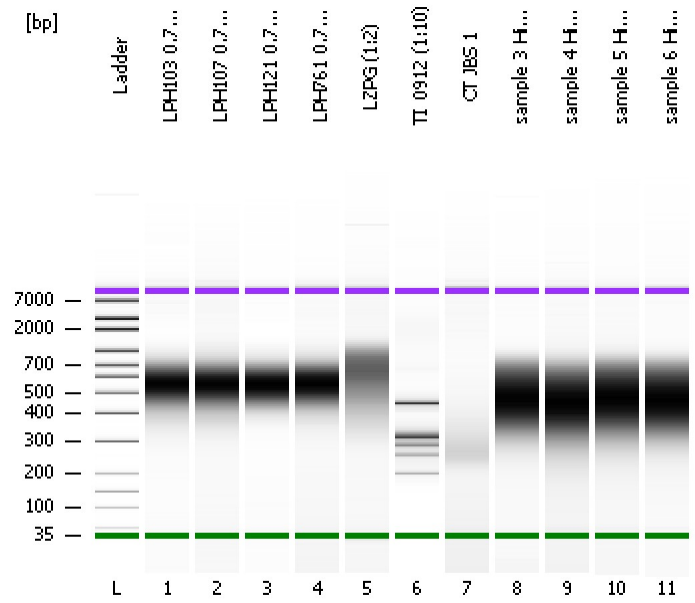
Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-28\2016-09-28_003.xad

Created: 9/28/2016 4:39:01 PM
Modified: 9/28/2016 5:23:39 PM

Electrophoresis File Run Summary



Instrument Information:

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

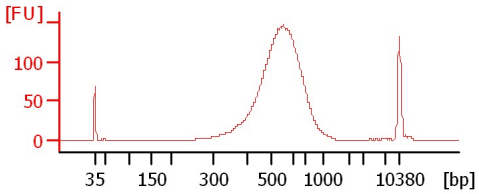
Assay Information:

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

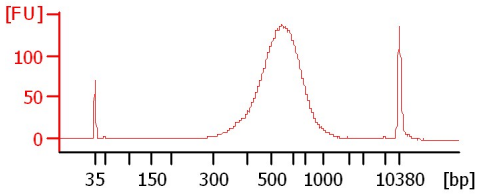
Chip Information:

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

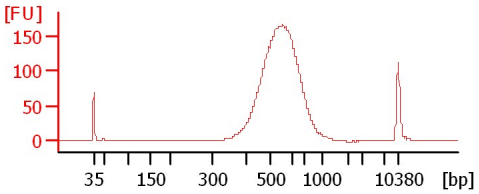
LPH103 0.7X SS Library



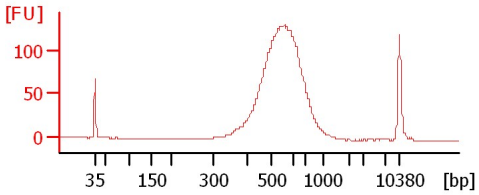
LPH107 0.7X SS Library



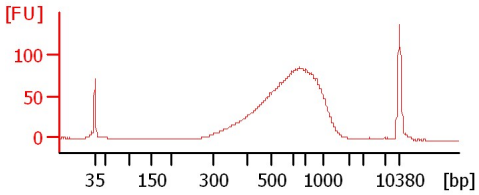
LPH121 0.7X SS Library



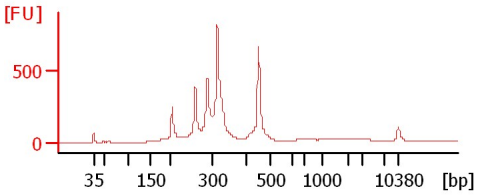
LPH761 0.7X SS Library



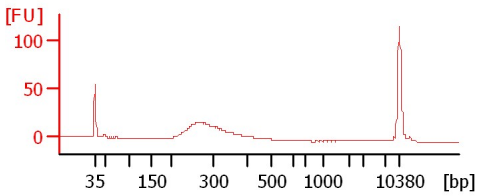
LZPG (1:2)



TI_0912 (1:10)

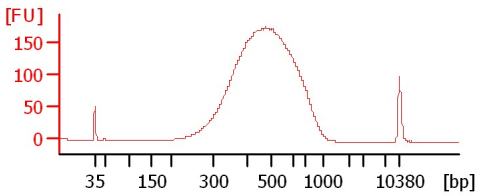


CT JBS 1



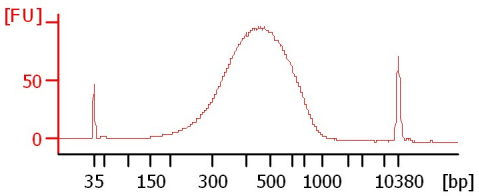
sample 3 HiSeq667 SS soni SNA

0053



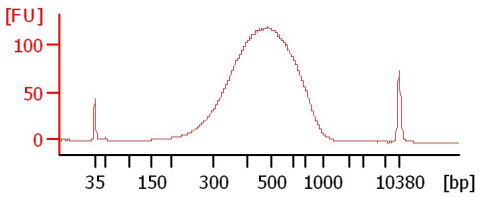
sample 4 HiSeq667 SS soni SNA

SBen806



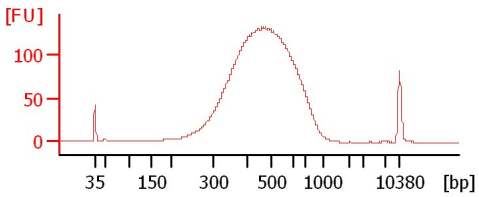
sample 5 HiSeq667 SS soni SNA

Wint804



sample 6 HiSeq667 SS soni SNA

MxL28



Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-28\2016-09-28_003.xad

Created: 9/28/2016 4:39:01 PM
Modified: 9/28/2016 5:23:39 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
LPH103 0.7X SS Library		☐	✔			
LPH107 0.7X SS Library		☐	✔			
LPH121 0.7X SS Library		☐	✔			
LPH761 0.7X SS Library		☐	✔			
LZPG (1:2)		☐	✔			
TI_0912 (1:10)		☐	✔			
CT JBS 1		☐	✔			
sample 3 HiSeq667 SS soni SNA	0053	☐	✔			
sample 4 HiSeq667 SS soni SNA	SBen806	☐	✔			
sample 5 HiSeq667 SS soni SNA	Wint804	☐	✔			
sample 6 HiSeq667 SS soni SNA	MxL28	☐	✔			
Ladder		☐	✔			

Chip Lot # **Reagent Kit Lot #**

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-28\2016-09-28_003.xad

Created: 9/28/2016 4:39:01 PM
Modified: 9/28/2016 5:23:39 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

