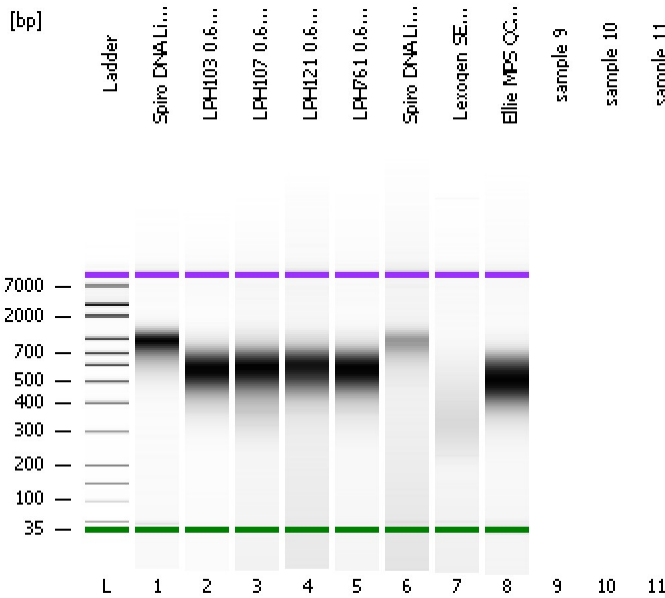


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-27\2016-09-27_004.xad

Created: 9/27/2016 1:38:14 PM
Modified: 9/27/2016 2:10:58 PM

Electrophoresis File Run Summary



Instrument Information:

Instrument Name: DE13701086 Firmware: C.01.069
Serial#: DE13701086 Type: G2938B

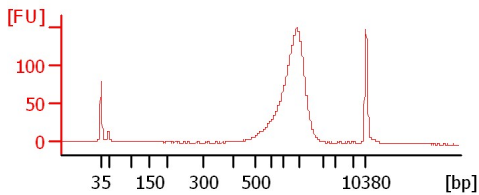
Assay Information:

Assay Origin Path: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\assays\dsDNA\High Sensitivity DNA.xsy
Assay Class: High Sensitivity DNA Assay
Version: 1.03
Assay Comments: Copyright © 2003-2010 Agilent Technologies

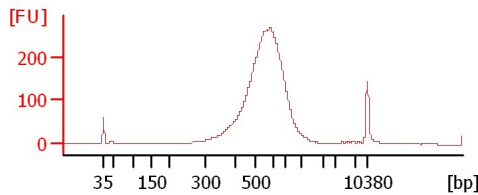
Chip Information:

Chip Lot #:
Reagent Kit Lot #:
Chip Comments:

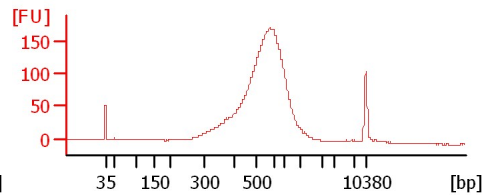
Spiro DNA Lib 0.5X L



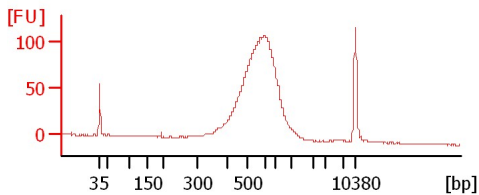
LPH103 0.65X Left SS Library



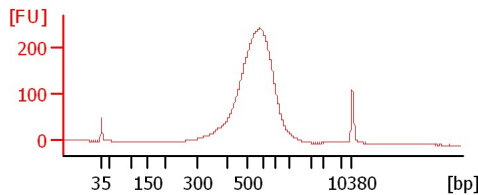
LPH107 0.65X Left SS Library



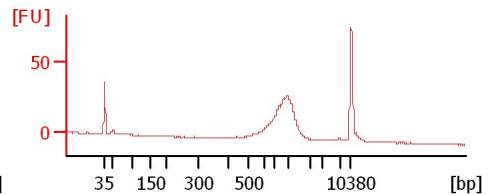
LPH121 0.65X Left SS Library



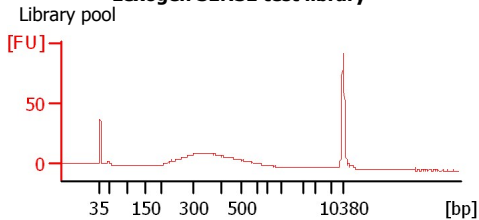
LPH761 0.65X Left SS Library



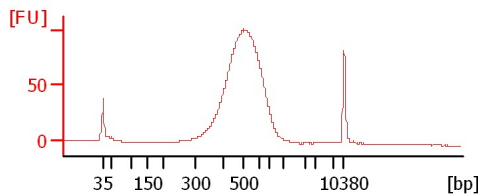
Spiro DNA Lib 0.5X L



Lexogen SENSE test library



Ellie MPS QC PCR



Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-27\2016-09-27_004.xad

Created: 9/27/2016 1:38:14 PM
Modified: 9/27/2016 2:10:58 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
Spiro DNA Lib 0.5X L		<input type="checkbox"/>	✓			
LPH103 0.65X Left SS Library		<input type="checkbox"/>	✓			
LPH107 0.65X Left SS Library		<input type="checkbox"/>	✓			
LPH121 0.65X Left SS Library		<input type="checkbox"/>	✓			
LPH761 0.65X Left SS Library		<input type="checkbox"/>	✓			
Spiro DNA Lib 0.5X L		<input type="checkbox"/>	✓			
Lexogen SENSE test library	Library pool	<input type="checkbox"/>	✓			
Ellie MPS QC PCR		<input type="checkbox"/>	✓			
sample 9		<input type="checkbox"/>				
sample 10		<input type="checkbox"/>				
sample 11		<input type="checkbox"/>				
Ladder		<input type="checkbox"/>	✓			

