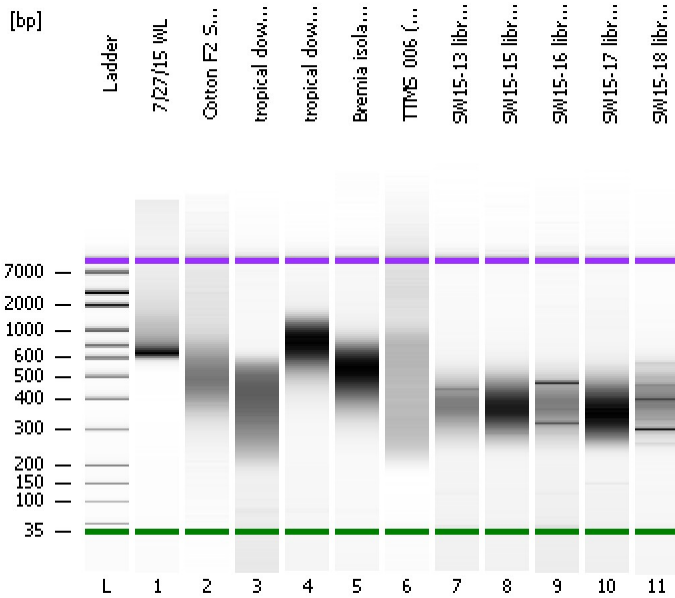


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-29\2015-07-29_001.xad

Created: 7/29/2015 3:03:00 PM
Modified: 7/29/2015 3:45:38 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

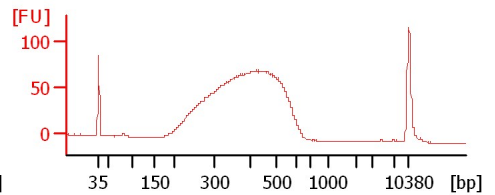
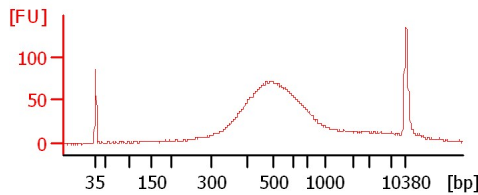
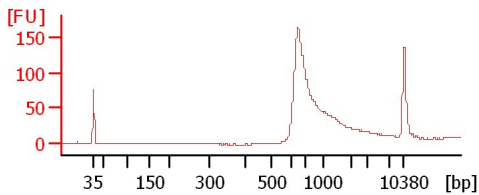
Chip Information:

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

7/27/15 WL

Cotton F2 Set 2_0.6x amp 1/3x

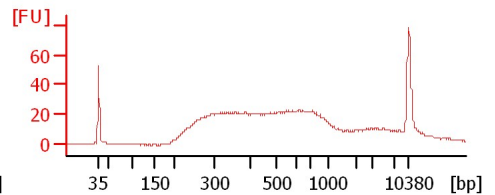
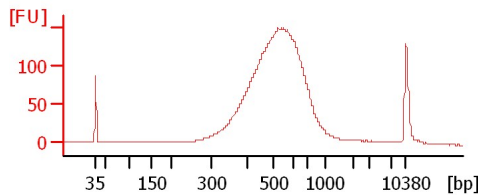
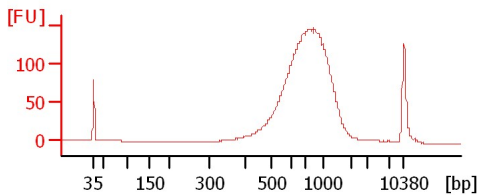
tropical downey mildew (1:3)



tropical downey mildew - large (1:3)

Bremia isolates crosses (1:3)

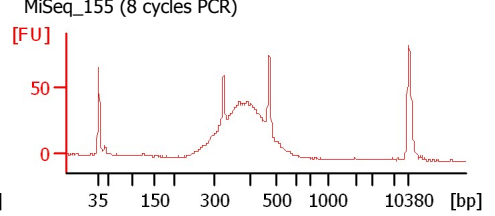
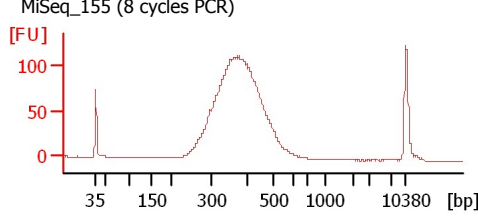
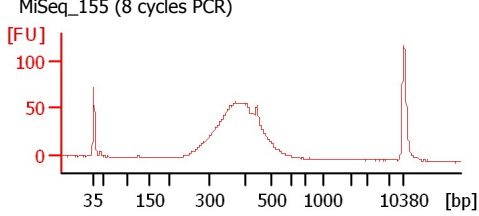
TTMS_006 (1:2)



SW15-13 library

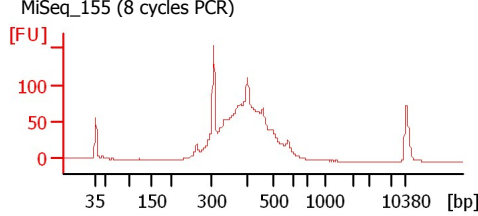
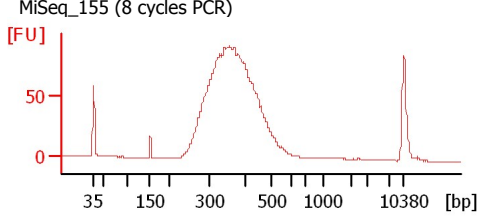
SW15-15 library (1:3)

SW15-16 library



SW15-17 library (1:8)

SW15-18 library (1:2)