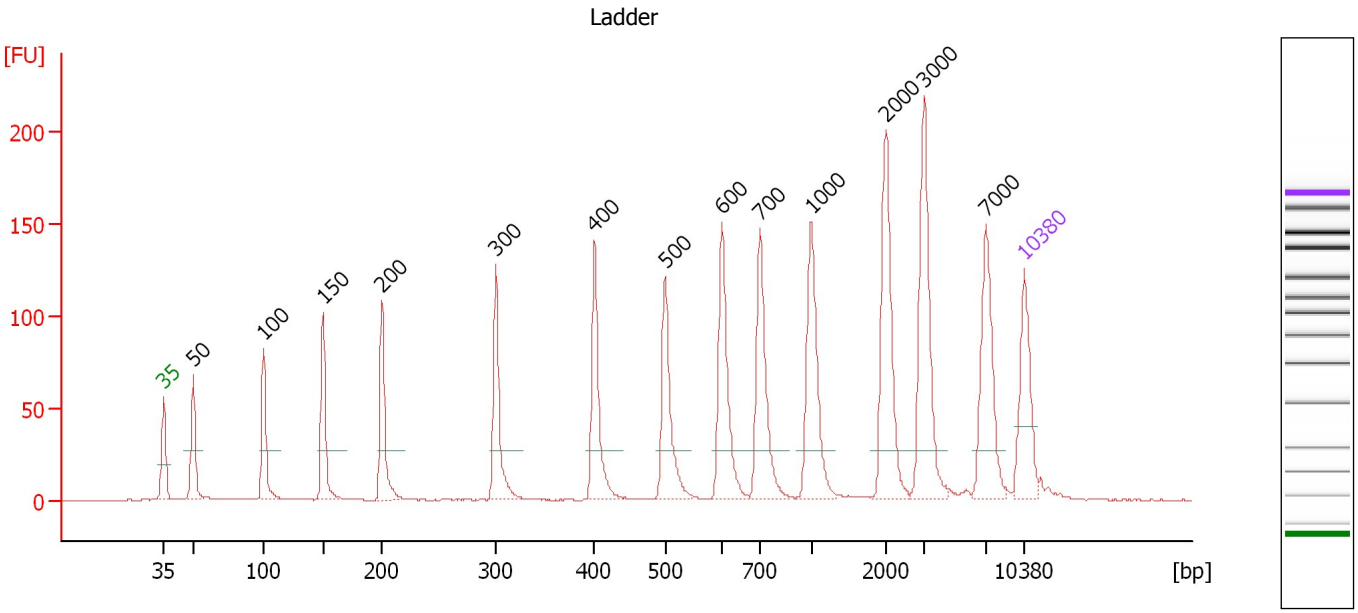
Ladder

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\2016-09-28\2016-09-28_003.xad

Created: 9/28/2016 4:39:01 PM
Modified: 9/28/2016 5:23:39 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

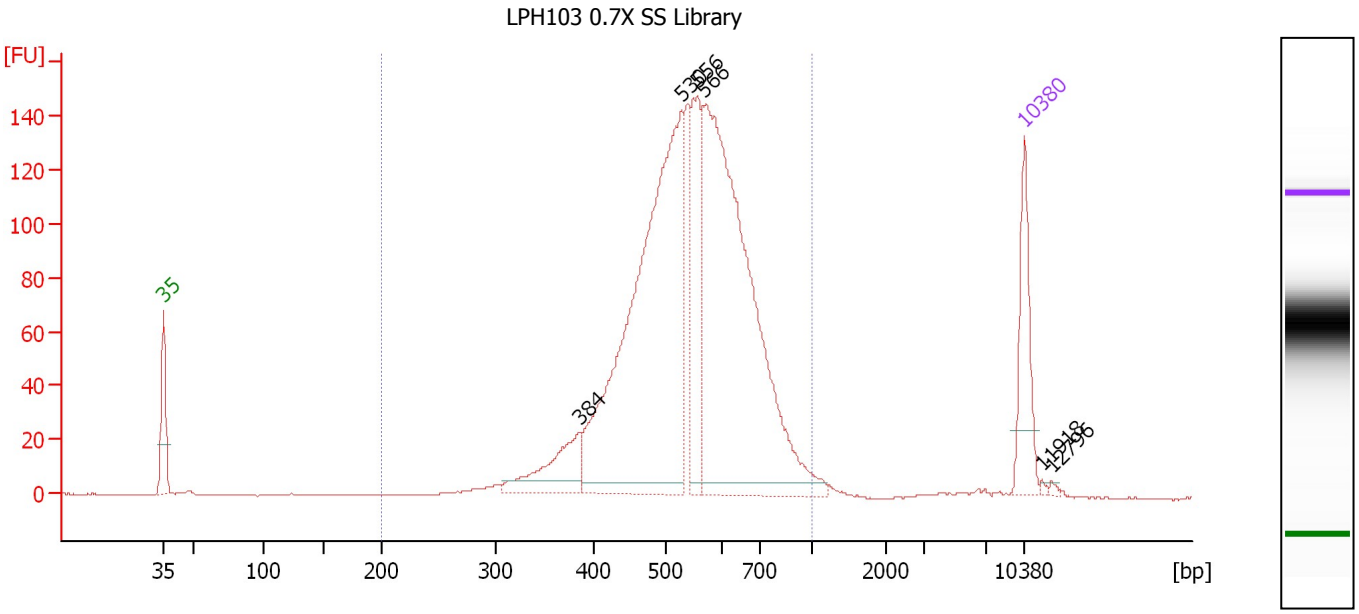
Peak table for Ladder

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	51.13
4		150	150.00	1,515.2	Ladder Peak	55.95
5		200	150.00	1,136.4	Ladder Peak	60.78
6		300	150.00	757.6	Ladder Peak	70.02
7		400	150.00	568.2	Ladder Peak	78.05
8		500	150.00	454.5	Ladder Peak	83.79
9		600	150.00	378.8	Ladder Peak	88.41
10		700	150.00	324.7	Ladder Peak	91.51
11		1,000	150.00	227.3	Ladder Peak	95.68
12		2,000	150.00	113.6	Ladder Peak	101.72
13		3,000	150.00	75.8	Ladder Peak	104.82
14		7,000	150.00	32.5	Ladder Peak	109.85
15		10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-28\2016-09-28_003.xad

Created: 9/28/2016 4:39:01 PM
Modified: 9/28/2016 5:23:39 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : LPH103 0.7X SS Library

Number of peaks found:	6	Corr. Area 1:	1,887.0
Noise:	0.2		

Peak table for sample 1 : LPH103 0.7X 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	384	91.02	359.1		76.77
3	530	704.67	2,015.6		85.16
4	556	151.38	412.3		86.39
5	566	688.82	1,843.2		86.85
6	10,380	75.00	10.9	Upper Marker	113.00
7	11,918	0.00	0.0		114.43
8	12,796	0.00	0.0		115.25

