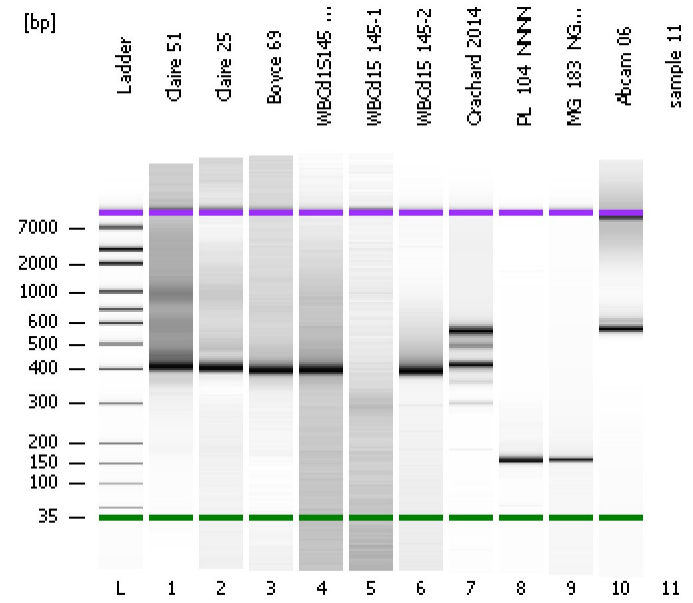
Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-07\2014-11-07_002.xad

Created: 11/7/2014 12:22:53 PM
Modified: 11/7/2014 1:03:02 PM

Electrophoresis File Run Summary



Instrument Information:

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

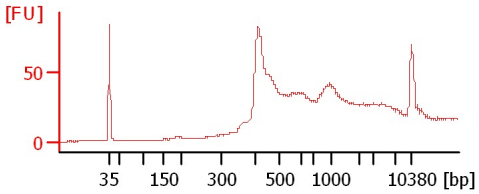
Assay Information:

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

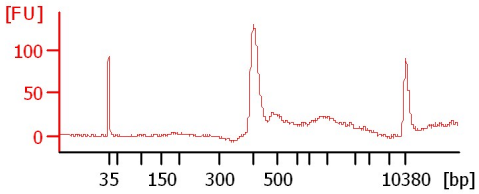
Chip Information:

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

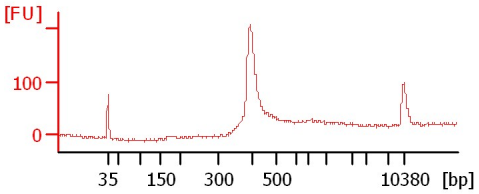
Claire 51



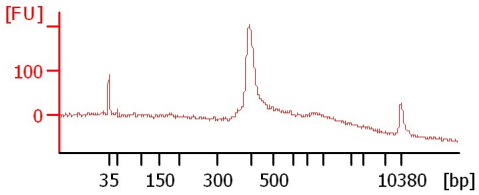
Claire 25



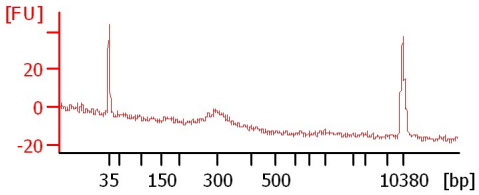
Boyce 69



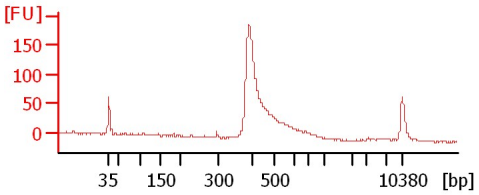
WBCd1S145 Pre



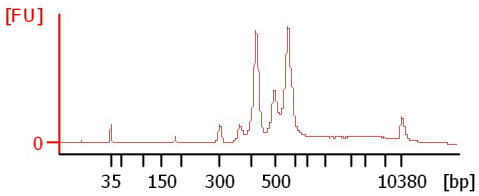
WBCd15 145-1



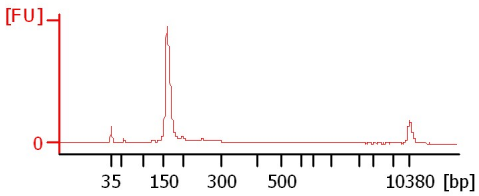
WBCd15 145-2



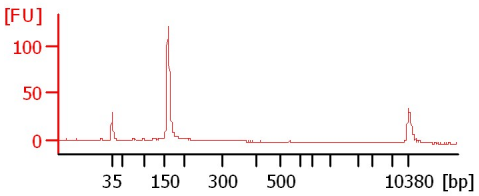
Orachard 2014



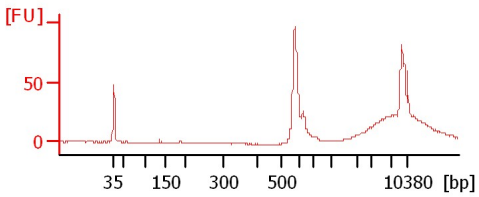
PL_104_NNNN



MG_183_NGNN



Abcam 06



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-07\2014-11-07_002.xad

Created: 11/7/2014 12:22:53 PM
Modified: 11/7/2014 1:03:02 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
Claire 51		☐	✔			
Claire 25		☐	✔			
Boyce 69		☐	✔			
WBCd1S145 Pre		☐	✔			
WBCd15 145-1		☐	✔			
WBCd15 145-2		☐	✔			
Orachard 2014		☐	✔			
PL_104_NNNN		☐	✔			
MG_183_NGNN		☐	✔			
Abcam 06		☐	✔			
sample 11		☐				
Ladder		☐	✔			