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-29\2015-07-29_001.xad

Created: 7/29/2015 3:03:00 PM
 Modified: 7/29/2015 3:45:38 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
7/27/15 WL		<input type="checkbox"/>	✓			
Cotton F2 Set 2_0.6x amp 1/3x		<input type="checkbox"/>	✓			
tropical downey mildew (1:3)		<input type="checkbox"/>	✓			
tropical downey mildew - large (1:3)		<input type="checkbox"/>	✓			
Bremia isolates crosses (1:3)		<input type="checkbox"/>	✓			
TTMS_006 (1:2)		<input type="checkbox"/>	✓			
SW15-13 library	MiSeq_155 (8 cycles PCR)	<input type="checkbox"/>	✓			
SW15-15 library (1:3)	MiSeq_155 (8 cycles PCR)	<input type="checkbox"/>	✓			
SW15-16 library	MiSeq_155 (8 cycles PCR)	<input type="checkbox"/>	✓			
SW15-17 library (1:8)	MiSeq_155 (8 cycles PCR)	<input type="checkbox"/>	✓			
SW15-18 library (1:2)	MiSeq_155 (8 cycles PCR)	<input type="checkbox"/>	✓			
Ladder		<input type="checkbox"/>	✓			
Chip Lot #				Reagent Kit Lot #		

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-29\2015-07-29_001.xad

Created: 7/29/2015 3:03:00 PM
Modified: 7/29/2015 3:45:38 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

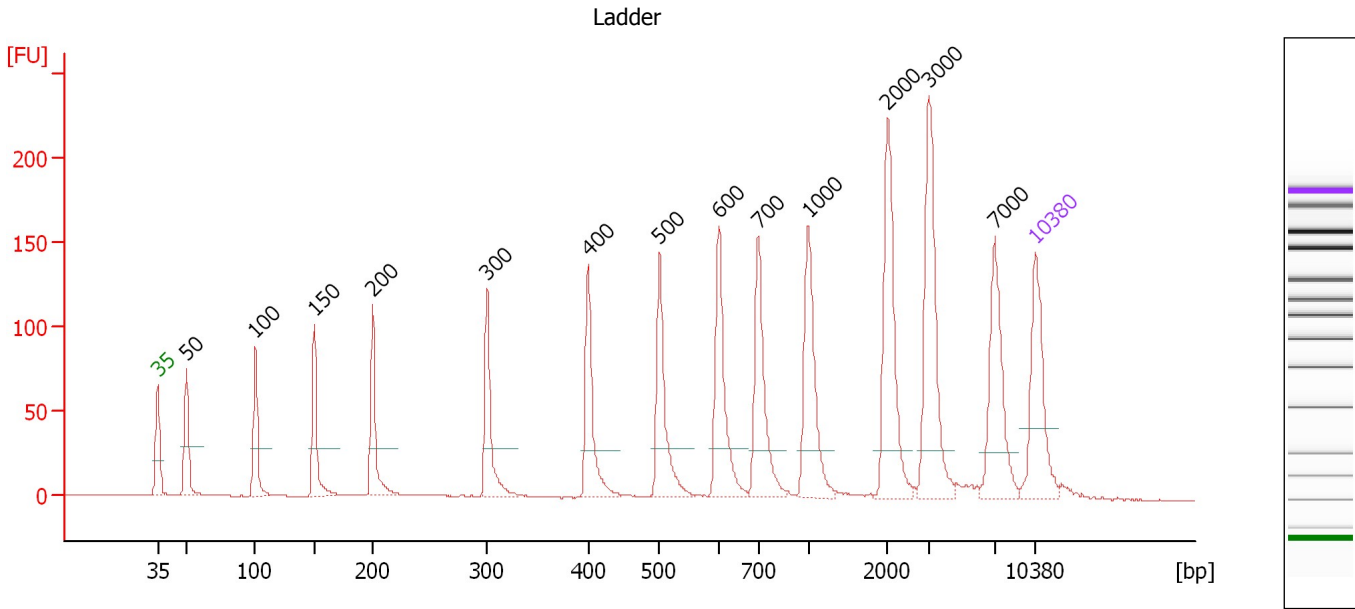
Ladder

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:\...ents and Settings\Bioanalyzer\2015-07-29\2015-07-29_001.xad

Created: 7/29/2015 3:03:00 PM
 Modified: 7/29/2015 3:45:38 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