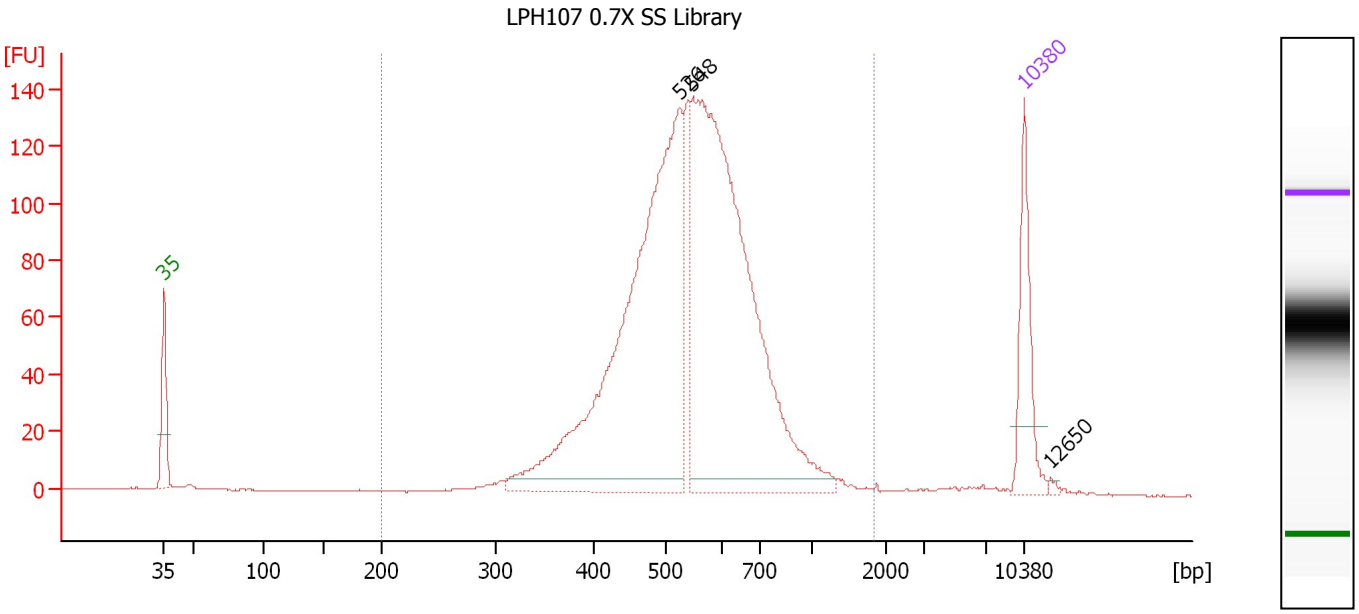
Region table for sample 1 : LPH103 0.7X SS Library

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	549	1,887.0	5,207.1	1,781.71	97	20.3

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-28\2016-09-28_003.xad

Created: 9/28/2016 4:39:01 PM
Modified: 9/28/2016 5:23:39 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : LPH107 0.7X SS Library

Number of peaks found:	3	Corr. Area 1:	1,842.8
Noise:	0.2		

Peak table for sample 2 : LPH107 0.7X 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	526	733.19	2,112.2		84.99
3	548	762.67	2,107.7		86.02
4	10,380	75.00	10.9	Upper Marker	113.00
5	12,650	0.00	0.0		115.11

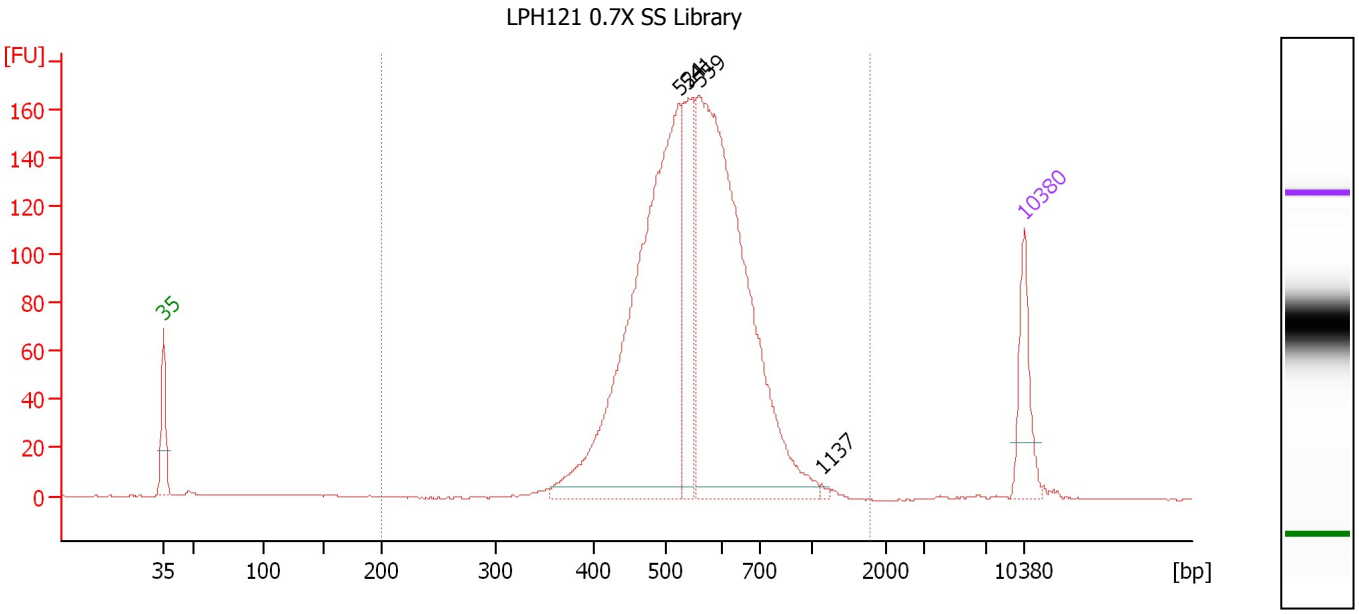
Region table for sample 2 : LPH107 0.7X SS Library

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color	Conc. [pg/µl]	% of Total	Size distribution in CV [%]
200	1,834	562	1,842.8	4,701.3		1,620.12	97	27.1

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-28\2016-09-28_003.xad

Created: 9/28/2016 4:39:01 PM
Modified: 9/28/2016 5:23:39 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : LPH121 0.7X SS Library

Number of peaks found:	4	Corr. Area 1:	1,969.7
Noise:	0.2		

Peak table for sample 3 : LPH121 0.7X 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	524	870.68	2,515.9		84.92
3	541	194.58	544.7		85.70
4	559	915.19	2,479.0		86.53
5	1,137	4.09	5.5		96.50
6	10,380	75.00	10.9	Upper Marker	113.00