Chip Lot #

Reagent Kit Lot #

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-27\2016-09-27_004.xad

Created: 9/27/2016 1:38:14 PM
Modified: 9/27/2016 2:10:58 PM

Electrophoresis Assay Details

General Analysis Settings

Number of Available Sample and Ladder Wells (Max.) : 12
Minimum Visible Range [s] : 32
Maximum Visible Range [s] : 138
Start Analysis Time Range [s] : 33
End Analysis Time Range [s] : 137.5
Ladder Concentration [pg/μl] : 1950
Uses Standard Area for Ladder Fragments
Lower Marker Concentration [pg/μl] : 125
Upper Marker Concentration [pg/μl] : 75
Used Upper Marker for Quantitation
Standard Curve Fit is Point to Point
Show Data Aligned to Lower and Upper Marker

Integrator Settings

Integration Start Time [s] : 33.05
Integration End Time [s] : 137
Slope Threshold : 0.8
Height Threshold [FU] : 5
Area Threshold : 0.1
Width Threshold [s] : 0.6
Baseline Plateau [s] : 0.5

Filter Settings

Filter Width [s] : 0.5
Polynomial Order : 4

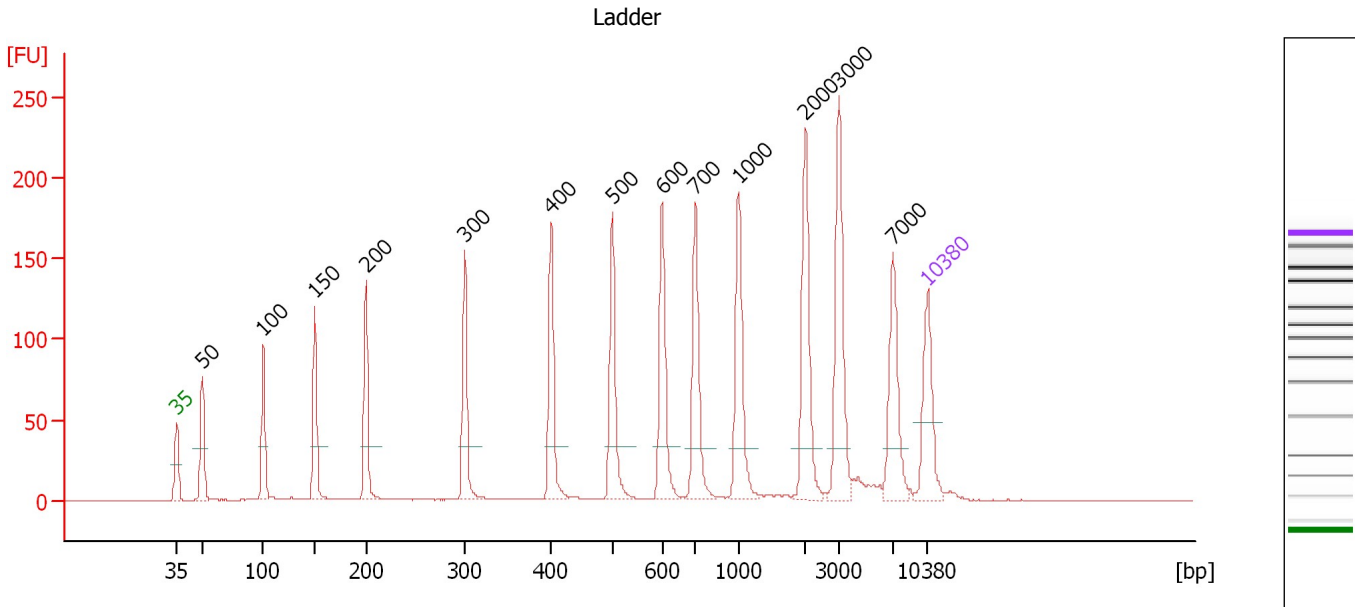
Ladder

Ladder Peak	Size	Area
1	35	160
2	50	210
3	100	208
4	150	221
5	200	242
6	300	270
7	400	305
8	500	306
9	600	336
10	700	321
11	1000	366
12	2000	413
13	3000	411
14	7000	400
15	10380	214

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-27\2016-09-27_004.xad

Created: 9/27/2016 1:38:14 PM
 Modified: 9/27/2016 2:10:58 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