Chip Lot # **Reagent Kit Lot #**

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-07\2014-11-07_002.xad

Created: 11/7/2014 12:22:53 PM
Modified: 11/7/2014 1:03:02 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

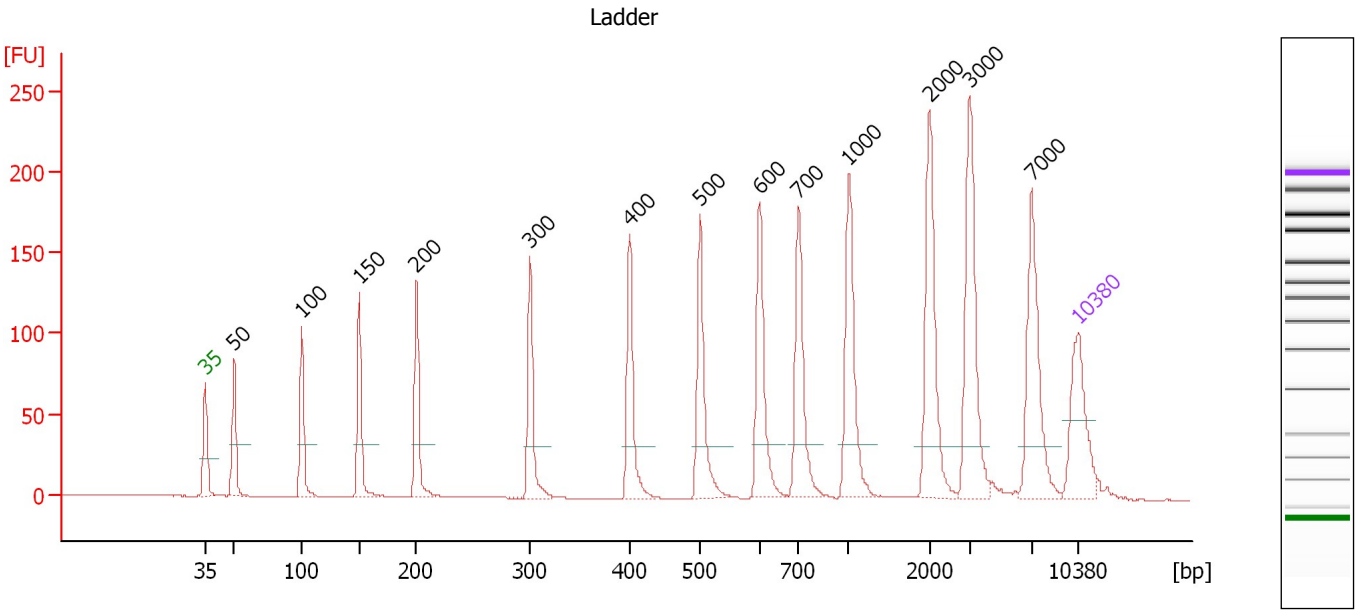
Ladder

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\2014-11-07\2014-11-07_002.xad

Created: 11/7/2014 12:22:53 PM
Modified: 11/7/2014 1:03:02 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

