

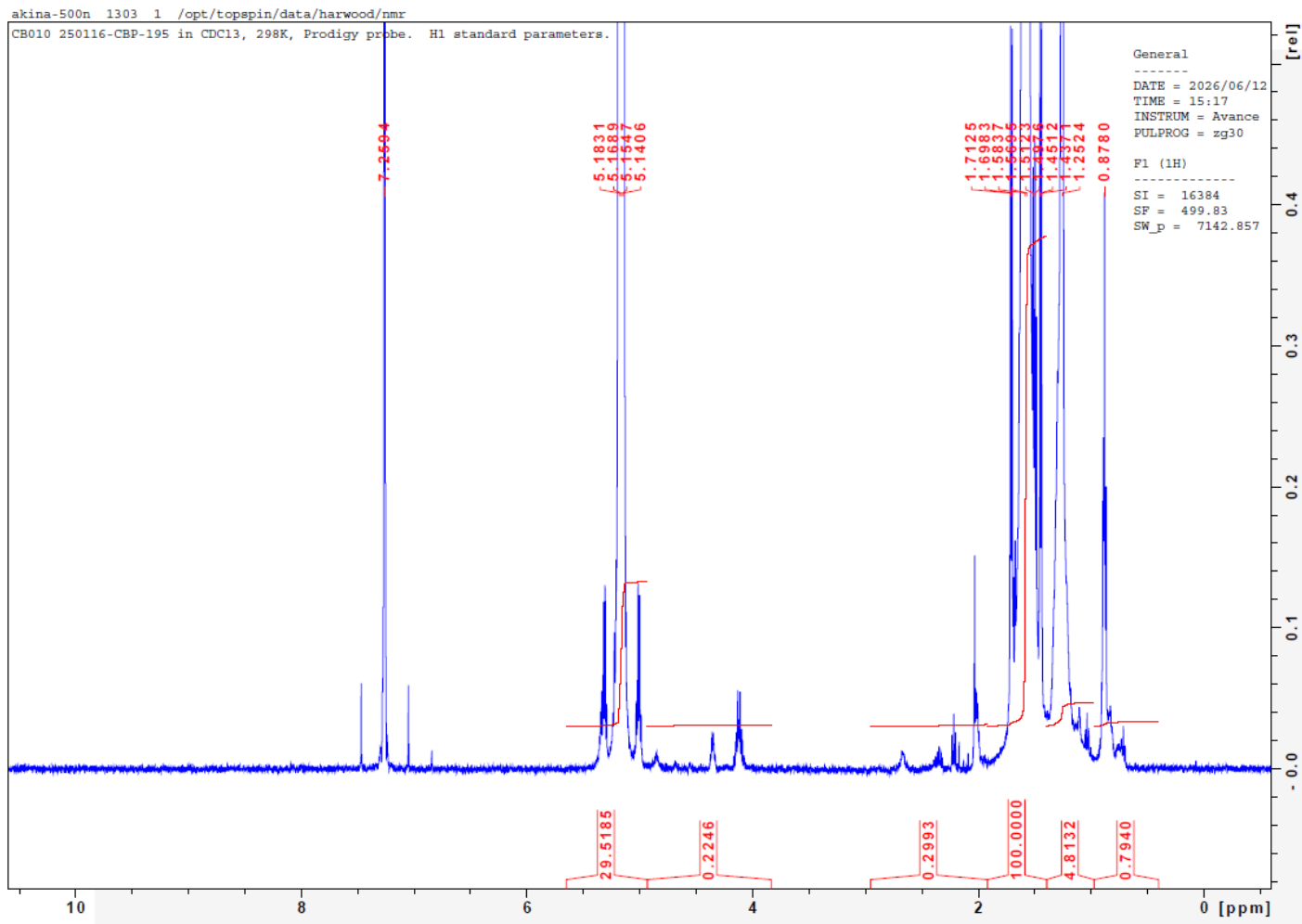
No. CB010

Certificate of Analysis



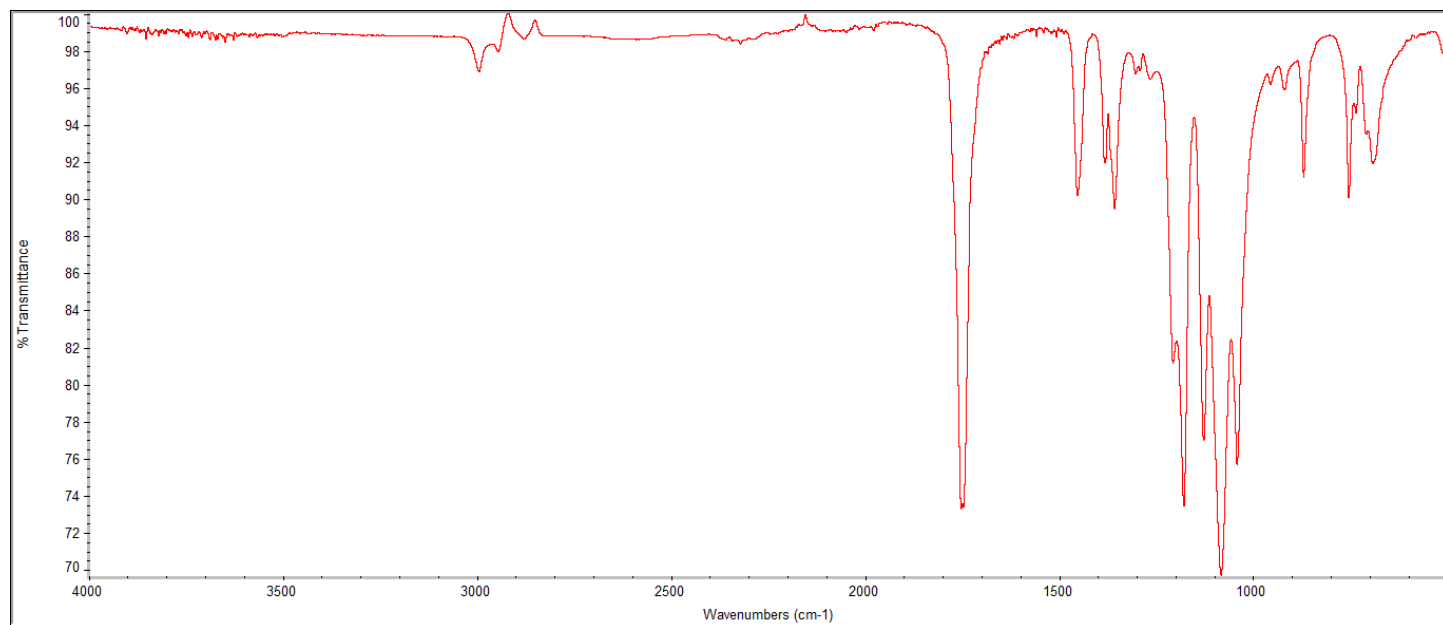
Product Name: Poly(L-Lactide) I.V. 0.9 -1.2 dl/g, acid endcap (PL 10)
(Lot # 250116CBP-195)

H-NMR



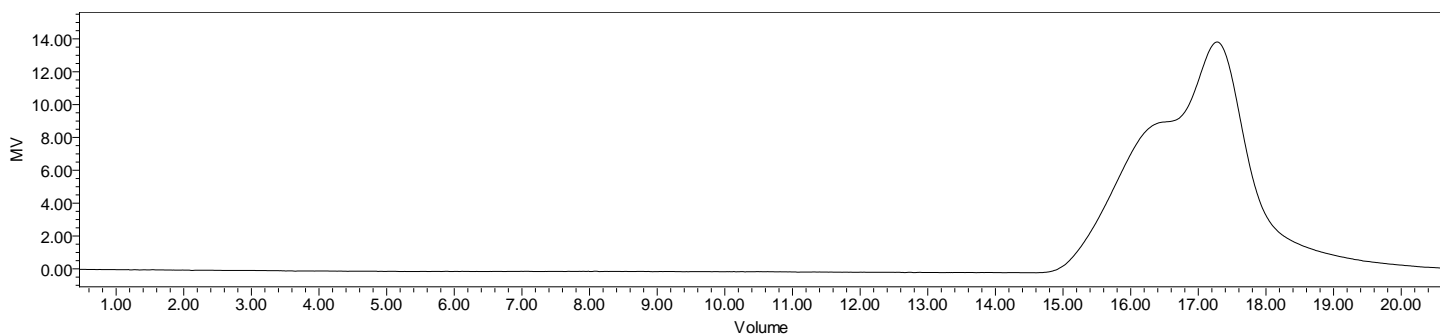
H-NMR Spectrum of copolymers in CDCl₃ (NMReady-60e, Nanalysis 60 MHz) NMR of PLLA copolymer

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
PLLA	87,092	107,968	1.24

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.

Manufacturer Provided Data

Assay	Specification	Result
Tin content	<50ppm	8 ppm
Water content	<0.50%	0.09%
Residual monomer, total	0.10 %	0.05 %
Inherent Viscosity ²	0.90-1.20 dL/g	1.12 dL/g
DSC, melting onset-peak	170.0-200.0 °C	181.1-190.2 °C
Elemental impurities	<0.10 ppm	0.05 ppm
Residual solvent, total	<0.010%	0.002 %
Residual solvent, Acetone	<5000 ppm	10 ppm
Residual solvent, Toluene	<890 ppm	<0 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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