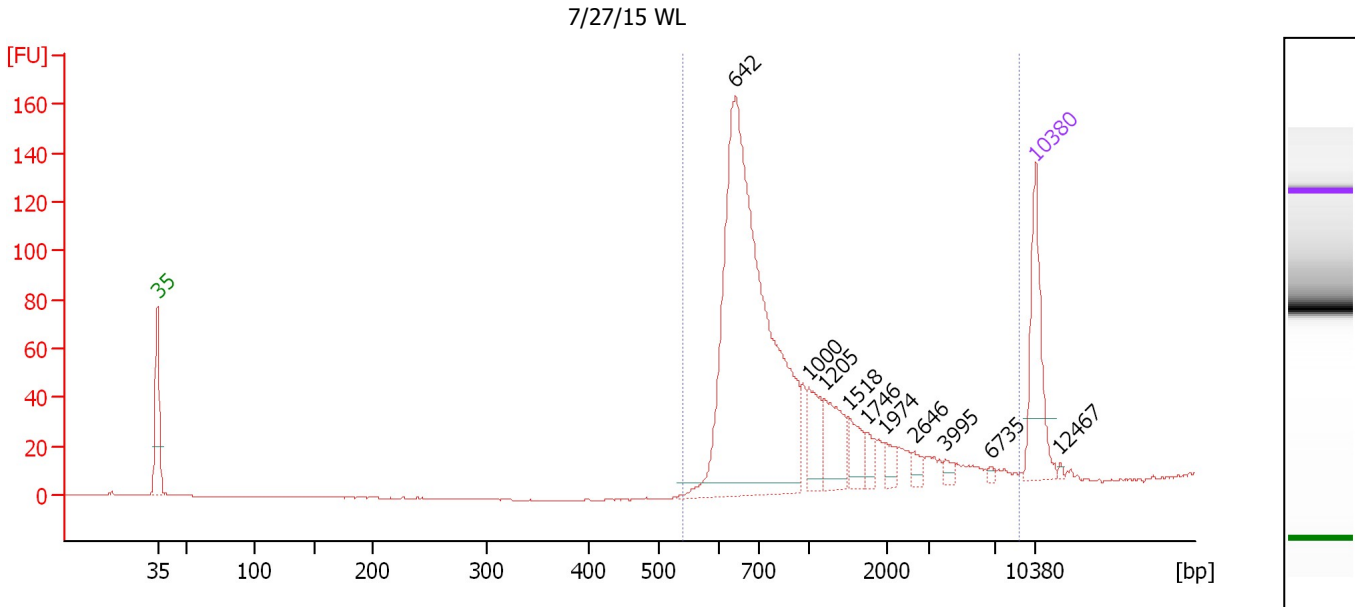
Peak table for Ladder

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	45.32
3	100	150.00	2,272.7	Ladder Peak	50.80
4	150	150.00	1,515.2	Ladder Peak	55.53
5	200	150.00	1,136.4	Ladder Peak	60.17
6	300	150.00	757.6	Ladder Peak	69.31
7	400	150.00	568.2	Ladder Peak	77.38
8	500	150.00	454.5	Ladder Peak	83.04
9	600	150.00	378.8	Ladder Peak	87.76
10	700	150.00	324.7	Ladder Peak	90.93
11	1,000	150.00	227.3	Ladder Peak	94.90
12	2,000	150.00	113.6	Ladder Peak	101.23
13	3,000	150.00	75.8	Ladder Peak	104.53
14	7,000	150.00	32.5	Ladder Peak	109.79
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-29\2015-07-29_001.xad

Created: 7/29/2015 3:03:00 PM
 Modified: 7/29/2015 3:45:38 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : 7/27/15 WL

Number of peaks found: 10 Corr. Area 1: 919.7
 Noise: 0.2

Peak table for sample 1 : 7/27/15 WL

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	642	632.31	1,493.2		89.08
3	1,000	41.52	62.9		94.89
4	1,205	54.99	69.1		96.20
5	1,518	26.08	26.0		98.18
6	1,746	13.03	11.3		99.62
7	1,974	11.67	9.0		101.06
8	2,646	9.01	5.2		103.36
9	3,995	6.68	2.5		105.84
10	6,735	2.51	0.6		109.44
11	10,380	75.00	10.9	Upper Marker	113.00
12	12,467	0.00	0.0		114.98

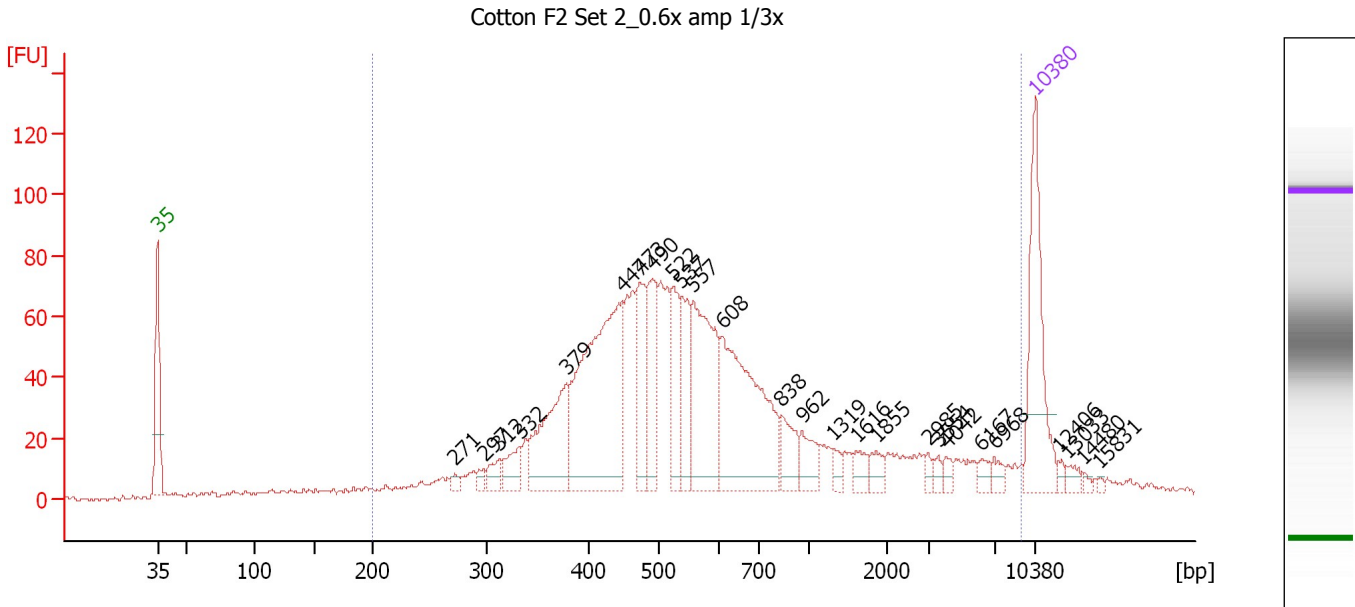
Region table for sample 1 : 7/27/15 WL

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
540	1,058	8,961	919.7	1,430.1	100	83.0	754.40

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-29\2015-07-29_001.xad

Created: 7/29/2015 3:03:00 PM
 Modified: 7/29/2015 3:45:38 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : Cotton F2 Set 2 0.6x amp 1/3x

Number of peaks found: 26 Corr. Area 1: 1,680.9
 Noise: 0.8

Peak table for sample 2 : Cotton F2 Set 2 0.6x amp 1/3x

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	271	5.63	31.4		66.68
3	297	6.43	32.8		69.02
4	312	13.39	65.1		70.26
5	332	22.05	100.6		71.91
6	379	91.76	367.0		75.66
7	447	221.35	749.6		80.06
8	473	56.39	180.5		81.53
9	490	59.69	184.5		82.49
10	522	48.95	142.0		84.09
11	537	48.49	136.8		84.78
12	557	115.39	313.8		85.74
13	608	154.06	383.6		88.03
14	838	25.19	45.6		92.75
15	962	19.24	30.3		94.40
16	1,319	7.16	8.2		96.92
17	1,616	9.73	9.1		98.80
18	1,855	9.33	7.6		100.31
19	2,985	4.06	2.1		104.48
20	3,554	3.96	1.7		105.26
21	4,042	5.29	2.0		105.90
22	6,167	6.09	1.5		108.69
23	6,968	5.81	1.3		109.75
24	10,380	75.00	10.9	Upper Marker	113.00
25	12,406	0.00	0.0		114.92

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-29\2015-07-29_001.xad

Created: 7/29/2015 3:03:00 PM
 Modified: 7/29/2015 3:45:38 PM

Electropherogram Summary Continued ...