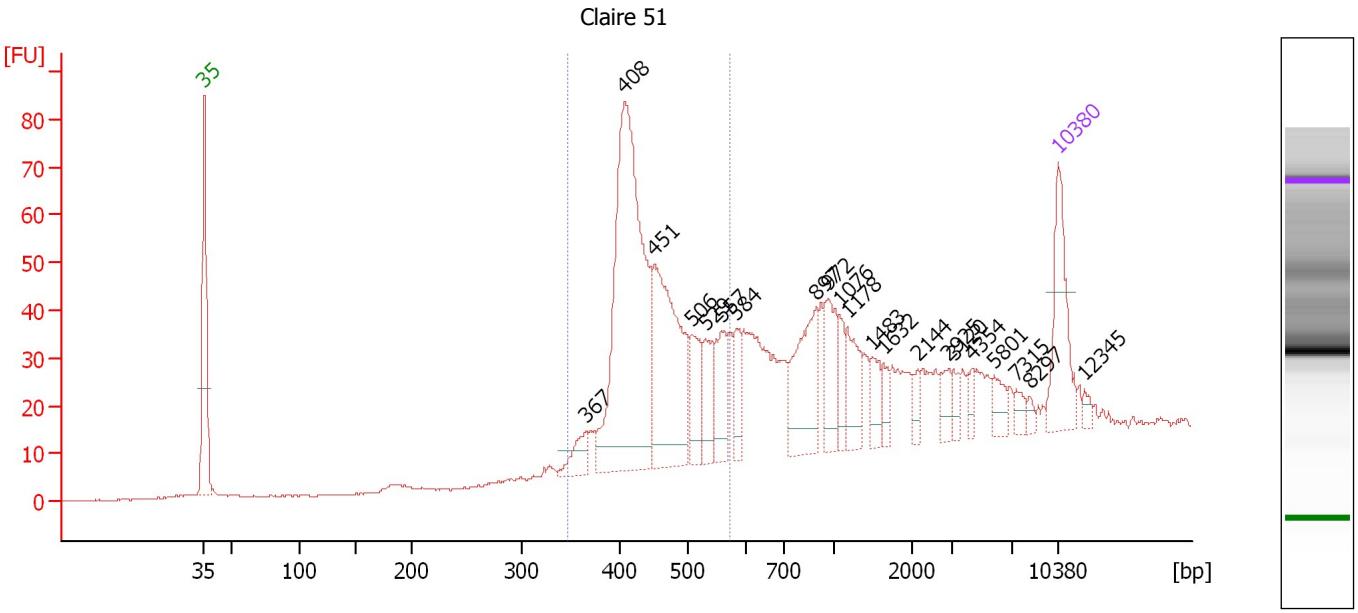
Peak table for Ladder

Peak		Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1		35	125.00	5,411.3	Lower Marker
2		50	150.00	4,545.5	Ladder Peak
3		100	150.00	2,272.7	Ladder Peak
4		150	150.00	1,515.2	Ladder Peak
5		200	150.00	1,136.4	Ladder Peak
6		300	150.00	757.6	Ladder Peak
7		400	150.00	568.2	Ladder Peak
8		500	150.00	454.5	Ladder Peak
9		600	150.00	378.8	Ladder Peak
10		700	150.00	324.7	Ladder Peak
11		1,000	150.00	227.3	Ladder Peak
12		2,000	150.00	113.6	Ladder Peak
13		3,000	150.00	75.8	Ladder Peak
14		7,000	150.00	32.5	Ladder Peak
15		10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-07\2014-11-07_002.xad

Created: 11/7/2014 12:22:53 PM
Modified: 11/7/2014 1:03:02 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : Claire 51

Number of peaks found:	21	Corr. Area 1:	506.8
Noise:	0.2		

Peak table for sample 1 : Claire 51

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	367	31.83	131.6	
3	408	460.59	1,711.5	
4	451	233.68	784.8	
5	506	60.37	180.6	
6	529	42.68	122.1	
7	557	57.77	157.1	
8	584	33.13	86.0	
9	897	97.62	164.8	
10	972	58.04	90.5	
11	1,076	23.12	32.5	
12	1,178	44.04	56.7	
13	1,483	24.48	25.0	
14	1,632	13.91	12.9	
15	2,144	11.63	8.2	
16	2,925	18.31	9.5	
17	3,120	11.66	5.7	
18	4,354	10.62	3.7	
19	5,801	18.26	4.8	
20	7,315	10.28	2.1	
21	8,297	5.46	1.0	
22	10,380	75.00	10.9	Upper Marker
23	12,345	0.00	0.0	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-07\2014-11-07_002.xad

Created: 11/7/2014 12:22:53 PM
Modified: 11/7/2014 1:03:02 PM

Electropherogram Summary Continued ...

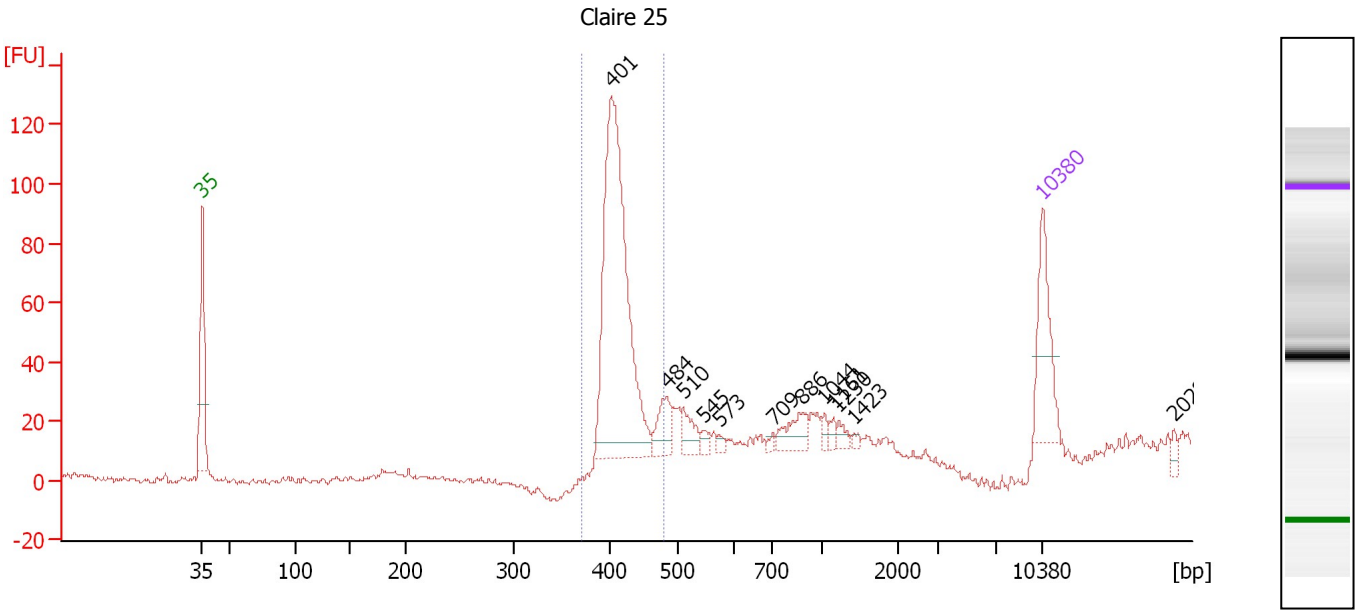
... Region table for sample 1 : Claire 51

