- Profile



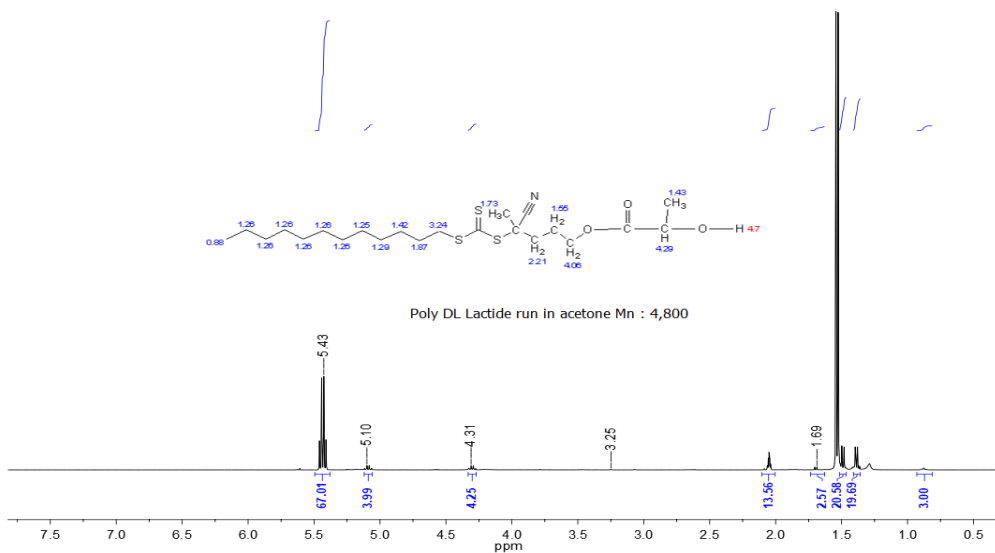
Mn from HNMR and MW/MN by GPC 1.15

B. NMR (HNMR) of polymer:

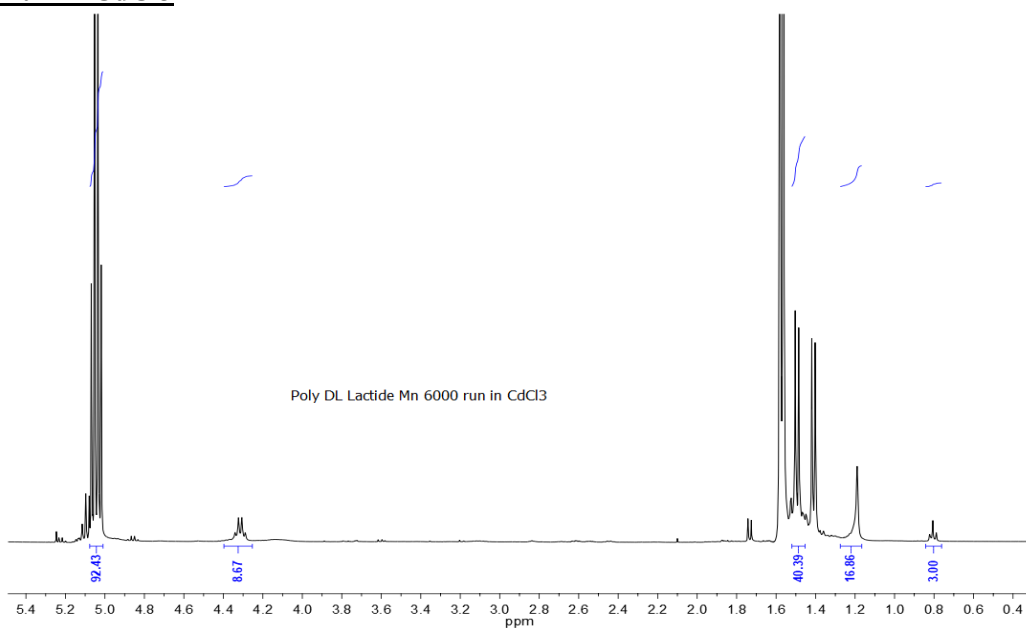
NMR (HNMR) of polymer: RAFT Macroinitiator PDLLA

	<u>Chemical shift</u> <u>C-(H)</u>	<u>C(CH₃)</u>	<u>Calculated</u> <u>Mn</u>
<u>In acetone</u>	<u>5.43</u>	<u>1,53</u>	<u>4,800</u>
<u>In CdCl₃</u>	<u>5.05</u>	<u>1.60</u>	<u>6,500</u>
<u>In DMSO</u>	<u>5.43</u>	<u>1,45</u>	<u>4,000</u>
			<u>Average</u> <u>5,000</u>

Run in D6 acetone



Run in CdCl3



Run in d6 DMSO