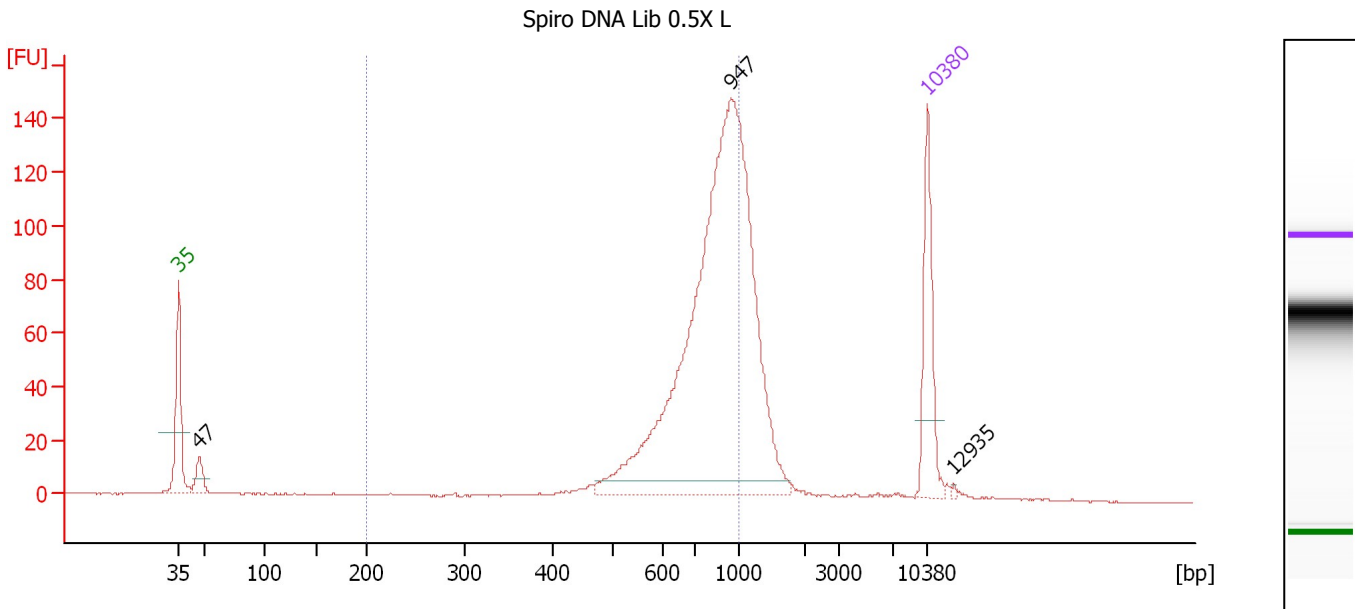
Peak table for Ladder

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	50	150.00	4,545.5	Ladder Peak	45.39
3	100	150.00	2,272.7	Ladder Peak	51.05
4	150	150.00	1,515.2	Ladder Peak	55.88
5	200	150.00	1,136.4	Ladder Peak	60.65
6	300	150.00	757.6	Ladder Peak	69.85
7	400	150.00	568.2	Ladder Peak	77.90
8	500	150.00	454.5	Ladder Peak	83.62
9	600	150.00	378.8	Ladder Peak	88.24
10	700	150.00	324.7	Ladder Peak	91.37
11	1,000	150.00	227.3	Ladder Peak	95.35
12	2,000	150.00	113.6	Ladder Peak	101.62
13	3,000	150.00	75.8	Ladder Peak	104.70
14	7,000	150.00	32.5	Ladder Peak	109.77
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-27\2016-09-27_004.xad

Created: 9/27/2016 1:38:14 PM
 Modified: 9/27/2016 2:10:58 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : Spiro DNA Lib 0.5X L

Number of peaks found: 3 Corr. Area 1: 818.7
 Noise: 0.2

Peak table for sample 1 : Spiro DNA Lib 0.5X L

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	47	30.10	965.8		44.94
3	947	789.46	1,262.7		94.65
4	10,380	75.00	10.9	Upper Marker	113.00
5	12,935	0.00	0.0		115.44

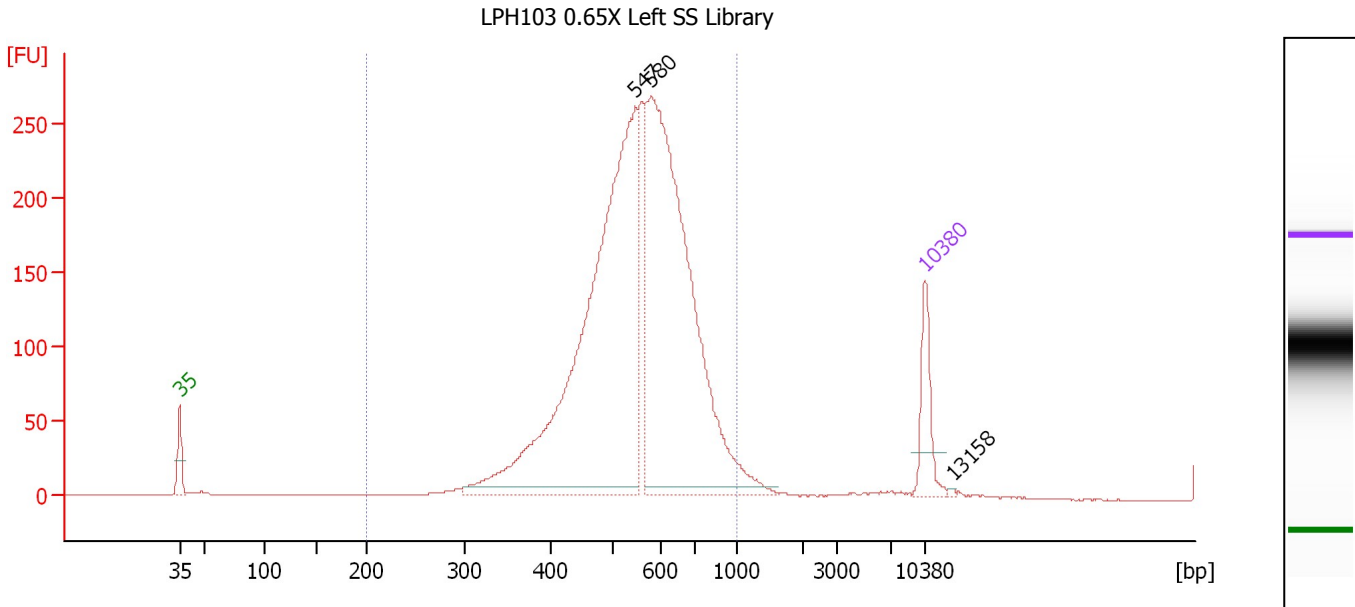
Region table for sample 1 : Spiro DNA Lib 0.5X L