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/µl]	Molarity [pmol/l]	Color
347	453	572	506.8	51	11.7	846.25	2,871.4	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-07\2014-11-07_002.xad

Created: 11/7/2014 12:22:53 PM
Modified: 11/7/2014 1:03:02 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : Claire 25

Number of peaks found:	12	Corr. Area 1:	378.9
Noise:	0.8		

Peak table for sample 2 : Claire 25

Peak		Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	◀	35	125.00	5,411.3	Lower Marker
2		401	475.14	1,794.1	
3		484	42.29	132.4	
4		510	29.25	86.9	
5		545	10.15	28.2	
6		573	5.91	15.6	
7		709	5.25	11.2	
8		886	33.73	57.6	
9		1,044	7.42	10.8	
10		1,161	7.56	9.9	
11		1,230	9.04	11.1	
12		1,423	3.93	4.2	
13	▶	10,380	75.00	10.9	Upper Marker
14		20,286	0.00	0.0	

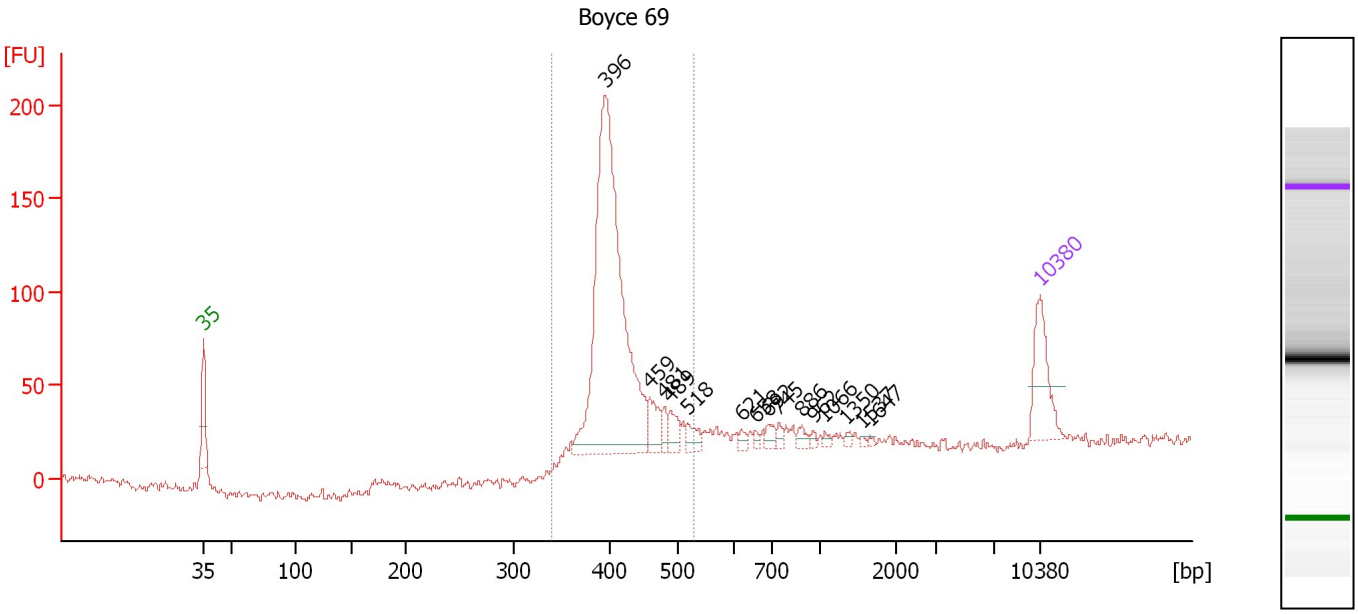
Region table for sample 2 : Claire 25

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/µl]	Molarity [pmol/l]	Color
370	414	480	378.9	68	4.9	499.50	1,829.7	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-07\2014-11-07_002.xad

Created: 11/7/2014 12:22:53 PM
Modified: 11/7/2014 1:03:02 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : Boyce 69