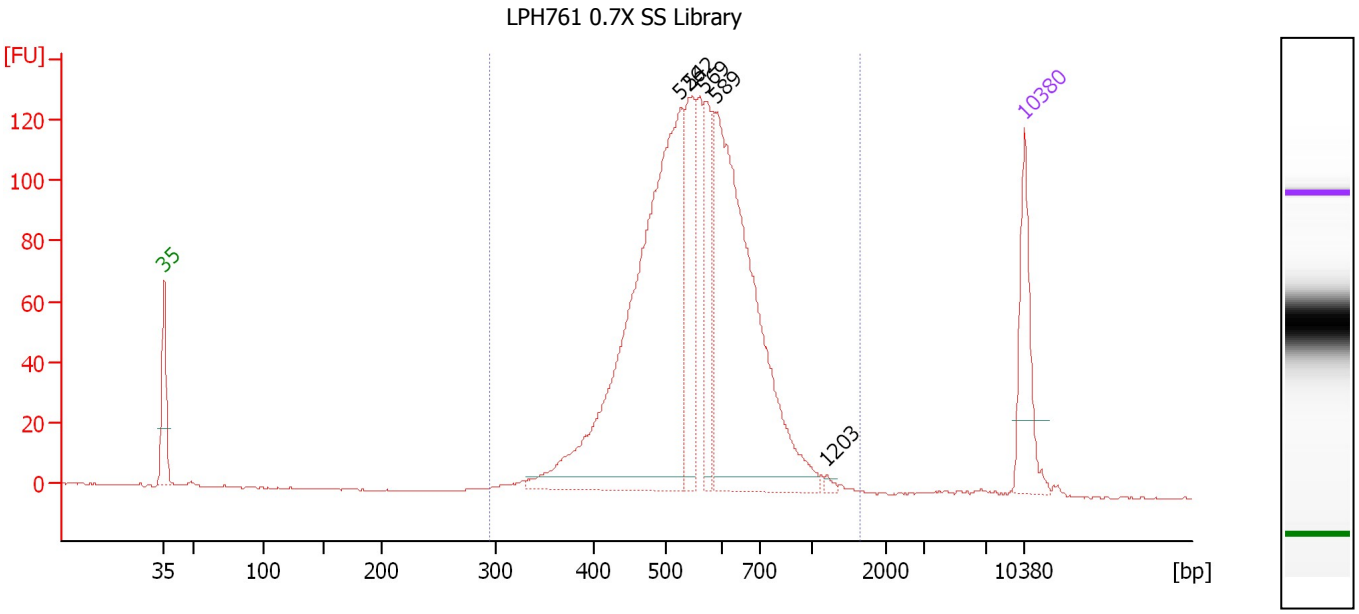
Region table for sample 3 : LPH121 0.7X SS Library

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color	Conc. [pg/µl]	% of Total	Size distribution in CV [%]
200	1,791	560	1,969.7	5,708.4		2,020.09	98	20.0

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-28\2016-09-28_003.xad

Created: 9/28/2016 4:39:01 PM
Modified: 9/28/2016 5:23:39 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : LPH761 0.7X SS Library

Number of peaks found:	5	Corr. Area 1:	1,623.6
Noise:	0.2		

Peak table for sample 4 : LPH761 0.7X 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	526	677.58	1,952.0		84.99
3	542	128.32	358.7		85.73
4	569	93.23	248.1		87.00
5	589	495.82	1,275.6		87.90
6	1,203	4.16	5.2		96.90
7	10,380	75.00	10.9	Upper Marker	113.00

Region table for sample 4 : LPH761 0.7X SS Library

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
295	1,651	565	1,623.6	4,387.4	1,552.23	99	22.4

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-28\2016-09-28_003.xad

Created: 9/28/2016 4:39:01 PM
Modified: 9/28/2016 5:23:39 PM

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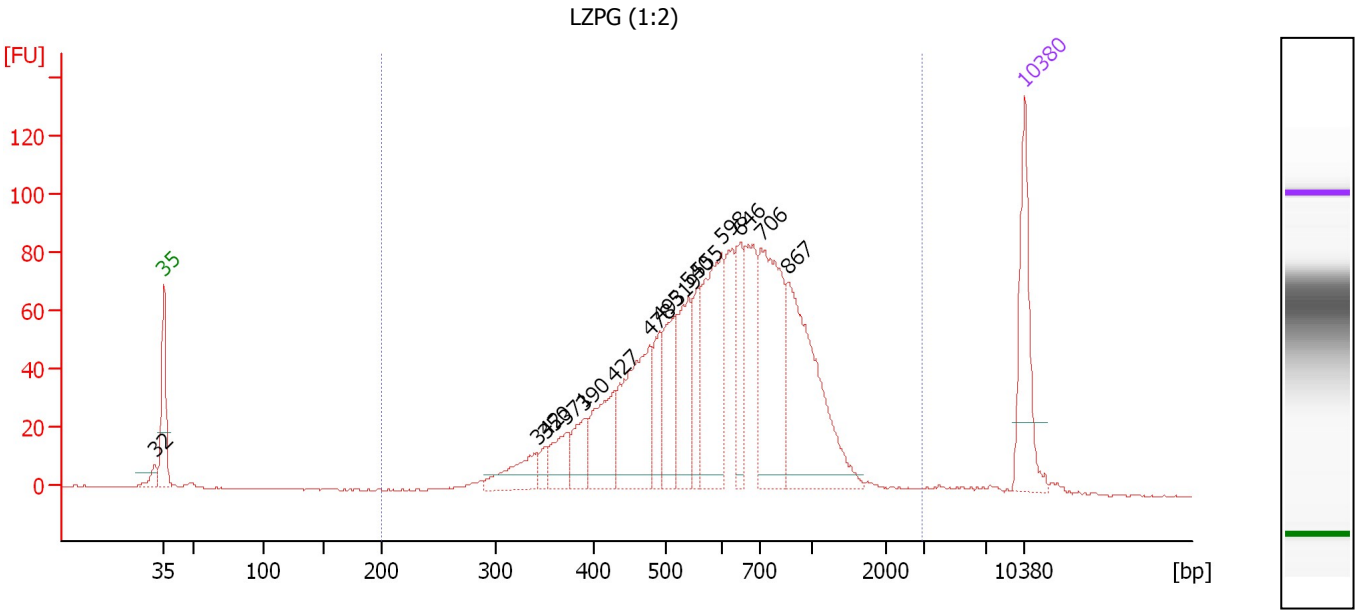


Overall Results for sample 5 : LZPG (1:2)

Number of peaks found:	15	Corr. Area 1:	1,529.2
Noise:	0.2		

Peak table for sample 5 : LZPG (1:2)