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	769	818.7	1,390.0	659.09	69	19.9

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-27\2016-09-27_004.xad

Created: 9/27/2016 1:38:14 PM
 Modified: 9/27/2016 2:10:58 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : LPH103 0.65X Left SS Library

Number of peaks found: 3 Corr. Area 1: 3,422.9
 Noise: 0.2

Peak table for sample 2 : LPH103 0.65X Left SS Library

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	547	1,251.19	3,465.6		85.79
3	580	1,110.78	2,904.1		87.29
4	10,380	75.00	10.9	Upper Marker	113.00
5	13,158	0.00	0.0		115.66

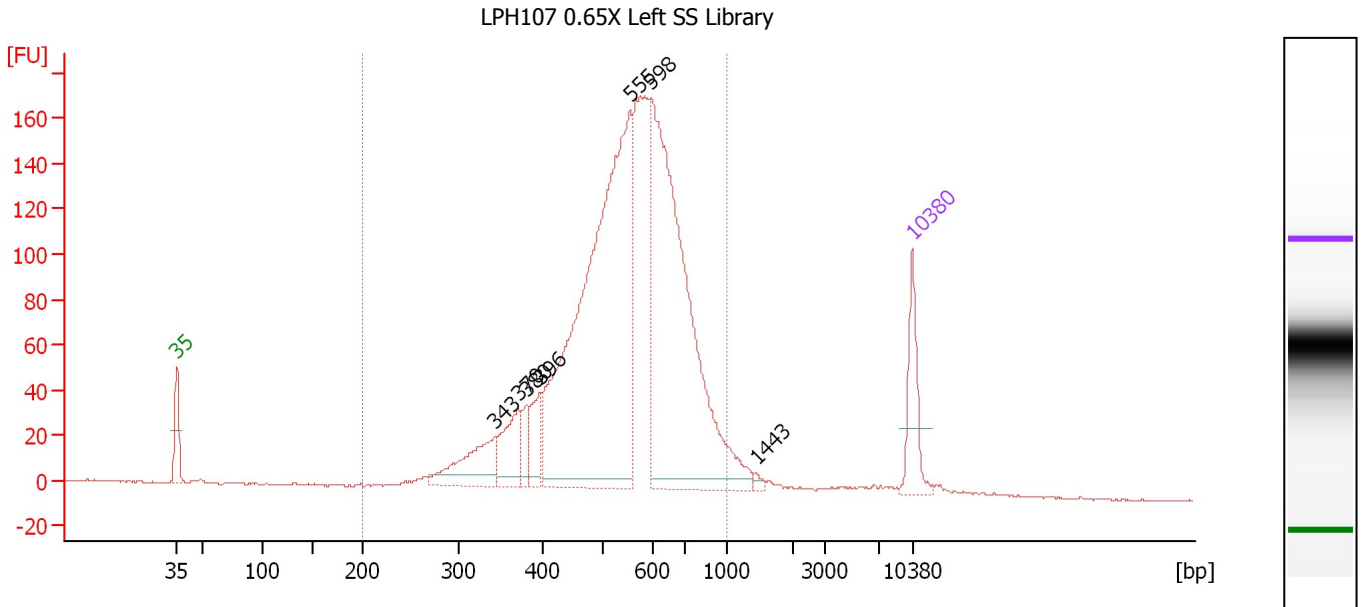
Region table for sample 2 : LPH103 0.65X Left SS Library

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	560	3,422.9	7,493.0	2,610.39	96	20.7

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-27\2016-09-27_004.xad

Created: 9/27/2016 1:38:14 PM
 Modified: 9/27/2016 2:10:58 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : LPH107 0.65X Left SS Library

Number of peaks found: 7 Corr. Area 1: 2,404.9
 Noise: 0.4

Peak table for sample 3 : LPH107 0.65X Left SS Library

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	343	136.97	605.2		73.30
3	370	99.09	405.7		75.49
4	380	41.37	164.9		76.30
5	396	67.71	259.1		77.57
6	555	1,075.01	2,936.3		86.15
7	598	822.06	2,084.5		88.13
8	1,443	6.64	7.0		98.13
9	10,380	75.00	10.9	Upper Marker	113.00