Number of peaks found:	15	Corr. Area 1:	801.3
Noise:	2.7		

Peak table for sample 3 : Boyce 69

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	396	751.31	2,878.0	
3	459	43.47	143.6	
4	481	18.65	58.8	
5	489	28.23	87.4	
6	518	22.98	67.3	
7	621	9.20	22.5	
8	658	6.43	14.8	
9	692	13.11	28.7	
10	745	8.88	18.1	
11	886	10.46	17.9	
12	962	5.71	9.0	
13	1,066	5.17	7.3	
14	1,350	4.39	4.9	
15	1,537	2.77	2.7	
16	1,647	2.38	2.2	
17	10,380	75.00	10.9	Upper Marker

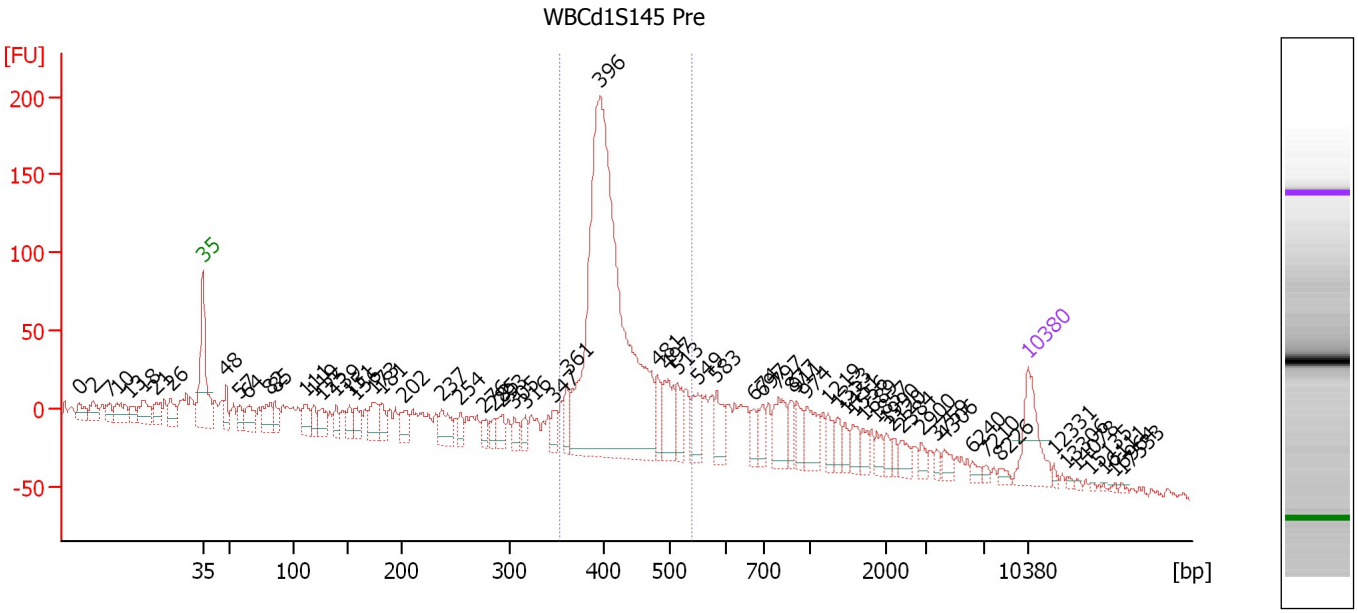
Region table for sample 3 : Boyce 69

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/µl]	Molarity [pmol/l]	Color
338	415	530	801.3	79	8.6	907.25	3,331.9	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-07\2014-11-07_002.xad

Created: 11/7/2014 12:22:53 PM
Modified: 11/7/2014 1:03:02 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : WBCd1S145 Pre

Number of peaks found:	65	Corr. Area 1:	1,172.6
Noise:	3.5		

Peak table for sample 4 : WBCd1S145 Pre

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	0	0.00	0.0	
2	2	0.00	0.0	
3	7	0.00	0.0	
4	10	0.00	0.0	
5	13	0.00	0.0	
6	18	0.00	0.0	
7	21	0.00	0.0	
8	26	0.00	0.0	
9	35	125.00	5,411.3	Lower Marker
10	48	41.59	1,314.6	
11	57	32.13	846.9	
12	64	48.32	1,148.8	
13	82	48.26	895.6	
14	85	33.11	587.4	
15	111	44.49	608.6	
16	119	29.47	376.5	
17	125	42.04	509.8	
18	139	28.16	306.6	
19	151	28.82	289.4	
20	156	37.36	362.0	
21	173	53.40	468.6	
22	181	32.97	276.6	
23	202	41.30	309.9	
24	237	50.41	322.1	
25	254	21.95	130.9	
26	276	20.20	111.0	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-07\2014-11-07_002.xad

Created: 11/7/2014 12:22:53 PM
Modified: 11/7/2014 1:03:02 PM

Electropherogram Summary Continued ...