... Peak table for sample 2 : Cotton F2 Set 2 0.6x amp 1/3x

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	13,033	0.00	0.0		115.52
27	14,480	0.00	0.0		116.89
28	15,831	0.00	0.0		118.18

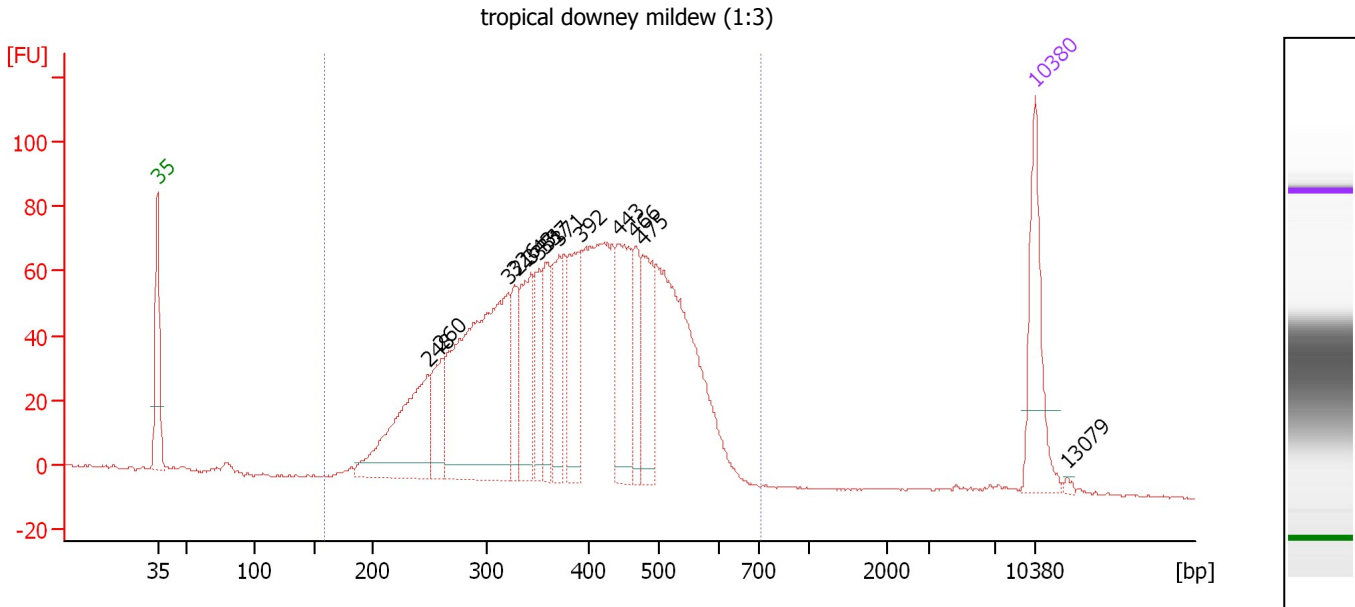
Region table for sample 2 : Cotton F2 Set 2 0.6x amp 1/3x

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
200	939	9,131	1,680.9	3,892.8	93	100.0	1,275.92

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-29\2015-07-29_001.xad

Created: 7/29/2015 3:03:00 PM
 Modified: 7/29/2015 3:45:38 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : tropical downey mildew (1:3)

Number of peaks found: 13 Corr. Area 1: 1,986.1
 Noise: 0.3

Peak table for sample 3 : tropical downey mildew (1:3)

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	248	179.34	1,094.5		64.58
3	260	63.74	371.4		65.65
4	321	370.99	1,753.7		70.96
5	326	51.83	240.7		71.43
6	343	95.39	421.3		72.78
7	351	53.50	230.9		73.43
8	357	66.84	283.8		73.90
9	371	70.44	287.8		75.02
10	392	105.68	408.3		76.74
11	443	116.19	397.3		79.82
12	466	57.99	188.5		81.12
13	475	85.01	271.0		81.64
14	10,380	75.00	10.9	Upper Marker	113.00
15	13,079	0.00	0.0		115.56

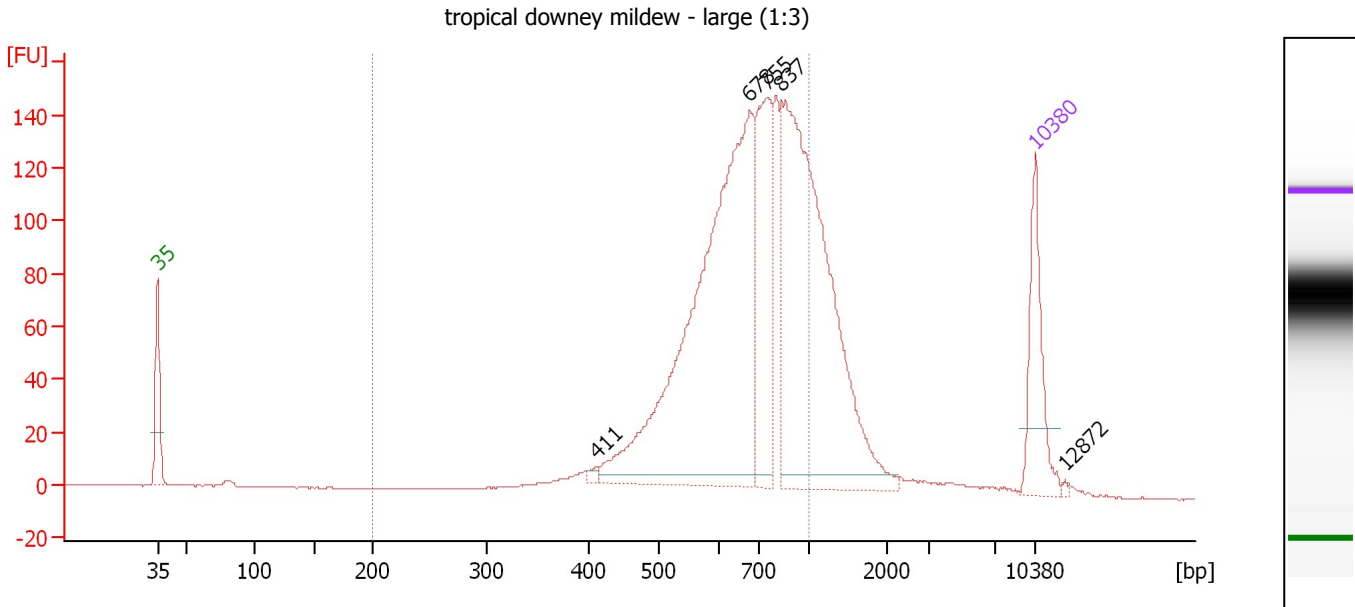
Region table for sample 3 : tropical downey mildew (1:3)