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	32	0.00	0.0		42.25
2	35	125.00	5,411.3	Lower Marker	43.00
3	342	45.08	199.8		73.38
4	350	13.39	58.0		74.02
5	371	35.32	144.2		75.73
6	390	39.28	152.7		77.23
7	427	72.78	257.9		79.63
8	478	133.96	424.9		82.51
9	493	48.05	147.8		83.37
10	519	66.93	195.6		84.65
11	540	77.78	218.0		85.66
12	555	46.47	126.8		86.36
13	598	137.60	348.5		88.33
14	646	62.13	145.8		89.83
15	706	166.17	356.9		91.59
16	867	178.61	312.1		93.83
17	10,380	75.00	10.9	Upper Marker	113.00

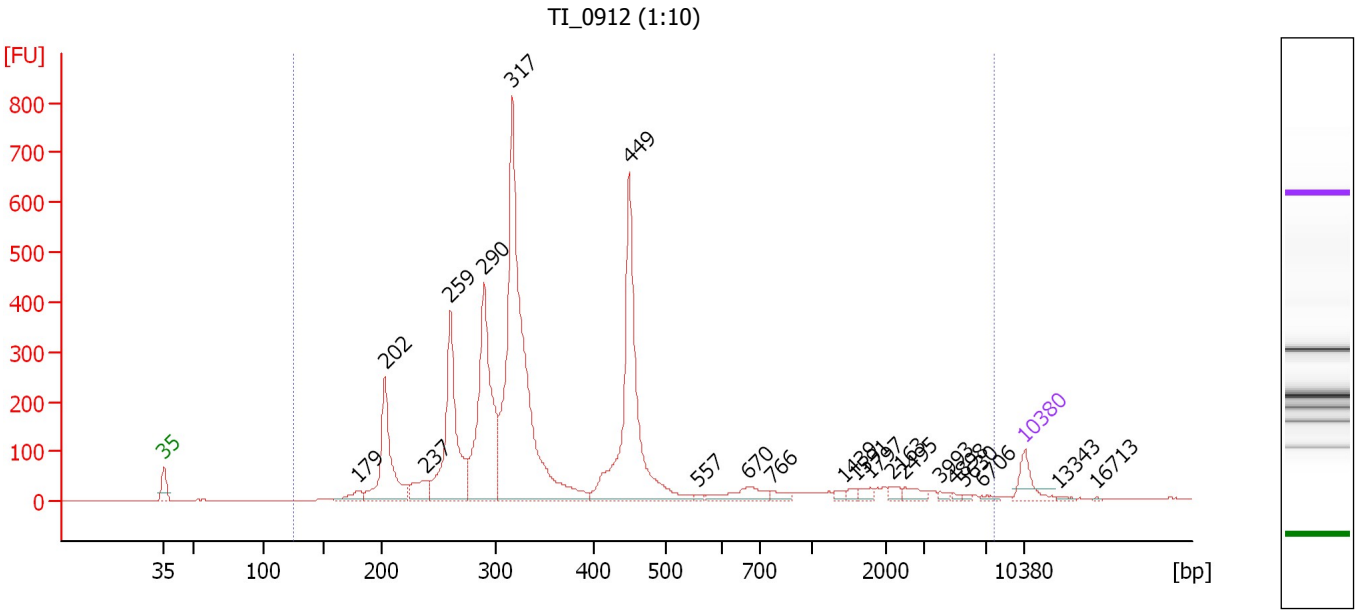
Region table for sample 5 : LZPG (1:2)

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
200	2,934	659	1,529.2	3,568.7	1,319.03	97	41.4

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-28\2016-09-28_003.xad

Created: 9/28/2016 4:39:01 PM
Modified: 9/28/2016 5:23:39 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : TI_0912 (1:10)

Number of peaks found:	21	Corr. Area 1:	5,082.4
Noise:	0.2		

Peak table for sample 6 : TI_0912 (1:10)

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	179	61.93	524.2		58.75
3	202	482.15	3,614.7		60.97
4	237	113.92	727.6		64.22
5	259	694.62	4,055.9		66.28
6	290	866.79	4,529.7		69.09
7	317	1,820.41	8,708.1		71.37
8	449	978.42	3,304.4		80.84
9	557	8.73	23.8		86.42
10	670	93.98	212.5		90.59
11	766	28.12	55.6		92.43
12	1,439	16.41	17.3		98.33
13	1,591	14.26	13.6		99.25
14	1,797	23.37	19.7		100.49
15	2,163	20.54	14.4		102.23
16	2,495	32.96	20.0		103.26
17	3,993	10.38	3.9		106.07
18	4,898	6.46	2.0		107.21
19	5,630	6.07	1.6		108.13
20	6,706	9.82	2.2		109.48
21	10,380	75.00	10.9	Upper Marker	113.00
22	13,343	0.00	0.0		115.76
23	16,713	0.00	0.0		118.90

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-28\2016-09-28_003.xad

Created: 9/28/2016 4:39:01 PM
Modified: 9/28/2016 5:23:39 PM

Electropherogram Summary Continued ...

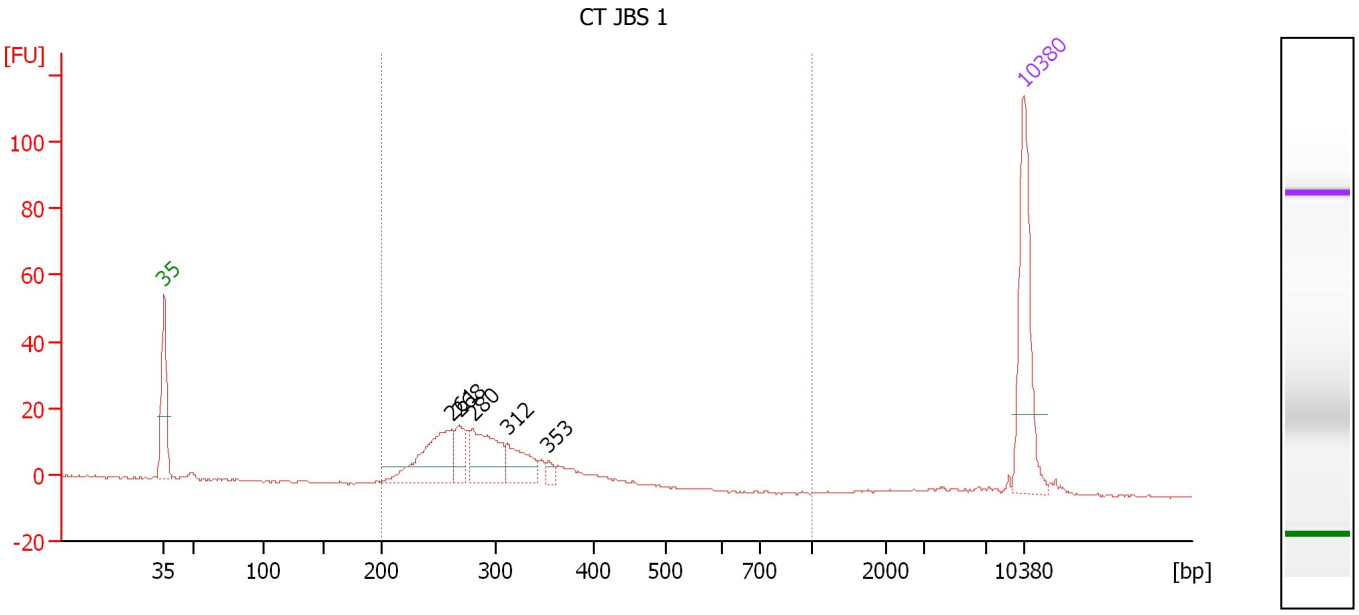
... Region table for sample 6 : TI_0912 (1:10)