... Peak table for sample 4 : WBCd1S145 Pre

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
27	285	21.11	112.1	
28	293	28.69	148.5	
29	305	24.08	119.5	
30	316	21.04	100.8	
31	347	25.86	113.0	
32	361	38.38	161.2	
33	396	1,065.26	4,077.0	
34	481	39.75	125.3	
35	497	72.02	219.6	
36	513	45.71	134.9	
37	549	53.09	146.6	
38	583	46.00	119.6	
39	674	23.70	53.3	
40	697	31.02	67.4	
41	797	59.69	113.4	
42	877	25.15	43.4	
43	911	29.24	48.6	
44	974	47.35	73.6	
45	1,219	24.01	29.8	
46	1,353	19.79	22.2	
47	1,451	15.10	15.8	
48	1,556	23.68	23.1	
49	1,689	16.62	14.9	
50	1,857	15.55	12.7	
51	1,990	12.55	9.6	
52	2,120	10.71	7.7	
53	2,384	19.33	12.3	
54	2,900	11.99	6.3	
55	3,759	7.91	3.2	
56	4,306	13.77	4.8	
57	6,240	8.09	2.0	
58	7,210	4.92	1.0	
59	8,226	7.40	1.4	
60	10,380	75.00	10.9	Upper Marker
61	12,331	0.00	0.0	
62	13,306	0.00	0.0	
63	14,078	0.00	0.0	
64	15,135	0.00	0.0	
65	16,111	0.00	0.0	
66	16,964	0.00	0.0	
67	17,533	0.00	0.0	

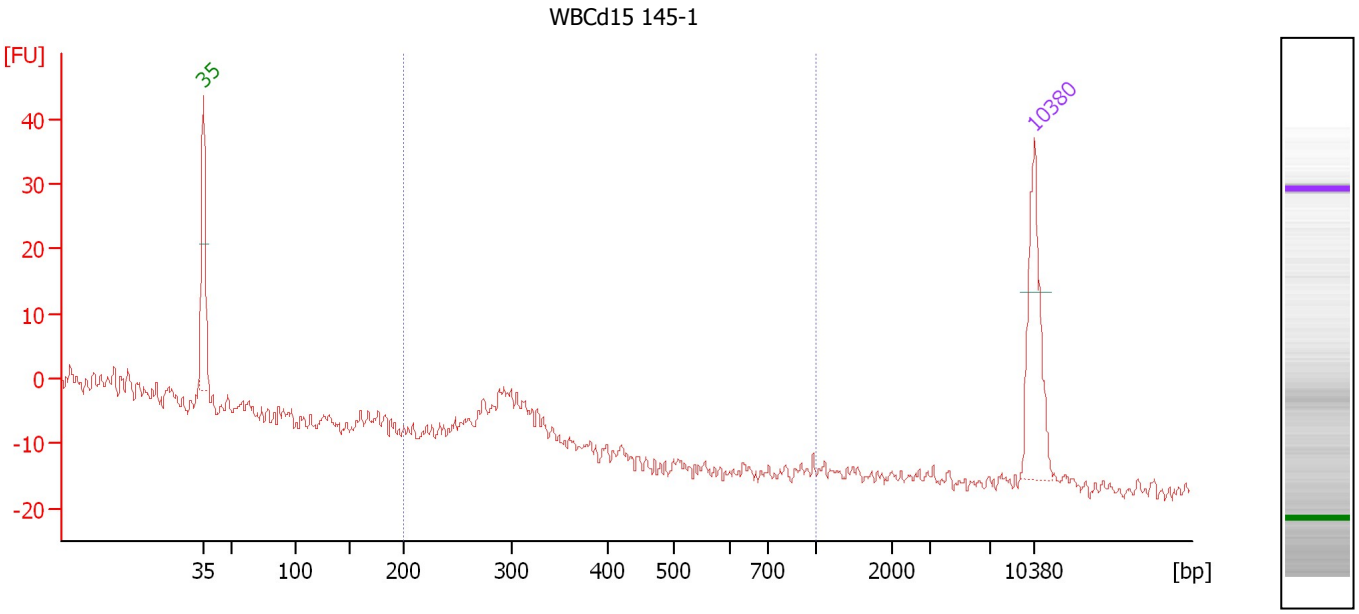
Region table for sample 4 : WBCd1S145 Pre

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/µl]	Molarity [pmol/l]	Color
352	423	540	1,172.6	44	10.4	1,227.38	4,446.2	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-07\2014-11-07_002.xad

Created: 11/7/2014 12:22:53 PM
Modified: 11/7/2014 1:03:02 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : WBCd15 145-1