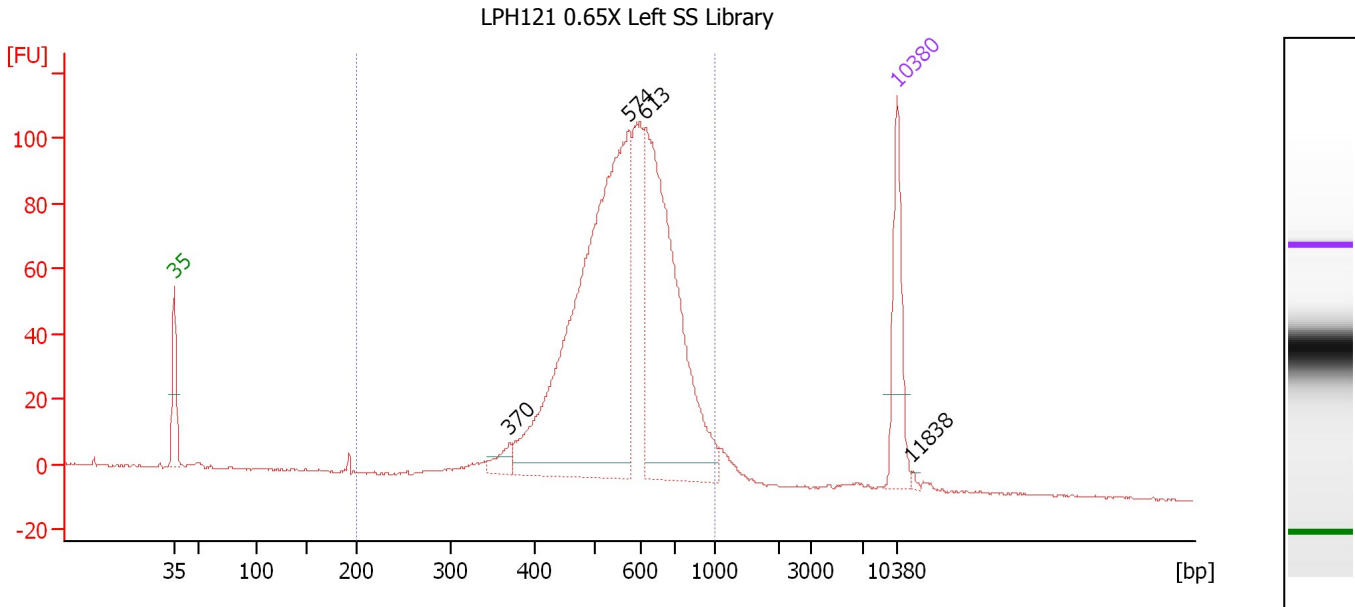
Region table for sample 3 : LPH107 0.65X Left SS Library

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	553	2,404.9	7,957.3	2,679.38	96	23.2

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-27\2016-09-27_004.xad

Created: 9/27/2016 1:38:14 PM
 Modified: 9/27/2016 2:10:58 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : LPH121 0.65X Left SS Library

Number of peaks found: 4 Corr. Area 1: 1,386.6
 Noise: 0.3

Peak table for sample 4 : LPH121 0.65X Left SS Library

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	370	20.33	83.3		75.47
3	574	660.21	1,743.1		87.03
4	613	411.68	1,018.3		88.63
5	10,380	75.00	10.9	Upper Marker	113.00
6	11,838	0.00	0.0		114.39

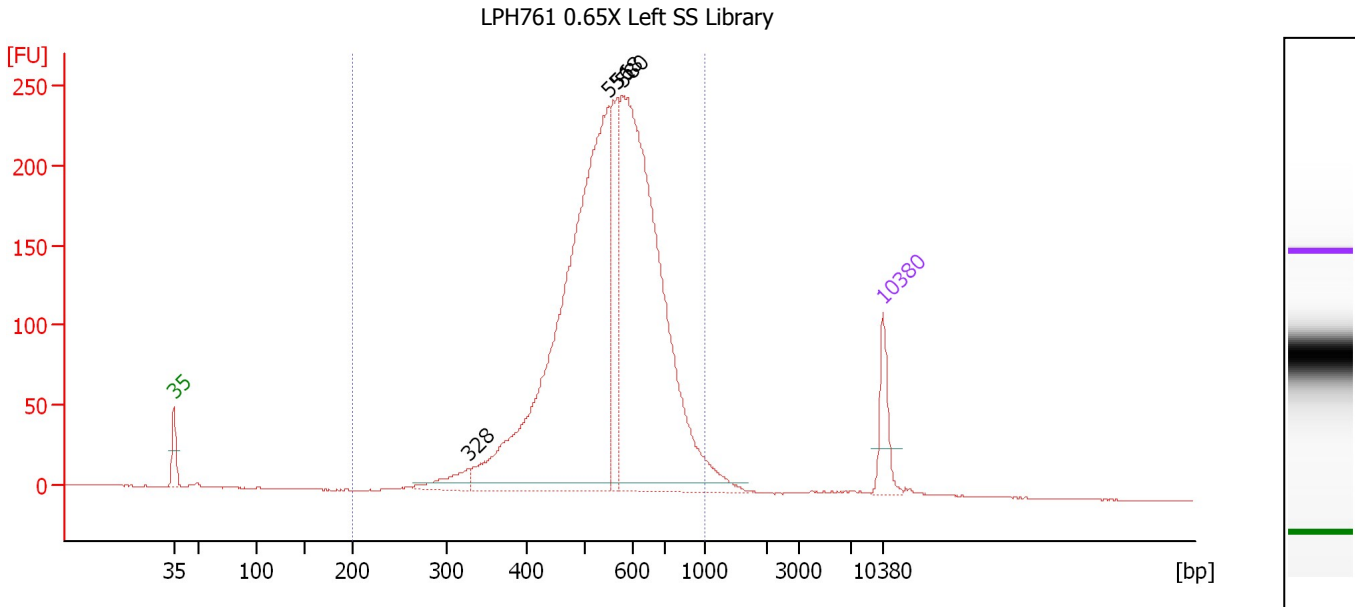
Region table for sample 4 : LPH121 0.65X Left SS Library