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/µl]	% of Total	Size distribution in CV [%]
126	7,816	532	5,082.4	25,489.5	5,385.15	98	100.0

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-28\2016-09-28_003.xad

Created: 9/28/2016 4:39:01 PM
Modified: 9/28/2016 5:23:39 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : CT JBS 1

Number of peaks found:	5	Corr. Area 1:	225.0
Noise:	0.2		

Peak table for sample 7 : CT JBS 1

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	261	83.18	482.7		66.42
3	268	27.73	157.0		67.02
4	280	65.26	353.2		68.17
5	312	37.54	182.5		70.96
6	353	6.07	26.1		74.29
7	10,380	75.00	10.9	Upper Marker	113.00

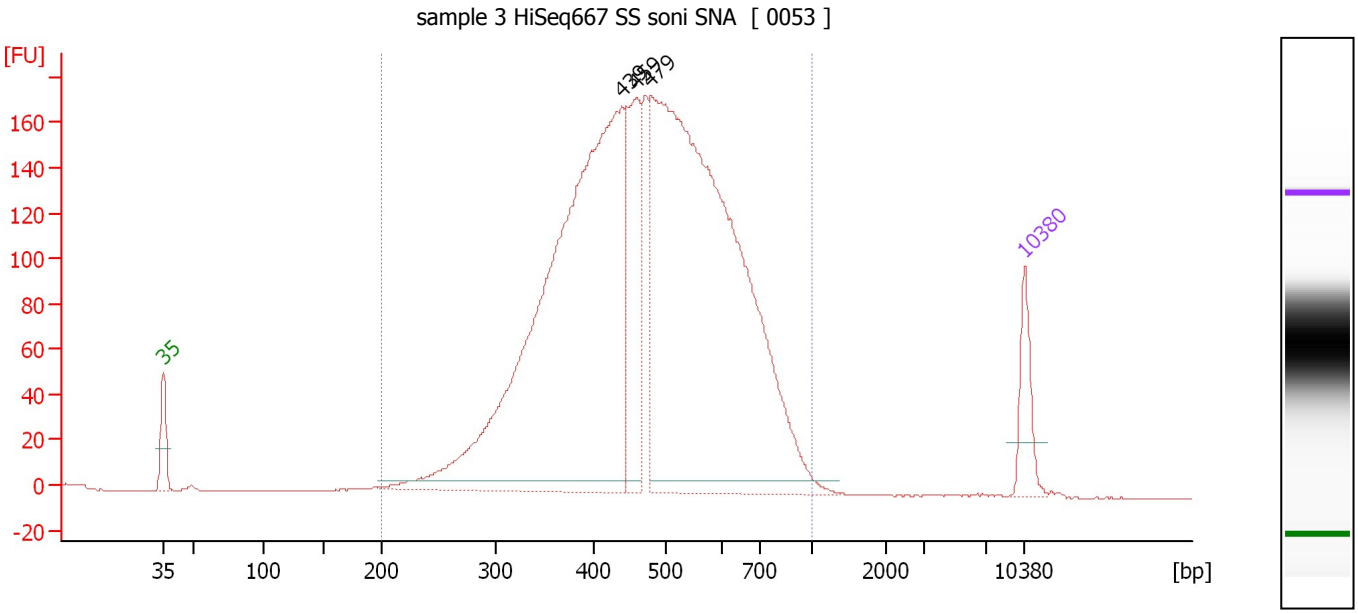
Region table for sample 7 : CT JBS 1

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	296	225.0	1,359.4	257.17	95	17.0

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-28\2016-09-28_003.xad

Created: 9/28/2016 4:39:01 PM
Modified: 9/28/2016 5:23:39 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : sample 3 HiSeq667 SS soni SNA

Number of peaks found:	3	Corr. Area 1:	3,571.5
Noise:	0.2		

Peak table for sample 8 : sample 3 HiSeq667 SS soni SNA

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	439	1,891.46	6,533.0		80.27
3	459	311.00	1,026.7		81.43
4	479	2,082.02	6,583.1		82.60
5	10,380	75.00	10.9	Upper Marker	113.00

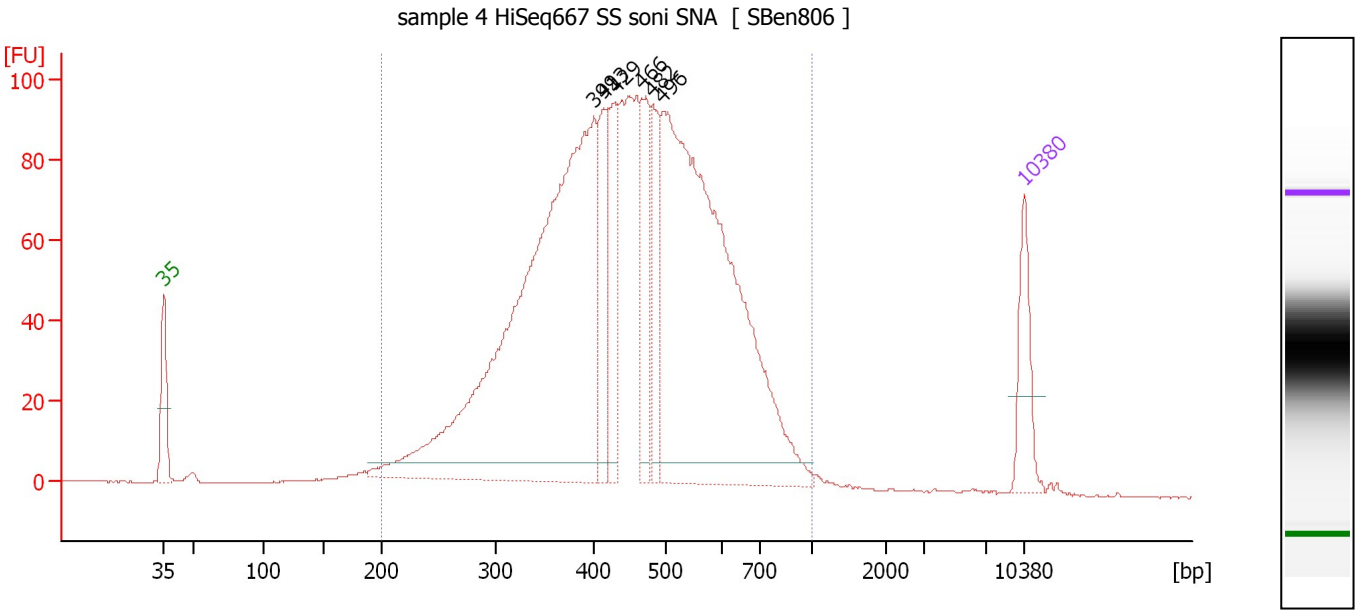
Region table for sample 8 : sample 3 HiSeq667 SS soni SNA