Number of peaks found:	0	Corr. Area 1:	15.3
Noise:	1.3		

Peak table for sample 5 : WBCd15 145-1

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

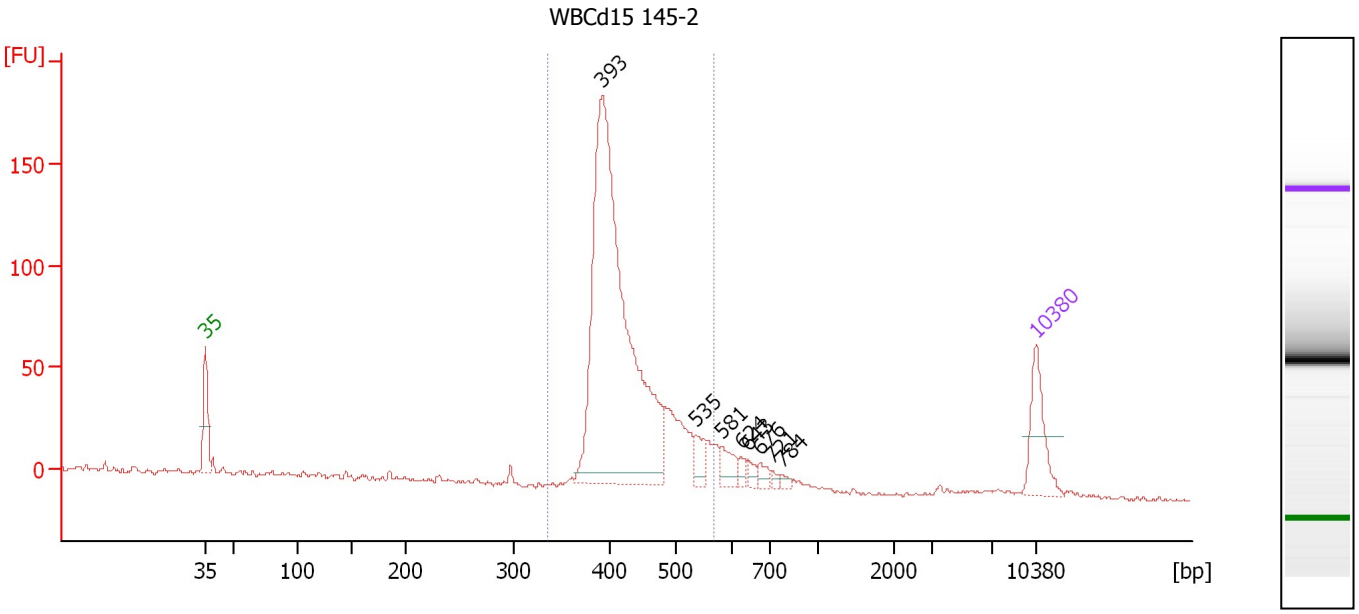
Region table for sample 5 : WBCd15 145-1

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/µl]	Molarity [pmol/l]	Color
200	298	1,000	15.3	91	4.5	33.93	173.0	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-07\2014-11-07_002.xad

Created: 11/7/2014 12:22:53 PM
Modified: 11/7/2014 1:03:02 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : WBCd15 145-2

Number of peaks found:	8	Corr. Area 1:	965.1
Noise:	0.9		

Peak table for sample 6 : WBCd15 145-2

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	393	1,016.12	3,915.7	
3	535	33.30	94.2	
4	581	34.03	88.8	
5	624	10.84	26.3	
6	643	13.43	31.7	
7	676	15.51	34.8	
8	721	7.81	16.4	
9	784	6.58	12.7	
10	10,380	75.00	10.9	Upper Marker

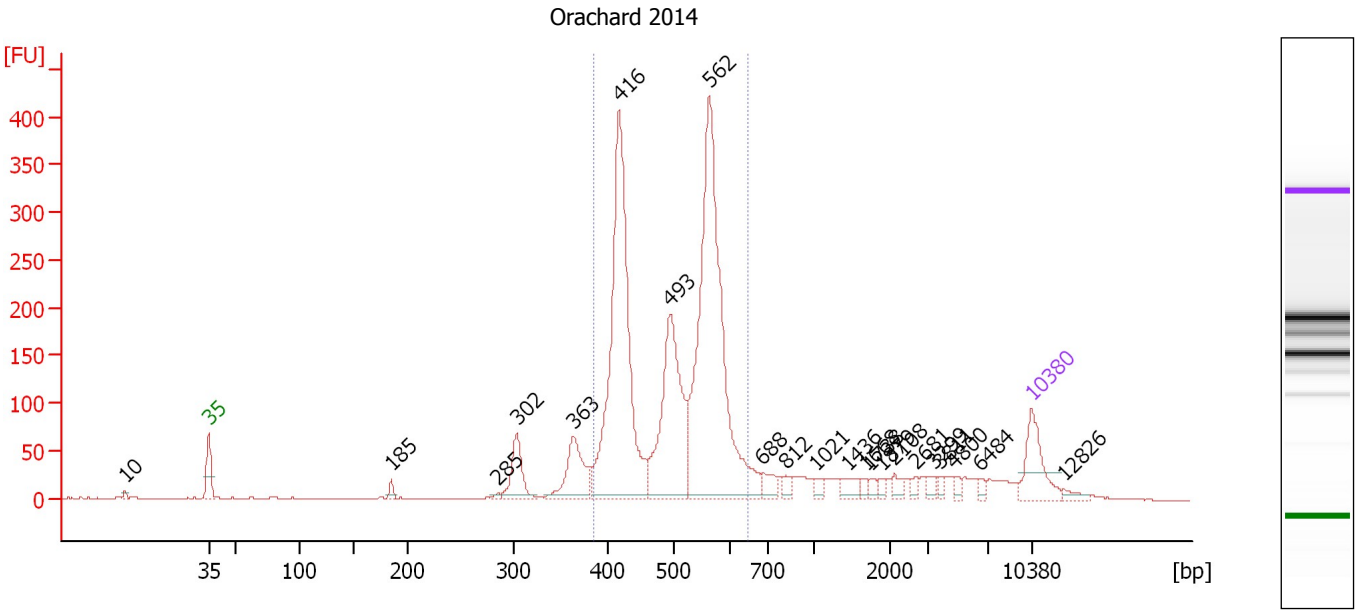
Region table for sample 6 : WBCd15 145-2