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	574	1,386.6	3,779.2	1,347.22	95	20.8

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-27\2016-09-27_004.xad

Created: 9/27/2016 1:38:14 PM
 Modified: 9/27/2016 2:10:58 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : LPH761 0.65X Left SS Library

Number of peaks found: 4 Corr. Area 1: 3,137.3
 Noise: 0.2

Peak table for sample 5 : LPH761 0.65X Left SS Library

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	328	63.33	292.3		72.13
3	551	1,594.19	4,383.1		85.98
4	568	261.50	697.4		86.77
5	580	1,382.37	3,613.9		87.30
6	10,380	75.00	10.9	Upper Marker	113.00

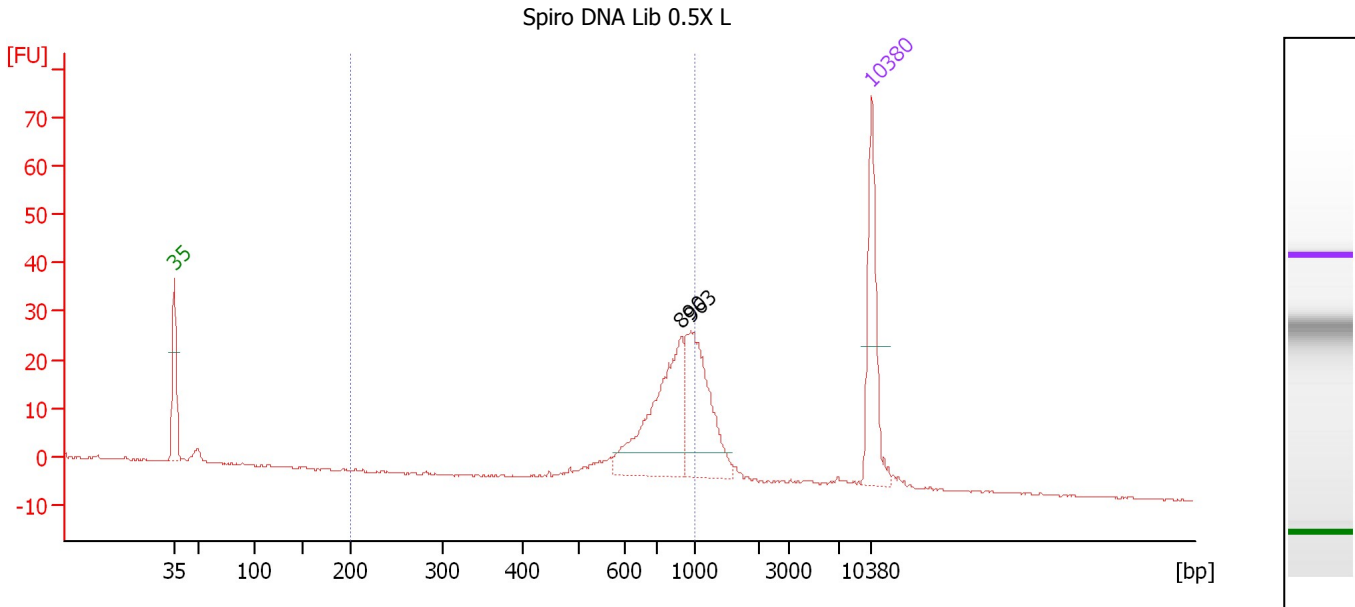
Region table for sample 5 : LPH761 0.65X Left SS Library

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	560	3,137.3	9,788.4	3,408.01	97	20.7

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-27\2016-09-27_004.xad

Created: 9/27/2016 1:38:14 PM
 Modified: 9/27/2016 2:10:58 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : Spiro DNA Lib 0.5X L

Number of peaks found: 2 Corr. Area 1: 163.0
 Noise: 0.2

Peak table for sample 6 : Spiro DNA Lib 0.5X L

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	890	143.65	244.5		93.89
3	963	119.49	188.0		94.86
4	10,380	75.00	10.9	Upper Marker	113.00