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/µl]
158	393	716	1,986.1	7,996.7	99	24.9	1,875.30

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-29\2015-07-29_001.xad

Created: 7/29/2015 3:03:00 PM
 Modified: 7/29/2015 3:45:38 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : tropical downey mildew - large (1:3)

Number of peaks found: 5 Corr. Area 1: 1,660.4
 Noise: 0.2

Peak table for sample 4 : tropical downey mildew - large (1:3)

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	411	5.29	19.5		78.02
3	678	663.60	1,482.9		90.23
4	755	177.32	355.9		91.65
5	837	528.29	956.2		92.74
6	10,380	75.00	10.9	Upper Marker	113.00
7	12,872	0.00	0.0		115.37

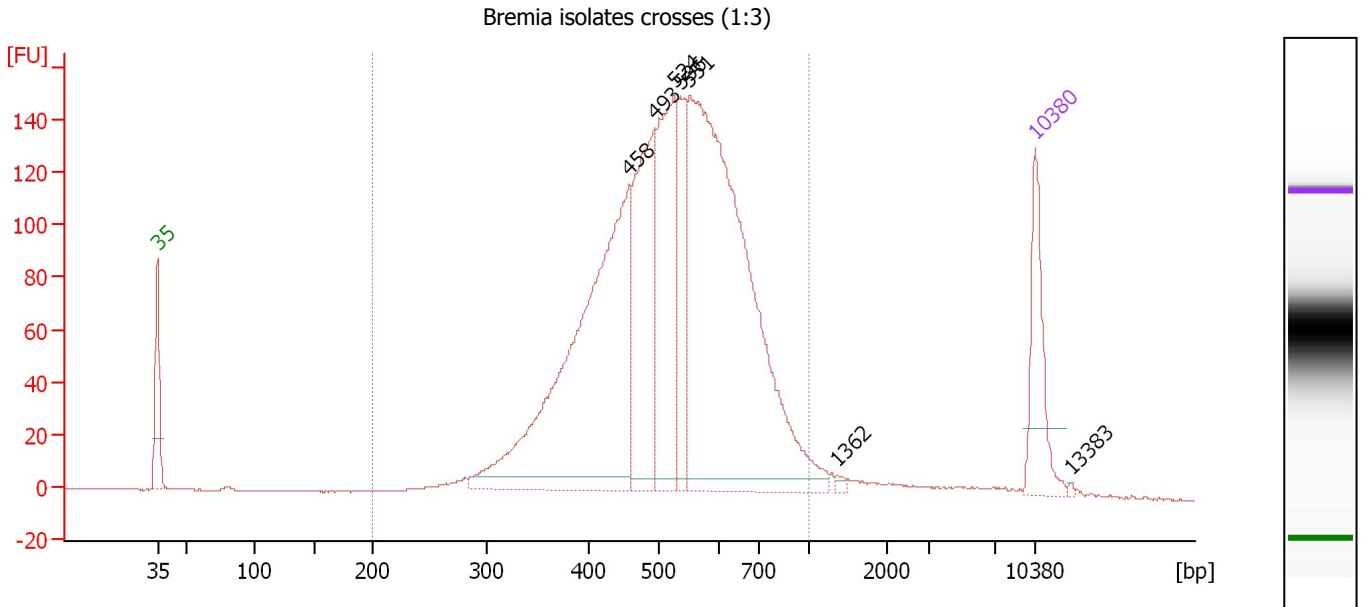
Region table for sample 4 : tropical downey mildew - large (1:3)

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
200	690	1,000	1,660.4	2,979.3	79	22.1	1,266.80

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-29\2015-07-29_001.xad

Created: 7/29/2015 3:03:00 PM
 Modified: 7/29/2015 3:45:38 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : Bremia isolates crosses (1:3)

Number of peaks found: 7 Corr. Area 1: 2,555.3
 Noise: 0.2

Peak table for sample 5 : Bremia isolates crosses (1:3)

Peak	Size [bp]	Conc. [pg/ μ l]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	458	610.89	2,021.0		80.66
3	493	249.60	767.1		82.64
4	524	243.12	702.5		84.19
5	536	109.85	310.8		84.72
6	551	781.73	2,149.9		85.44
7	1,362	3.67	4.1		97.19
8	10,380	75.00	10.9	Upper Marker	113.00
9	13,383	0.00	0.0		115.85

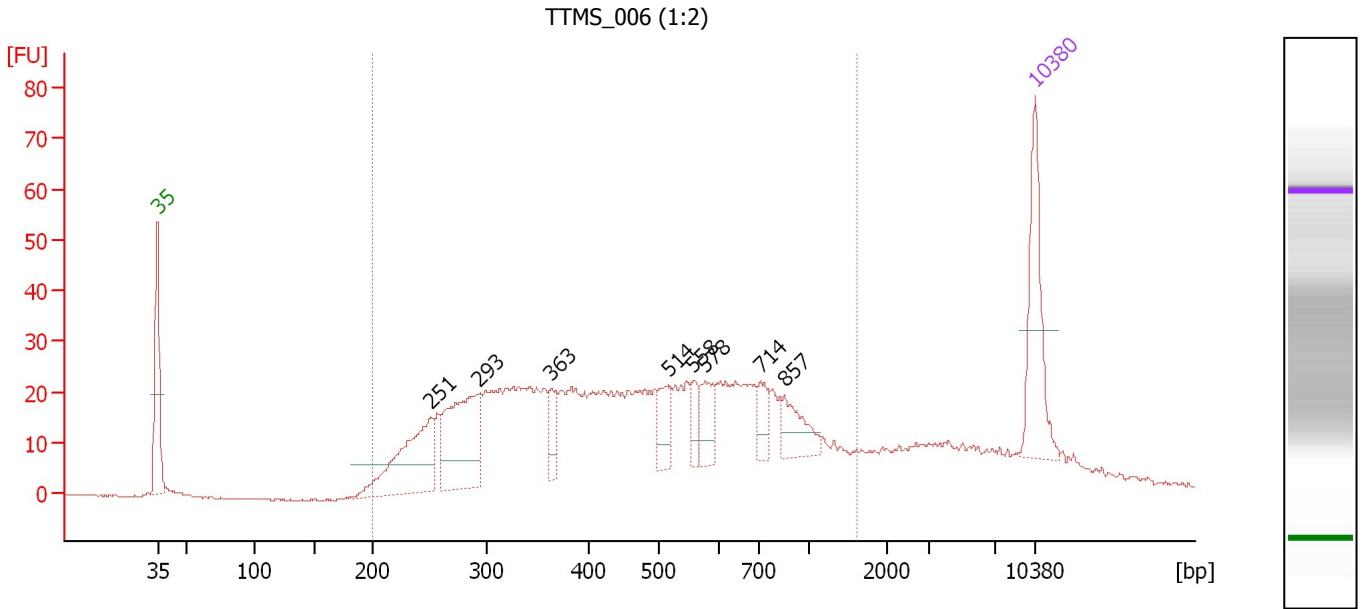
Region table for sample 5 : Bremia isolates crosses (1:3)

