

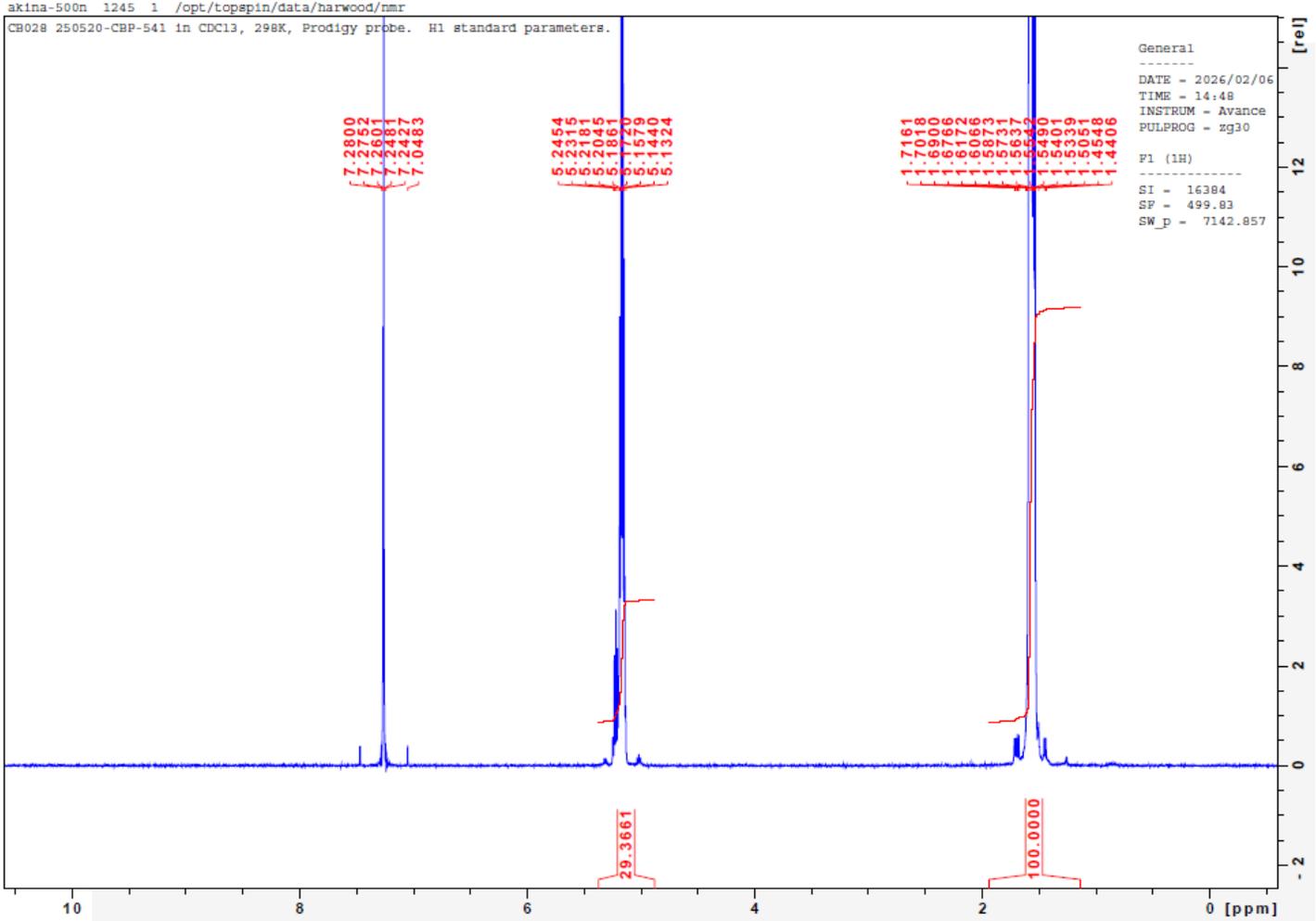
No. CB028

# Certificate of Analysis

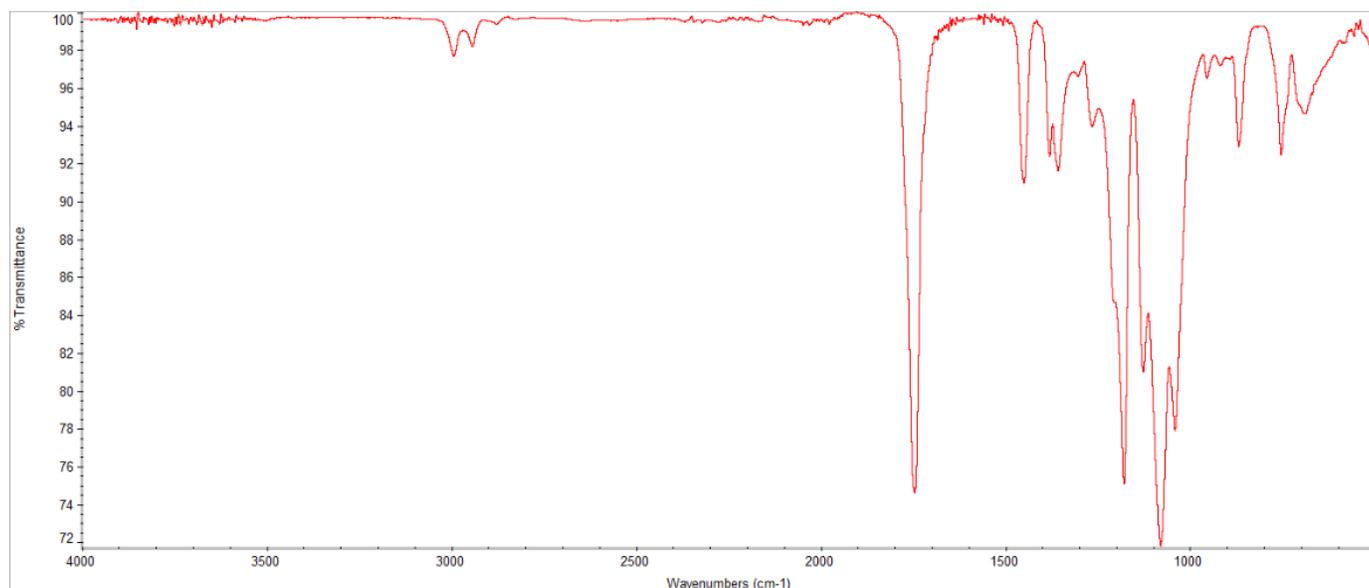


Product Name: Poly(L-Lactide, D,L-Lactide) L:DL 80:20 I.V. 3.30 – 4.30 dl/g, ester endcap (PLDL 8038) (Lot#: 250520CBP-541)

## H-NMR

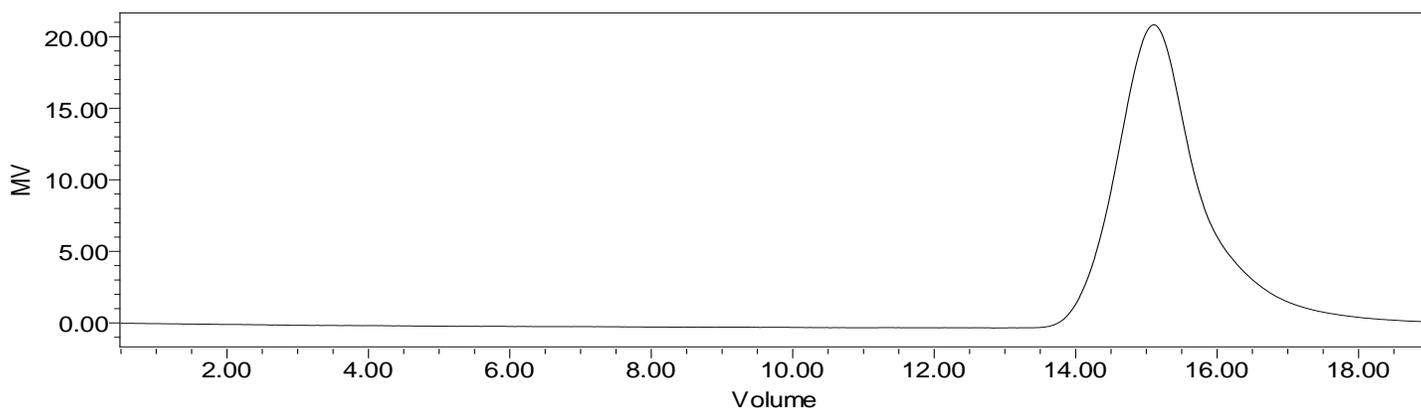


## FTIR



FTIR Analysis: Collected from IS5 ID7-ATR spectrometer (Thermo Scientific) and analyzed in transmission mode.

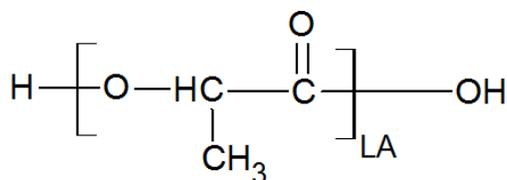
## GPC-ES



Polymer	M <sub>n</sub> (from GPC)	M <sub>w</sub> (from GPC)	PDI
PLDL	260,561	384,034	1.47

GPC-ES Analysis Method: Waters Breeze 2 system with 1 ml/min THF flow across three GPC columns. Detection via refractive index, calibrated against polystyrene standards.

## Structure of copolymers



**Manufacturer Provided Data**

Assay	Specification	Result
Melting onset, DSC, 10 °C/min	110.0 °C	114.4 °C
Melting peak, DSC, 10 °C/min	135.0 °C	133.0 °C
Tin content	<50ppm	33 ppm
Water content <sup>1</sup>	<0.50%	0.05%
Residual monomer, Total	<0.10%	0.09%
Inherent Viscosity <sup>2</sup>	3.30-4.30 dL/g	3.88 dL/g
Residual solvent, Total	<0.10%	0.01 %
Residual solvent, Toluene	<890 ppm	<0 ppm
Residual solvent, Acetone	<5000 ppm	1 ppm

1 – Measured by titration

2 – Measured at 25 °C in Chloroform c=0.1 g/dL

Approved By: <i>Amie Tyler</i> Quality Manager
--