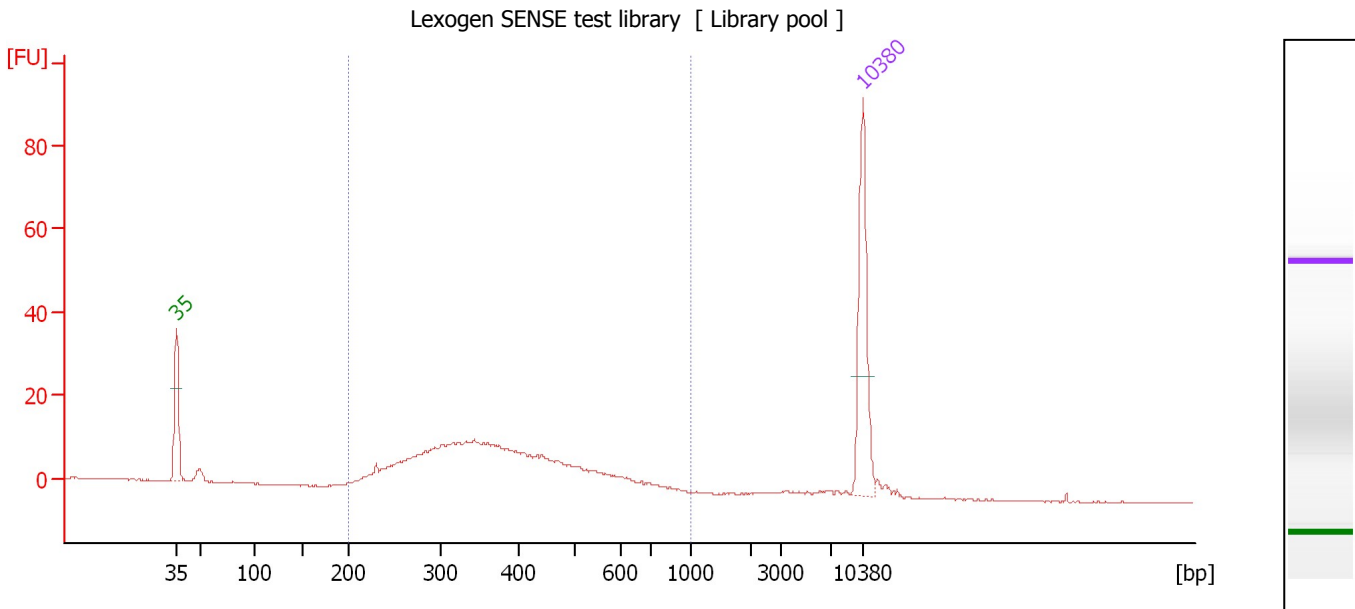
Region table for sample 6 : Spiro DNA Lib 0.5X L

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	779	163.0	461.4	227.85	66	17.8

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-27\2016-09-27_004.xad

Created: 9/27/2016 1:38:14 PM
 Modified: 9/27/2016 2:10:58 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : Lexogen SENSE test library

Number of peaks found: 0 Corr. Area 1: 251.2
 Noise: 0.1

Peak table for sample 7 : Lexogen SENSE test library

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	10,380	75.00	10.9	Upper Marker	113.00

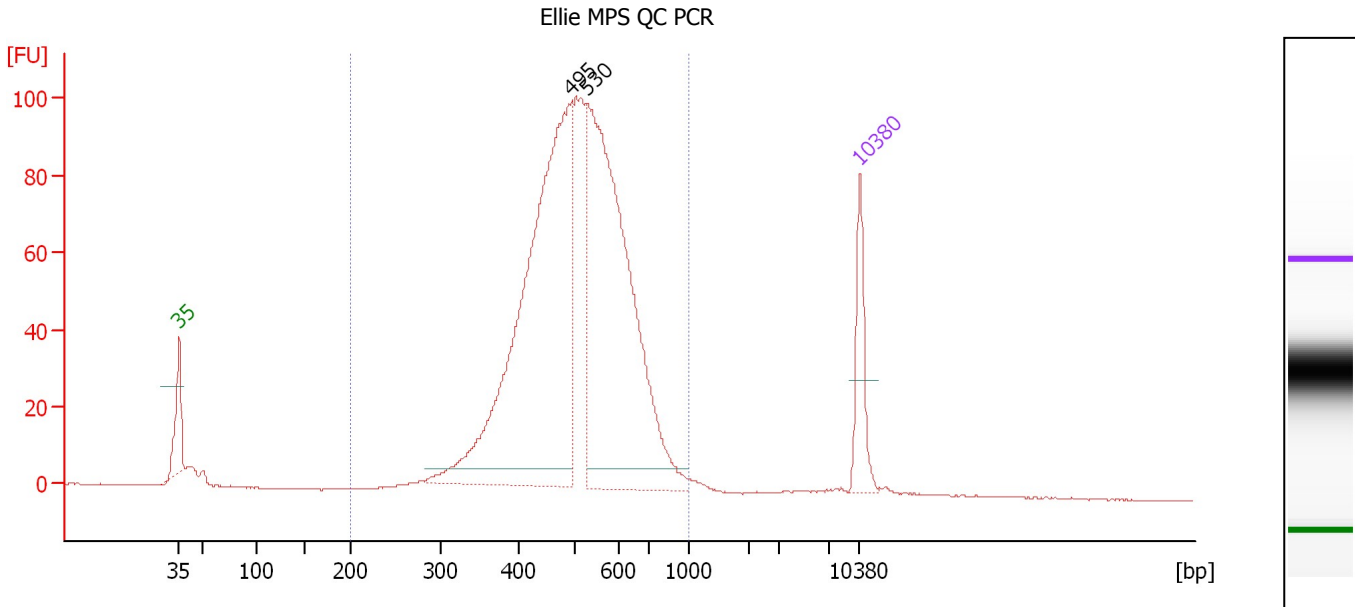
Region table for sample 7 : Lexogen SENSE test library

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	386	251.2	1,574.4	360.93	95	29.6

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-27\2016-09-27_004.xad

Created: 9/27/2016 1:38:14 PM
 Modified: 9/27/2016 2:10:58 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : Ellie MPS QC PCR