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/ μ l]
200	528	1,000	2,555.3	6,267.9	97	22.9	2,030.78

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-29\2015-07-29_001.xad

Created: 7/29/2015 3:03:00 PM
 Modified: 7/29/2015 3:45:38 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : TTMS_006 (1:2)

Number of peaks found: 8 Corr. Area 1: 914.9
 Noise: 0.2

Peak table for sample 6 : TTMS_006 (1:2)

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	251	132.55	799.6		64.84
3	293	141.87	733.1		68.68
4	363	26.95	112.4		74.42
5	514	33.71	99.3		83.72
6	558	18.35	49.9		85.76
7	578	35.90	94.1		86.73
8	714	22.46	47.7		91.11
9	857	36.95	65.3		93.01
10	10,380	75.00	10.9	Upper Marker	113.00

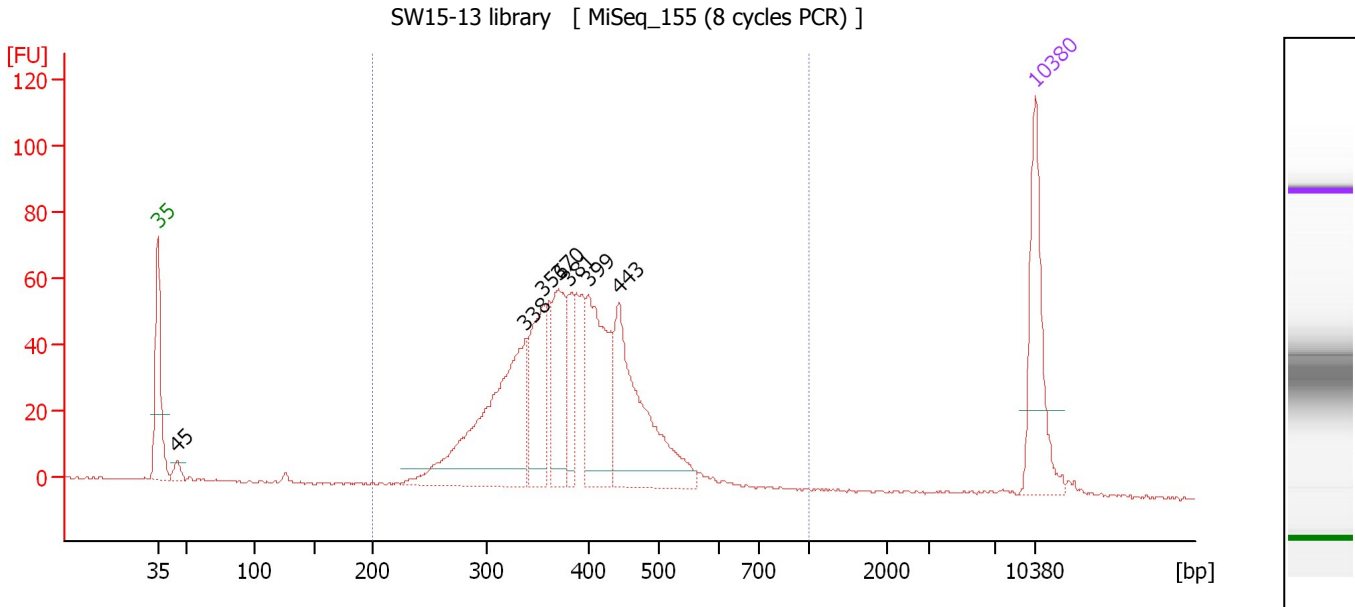
Region table for sample 6 : TTMS_006 (1:2)

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
200	519	1,604	914.9	5,596.2	83	50.9	1,453.18

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-29\2015-07-29_001.xad

Created: 7/29/2015 3:03:00 PM
 Modified: 7/29/2015 3:45:38 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : SW15-13 library

Number of peaks found: 7 Corr. Area 1: 964.9
 Noise: 0.4

Peak table for sample 7 : SW15-13 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	45	11.74	396.2		44.53
3	338	231.24	1,037.1		72.36
4	356	91.56	390.2		73.79
5	370	80.89	331.1		74.97
6	381	44.65	177.8		75.81
7	399	124.90	473.7		77.33
8	443	169.30	579.3		79.80
9	10,380	75.00	10.9	Upper Marker	113.00

