

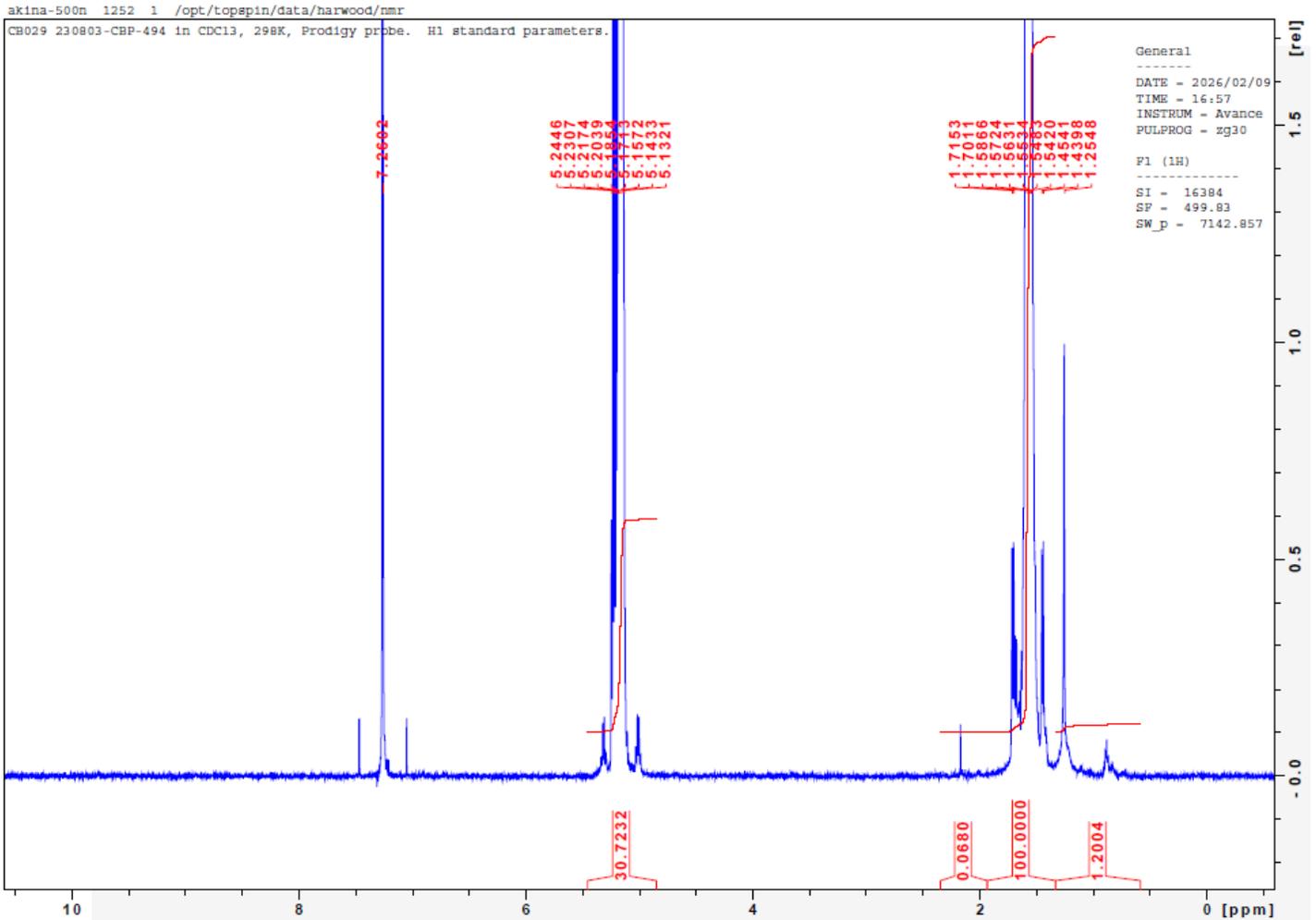
No. CB029

Certificate of Analysis



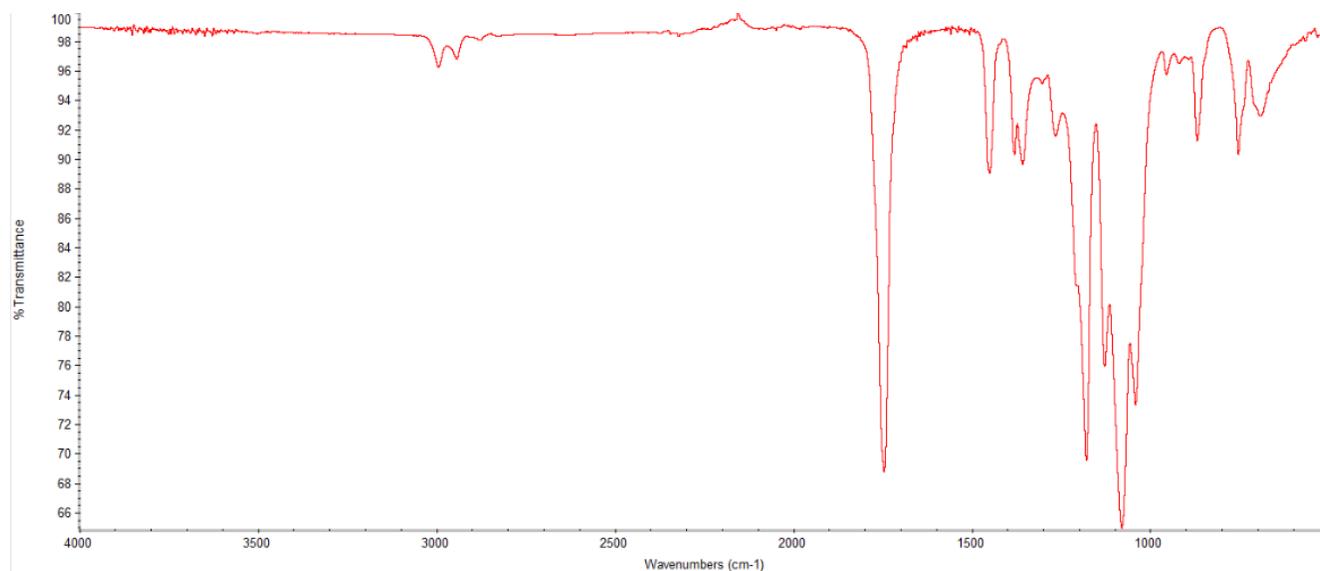
Product Name: Poly(L-Lactide, D,L-Lactide) L:DL 80:20 I.V. 5.20 – 6.30 dl/g, ester endcap (PLDL 8058) (Lot#: 230803CBP-494)

H-NMR



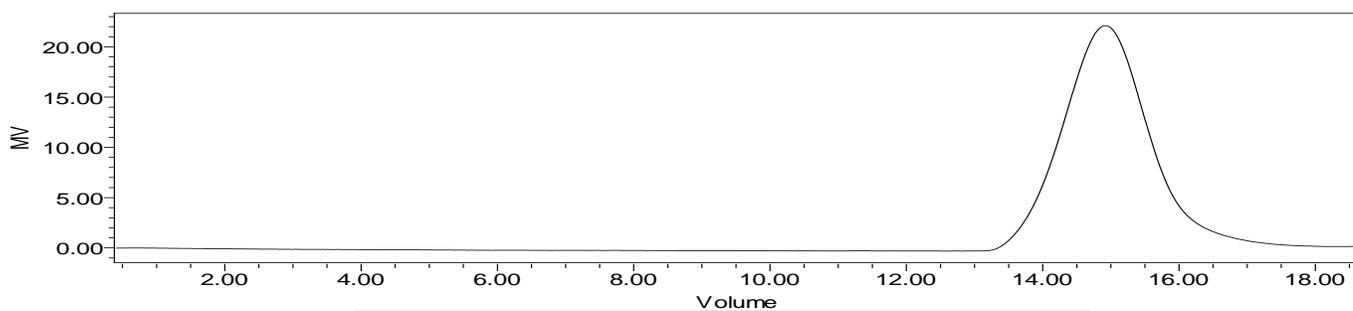
H-NMR Spectrum of copolymers in CDCl₃ (NMReady-60e, Nanalysis 60 MHz) NMR of PLDL copolymer

FTIR



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

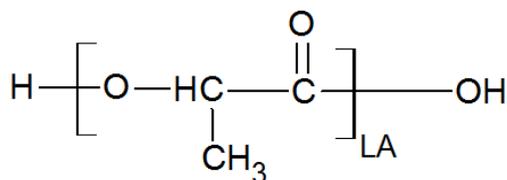
GPC-ES



Polymer	M _n (from GPC)	M _w (from GPC)	PDI
PLDL	338,733	495,772	1.46

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	100.0 °C	114.0 °C
Melting peak, DSC, 10 °C/min	135.0 °C	129.2 °C
Tin content	<50ppm	30 ppm
Water content ¹	<0.50%	0.05%
Residual monomer, Total	<0.10%	0.00%
Inherent Viscosity ²	5.20-6.30 dL/g	5.90 dL/g
Residual solvent, Total	<0.10%	0.00 %
Residual solvent, Toluene	<890 ppm	1 ppm
Residual solvent, Acetone	<5000 ppm	8 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
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