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	485	3,571.5	15,210.4	4,448.96	100	25.9

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-28\2016-09-28_003.xad

Created: 9/28/2016 4:39:01 PM
Modified: 9/28/2016 5:23:39 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : sample 4 HiSeq667 SS soni SNA

Number of peaks found:	6	Corr. Area 1:	2,164.1
Noise:	0.1		

Peak table for sample 9 : sample 4 HiSeq667 SS soni SNA

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	399	1,309.03	4,970.6		77.97
3	413	143.47	526.1		78.81
4	429	134.55	475.5		79.70
5	466	143.15	465.9		81.81
6	482	128.23	403.0		82.76
7	496	1,153.26	3,525.4		83.54
8	10,380	75.00	10.9	Upper Marker	113.00

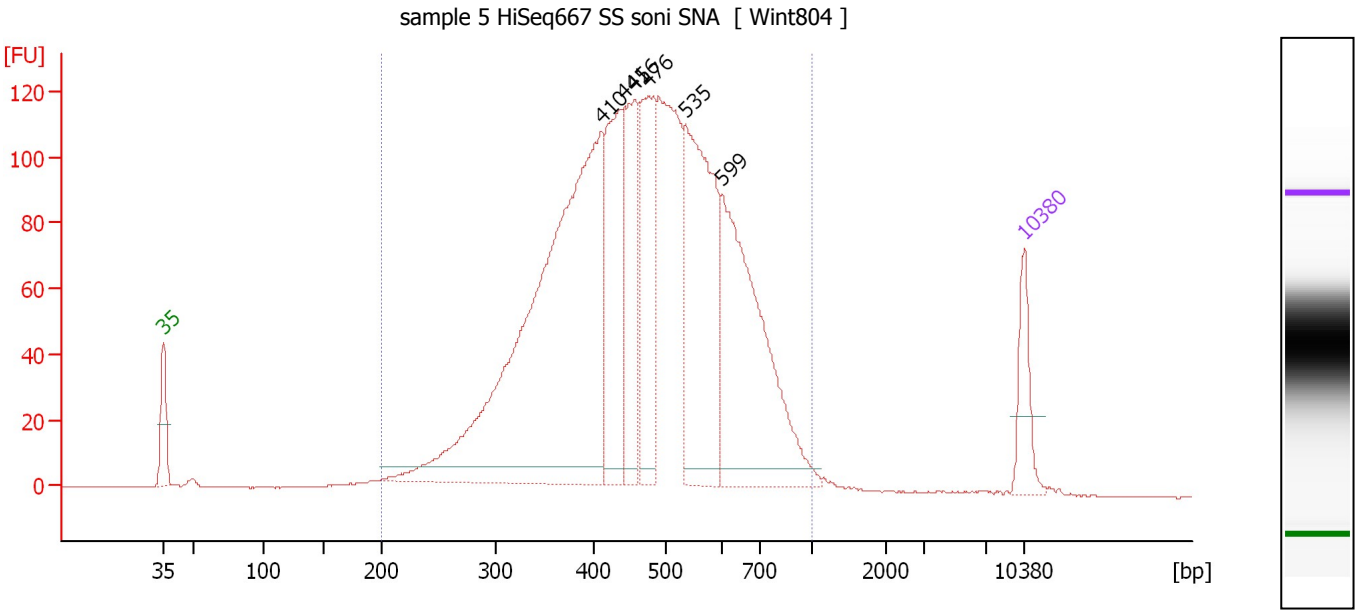
Region table for sample 9 : sample 4 HiSeq667 SS soni SNA

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	459	2,164.1	13,176.1	3,589.15	98	27.4

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-28\2016-09-28_003.xad

Created: 9/28/2016 4:39:01 PM
Modified: 9/28/2016 5:23:39 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : sample 5 HiSeq667 SS soni SNA

Number of peaks found:	6	Corr. Area 1:	2,562.2
Noise:	0.1		

Peak table for sample 10 : sample 5 HiSeq667 SS soni SNA

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	410	1,409.48	5,203.9		78.65
3	441	358.53	1,232.5		80.39
4	456	266.80	885.7		81.29
5	476	317.58	1,010.9		82.41
6	535	538.71	1,526.6		85.39
7	599	566.60	1,432.9		88.37
8	10,380	75.00	10.9	Upper Marker	113.00