Number of peaks found: 2 Corr. Area 1: 1,418.2
 Noise: 0.1

Peak table for sample 8 : Ellie MPS QC PCR

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	495	978.24	2,993.0		83.34
3	530	841.53	2,407.3		84.99
4	10,380	75.00	10.9	Upper Marker	113.00

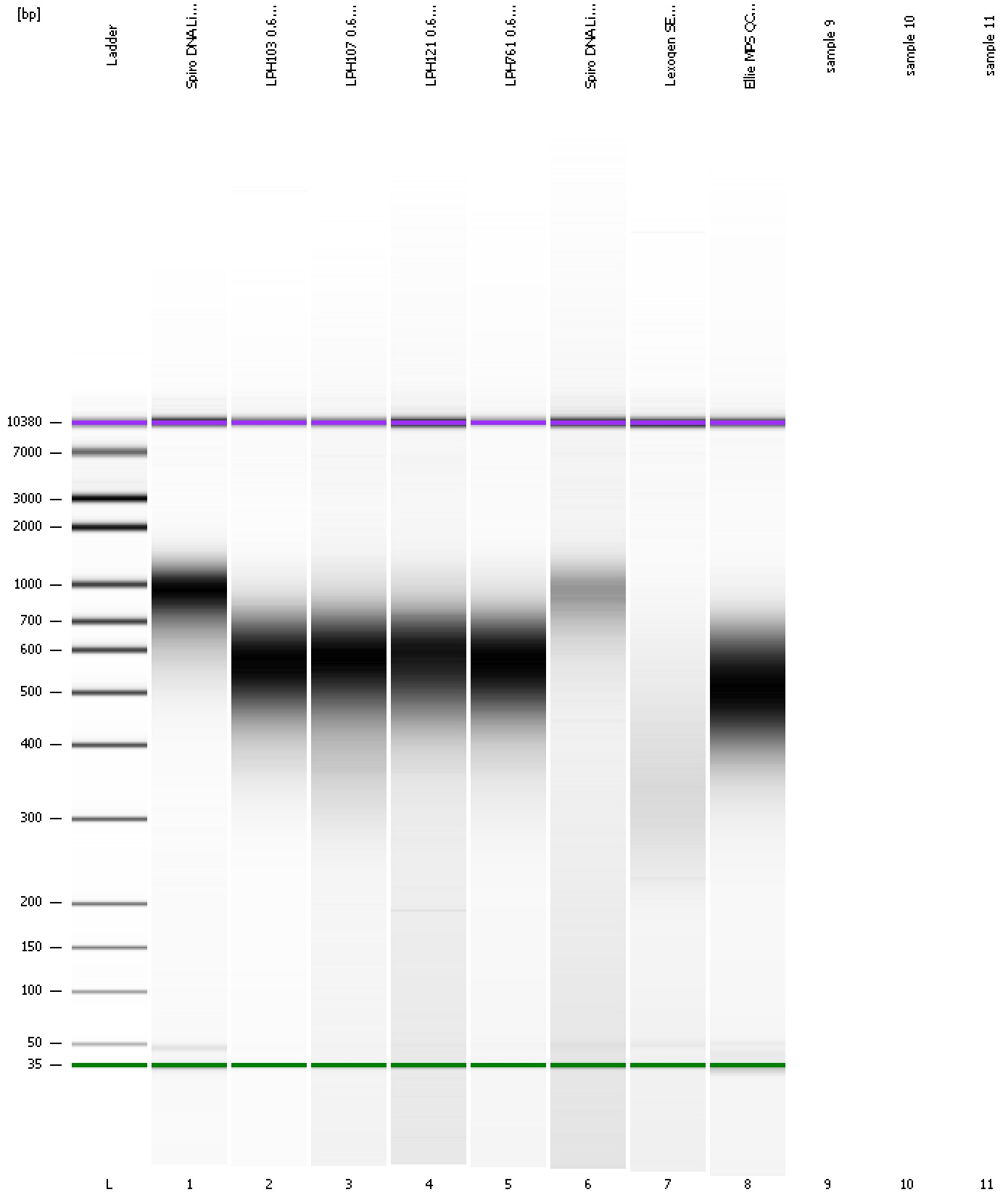
Region table for sample 8 : Ellie MPS QC PCR

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	513	1,418.2	6,659.9	2,136.61	97	20.1

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-27\2016-09-27_004.xad

Created: 9/27/2016 1:38:14 PM
Modified: 9/27/2016 2:10:58 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-27\2016-09-27_004.xad

Created: 9/27/2016 1:38:14 PM
Modified: 9/27/2016 2:10:58 PM

Invalid Samples

Sample 9 has not been run, no results available.

Sample 10 has not been run, no results available.

Sample 11 has not been run, no results available.

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-27\2016-09-27_004.xad

Created: 9/27/2016 1:38:14 PM
 Modified: 9/27/2016 2:10:58 PM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 9)		Instrument	Run		9/27/2016 2:10:57 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\data\2016-09-27\2016-09-27_004.xad)		Instrument	Run		9/27/2016 1:38:19 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		9/27/2016 1:38:19 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		9/27/2016 1:38:19 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		9/27/2016 1:38:19 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		9/27/2016 1:38:19 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		9/27/2016 1:38:19 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		9/27/2016 1:38:19 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1