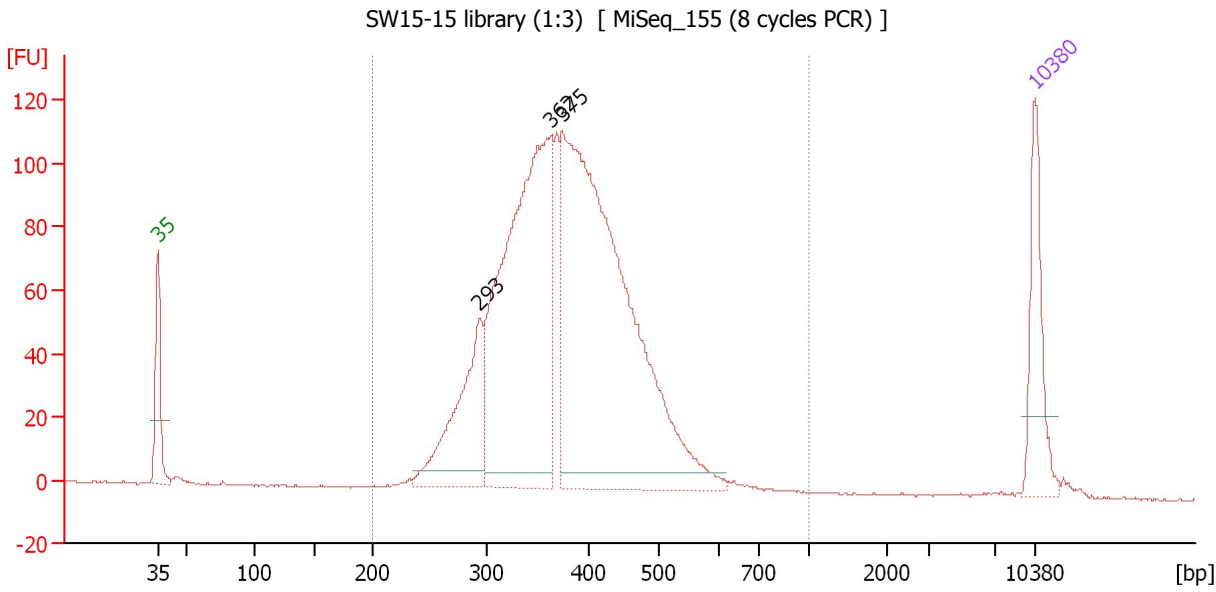
Region table for sample 7 : SW15-13 library

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
200	389	1,000	964.9	3,562.0	97	19.4	873.09

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-29\2015-07-29_001.xad

Created: 7/29/2015 3:03:00 PM
 Modified: 7/29/2015 3:45:38 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : SW15-15 library (1:3)

Number of peaks found: 3 Corr. Area 1: 1,847.1
 Noise: 0.2

Peak table for sample 8 : SW15-15 library (1:3)

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	293	187.12	967.4		68.67
3	362	602.03	2,516.9		74.34
4	375	824.95	3,335.3		75.34
5	10,380	75.00	10.9	Upper Marker	113.00

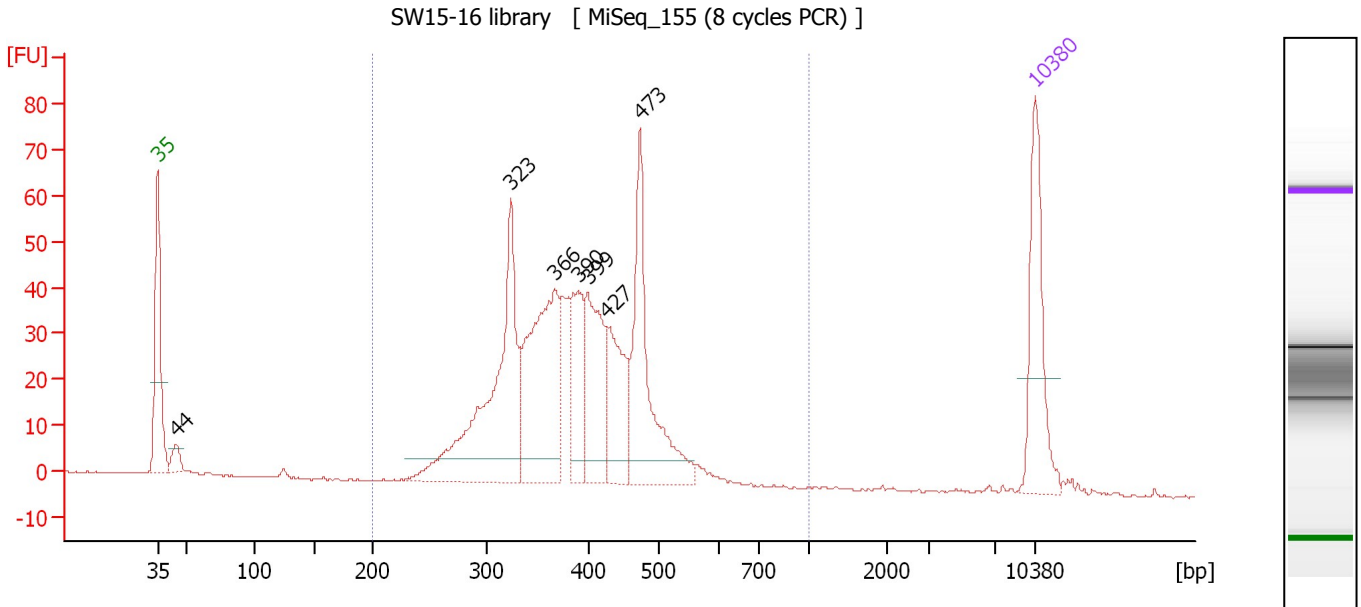
Region table for sample 8 : SW15-15 library (1:3)

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
200	382	1,000	1,847.1	6,997.5	99	18.8	1,686.79

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-29\2015-07-29_001.xad

Created: 7/29/2015 3:03:00 PM
 Modified: 7/29/2015 3:45:38 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : SW15-16 library

Number of peaks found: 7 Corr. Area 1: 749.0
 Noise: 0.2

Peak table for sample 9 : SW15-16 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	44	17.30	590.4		44.45
3	323	241.58	1,133.3		71.16
4	366	191.46	791.6		74.67
5	390	72.13	280.2		76.57
6	399	100.65	381.9		77.32
7	427	81.43	289.3		78.88
8	473	157.44	504.8		81.48
9	10,380	75.00	10.9	Upper Marker	113.00