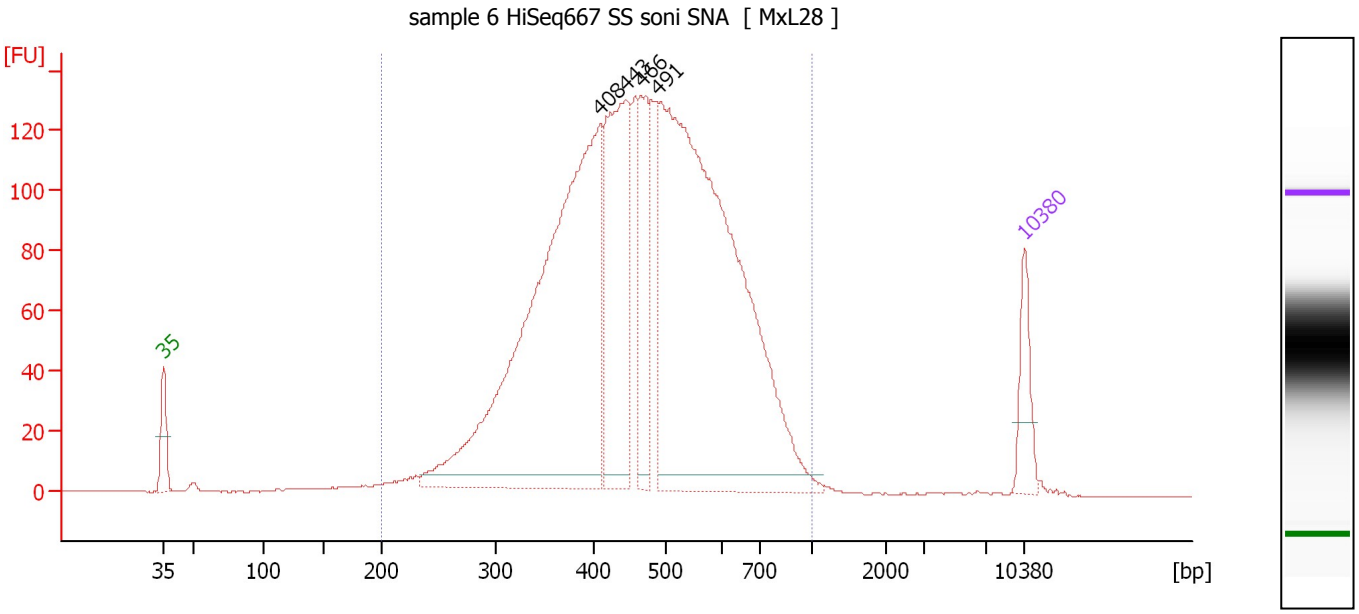
Region table for sample 10 : sample 5 HiSeq667 SS soni SNA

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	479	2,562.2	14,939.9	4,262.75	98	27.2

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-28\2016-09-28_003.xad

Created: 9/28/2016 4:39:01 PM
Modified: 9/28/2016 5:23:39 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : sample 6 HiSeq667 SS soni SNA

Number of peaks found:	4	Corr. Area 1:	2,752.8
Noise:	0.1		

Peak table for sample 11 : sample 6 HiSeq667 SS soni SNA

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		408	1,453.64	5,404.6		78.48
3		443	535.76	1,831.9		80.53
4		466	231.04	751.4		81.83
5		491	1,686.49	5,208.5		83.25
6	▶	10,380	75.00	10.9	Upper Marker	113.00

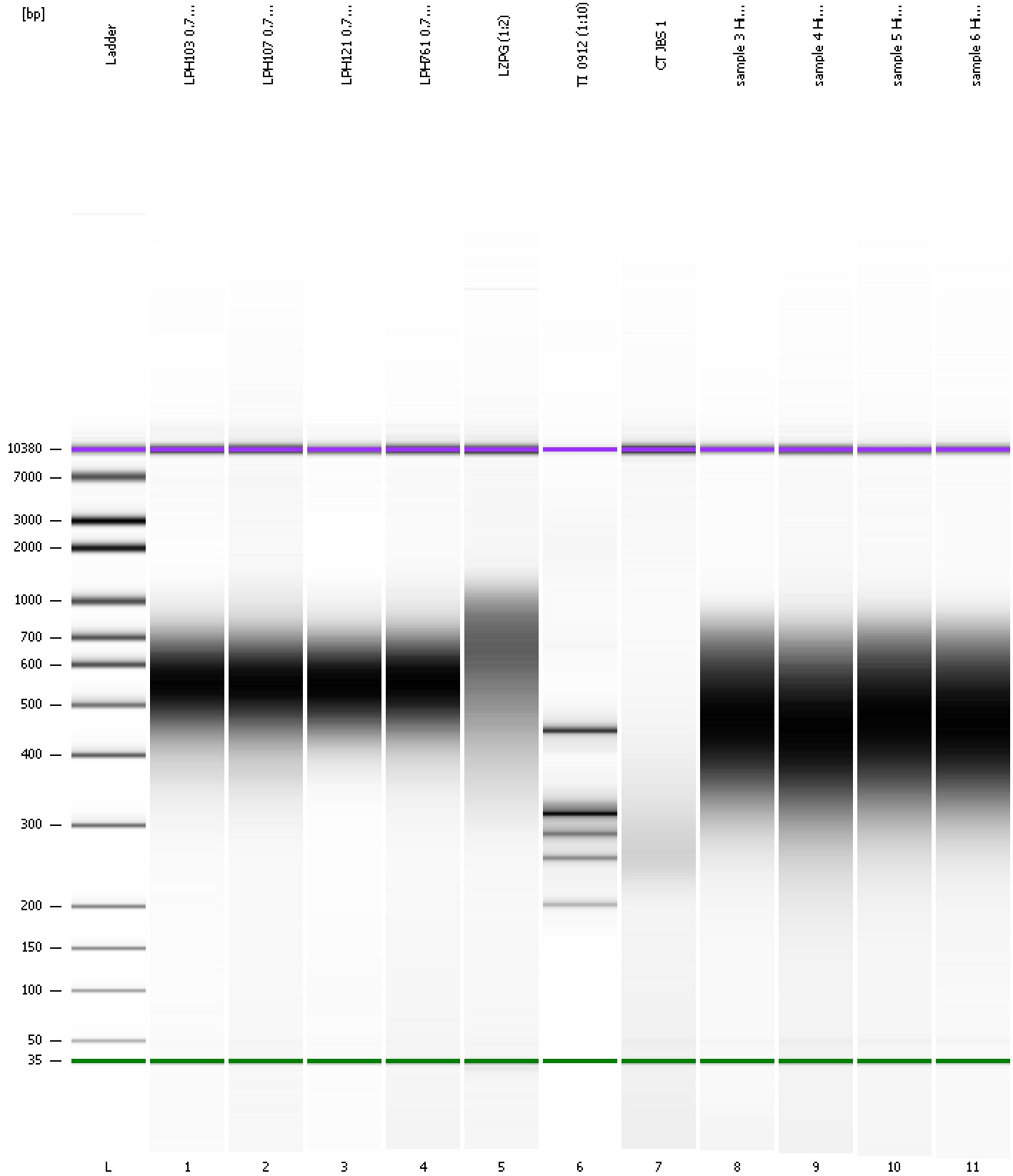
Region table for sample 11 : sample 6 HiSeq667 SS soni SNA

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	476	2,752.8	15,318.4	4,372.72	98	26.4

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-28\2016-09-28_003.xad

Created: 9/28/2016 4:39:01 PM
Modified: 9/28/2016 5:23:39 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-28\2016-09-28_003.xad

Created: 9/28/2016 4:39:01 PM
Modified: 9/28/2016 5:23:39 PM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 12)		Instrument	Run		9/28/2016 5:19:30 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\2016-09-28\2016-09-28_003.xad)		Instrument	Run		9/28/2016 4:39:07 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		9/28/2016 4:39:07 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		9/28/2016 4:39:07 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		9/28/2016 4:39:07 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		9/28/2016 4:39:07 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		9/28/2016 4:39:07 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		9/28/2016 4:39:07 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1