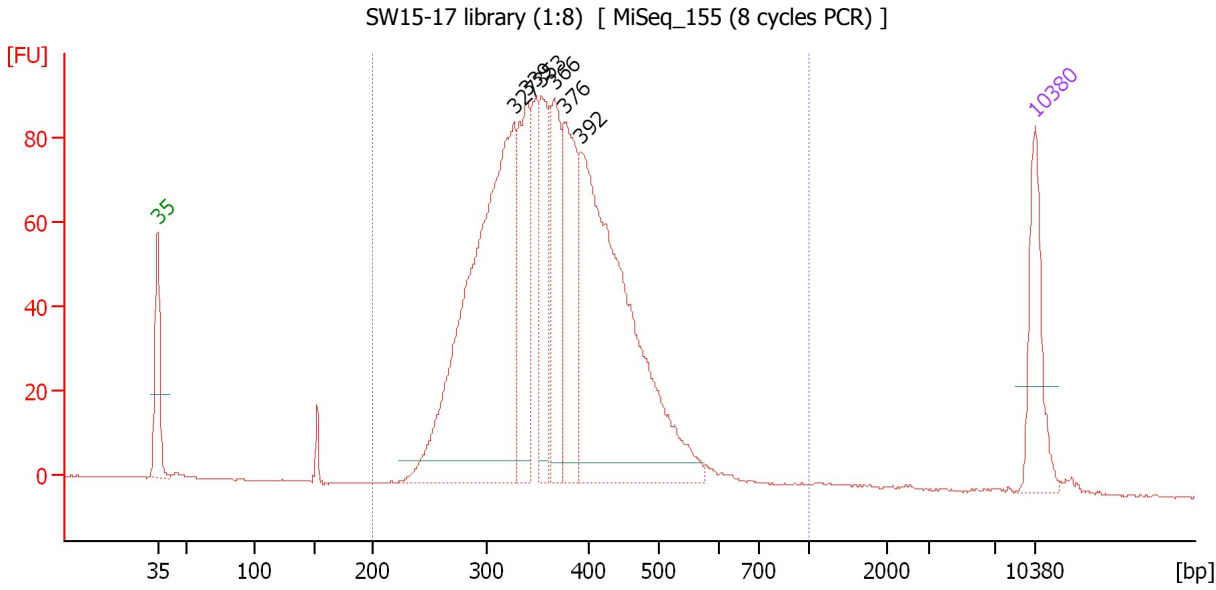
Region table for sample 9 : SW15-16 library

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
200	391	1,000	749.0	3,771.4	97	18.4	930.97

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-29\2015-07-29_001.xad

Created: 7/29/2015 3:03:00 PM
 Modified: 7/29/2015 3:45:38 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : SW15-17 library (1:8)

Number of peaks found: 6 Corr. Area 1: 1,599.9
 Noise: 0.2

Peak table for sample 10 : SW15-17 library (1:8)

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	327	652.57	3,026.9		71.46
3	339	164.22	734.9		72.42
4	353	133.27	571.9		73.59
5	366	141.60	586.8		74.60
6	376	175.73	707.6		75.46
7	392	561.43	2,169.9		76.73
8	10,380	75.00	10.9	Upper Marker	113.00

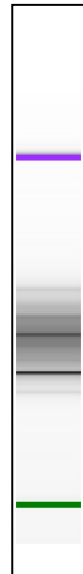
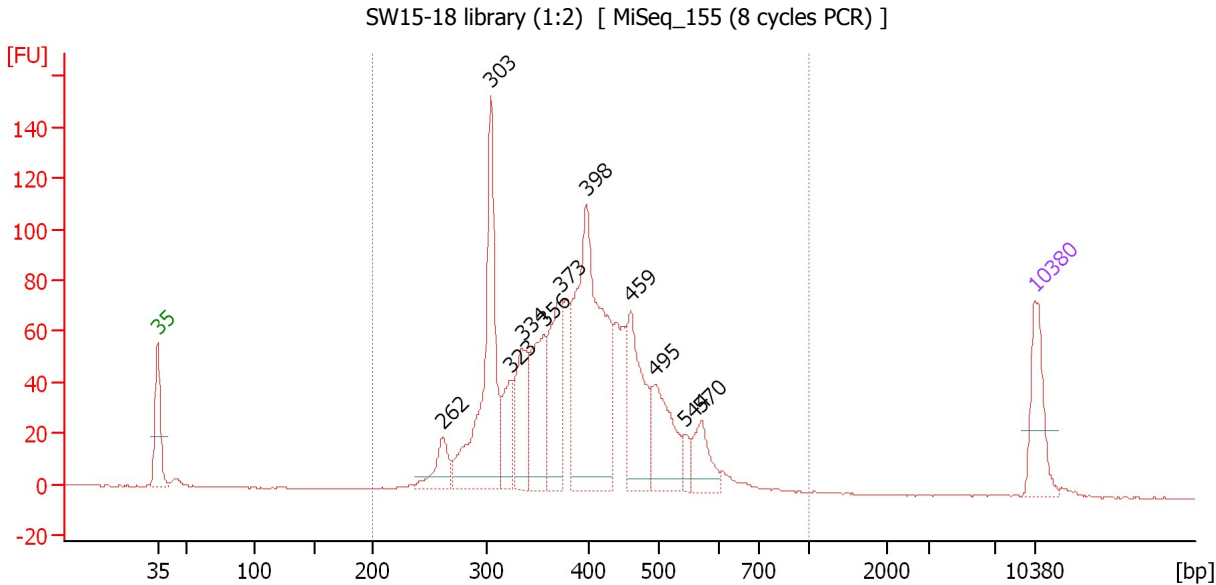
Region table for sample 10 : SW15-17 library (1:8)

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
200	372	1,000	1,599.9	8,618.7	97	20.9	2,012.36

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-29\2015-07-29_001.xad

Created: 7/29/2015 3:03:00 PM
 Modified: 7/29/2015 3:45:38 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : SW15-18 library (1:2)

Number of peaks found: 11 Corr. Area 1: 1,462.0
 Noise: 0.2

Peak table for sample 11 : SW15-18 library (1:2)

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	262	61.97	358.8		65.80
3	303	362.31	1,810.9		69.56
4	323	77.81	365.1		71.15
5	334	122.92	557.0		72.08
6	356	153.77	654.3		73.83
7	373	163.23	662.5		75.22
8	398	475.90	1,813.8		77.18
9	459	174.65	576.3		80.73
10	495	130.29	399.1		82.74
11	544	23.81	66.4		85.10
12	570	61.74	164.2		86.34
13	10,380	75.00	10.9	Upper Marker	113.00

Region table for sample 11 : SW15-18 library (1:2)

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
200	399	1,000	1,462.0	8,301.8	99	21.5	2,066.25

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-29\2015-07-29_001.xad

Created: 7/29/2015 3:03:00 PM
Modified: 7/29/2015 3:45:38 PM

Gel Image