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/µl]	Molarity [pmol/l]	Color
334	429	566	965.1	85	11.0	1,175.72	4,209.1	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-07\2014-11-07_002.xad

Created: 11/7/2014 12:22:53 PM
Modified: 11/7/2014 1:03:02 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : Orachard 2014

Number of peaks found:	22	Corr. Area 1:	2,452.9
Noise:	0.3		

Peak table for sample 7 : Orachard 2014

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	10	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	185	13.70	112.2	
4	285	5.67	30.2	
5	302	94.94	475.6	
6	363	127.88	533.5	
7	416	717.32	2,611.2	
8	493	366.29	1,124.8	
9	562	815.22	2,197.9	
10	688	28.44	62.7	
11	812	14.58	27.2	
12	1,021	13.30	19.7	
13	1,436	23.22	24.5	
14	1,668	8.41	7.6	
15	1,738	9.39	8.2	
16	1,879	8.72	7.0	
17	2,108	14.11	10.1	
18	2,681	10.04	5.7	
19	3,299	11.56	5.3	
20	3,811	8.07	3.2	
21	4,800	10.13	3.2	
22	6,484	8.61	2.0	
23	10,380	75.00	10.9	Upper Marker
24	12,826	0.00	0.0	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-07\2014-11-07_002.xad

Created: 11/7/2014 12:22:53 PM
Modified: 11/7/2014 1:03:02 PM

Electropherogram Summary Continued ...

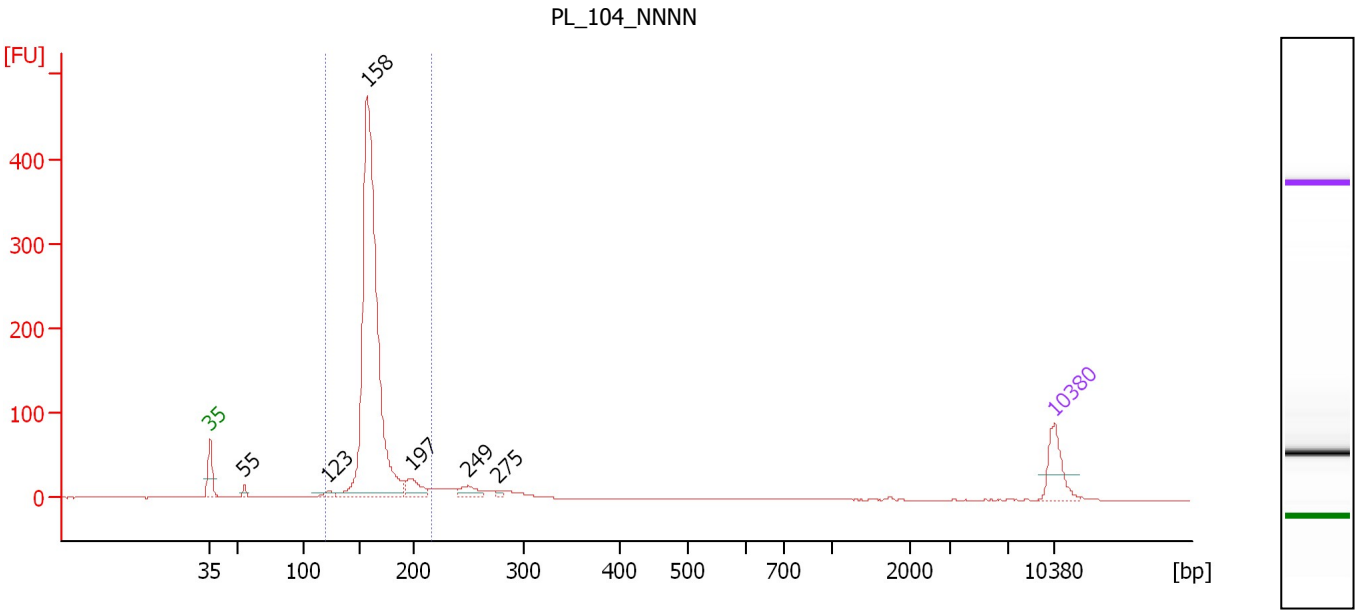
... Region table for sample 7 : Orachard 2014

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/µl]	Molarity [pmol/l]	Color
384	500	646	2,452.9	73	13.9	1,858.29	5,773.4	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-07\2014-11-07_002.xad

Created: 11/7/2014 12:22:53 PM
Modified: 11/7/2014 1:03:02 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : PL_104_NNNN

Number of peaks found:	6	Corr. Area 1:	1,311.7
Noise:	0.2		

Peak table for sample 8 : PL_104_NNNN

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	55	18.43	509.4	
3	123	23.61	291.9	
4	158	1,669.38	16,049.9	
5	197	72.86	559.7	
6	249	45.90	279.6	
7	275	9.13	50.2	
8	10,380	75.00	10.9	Upper Marker

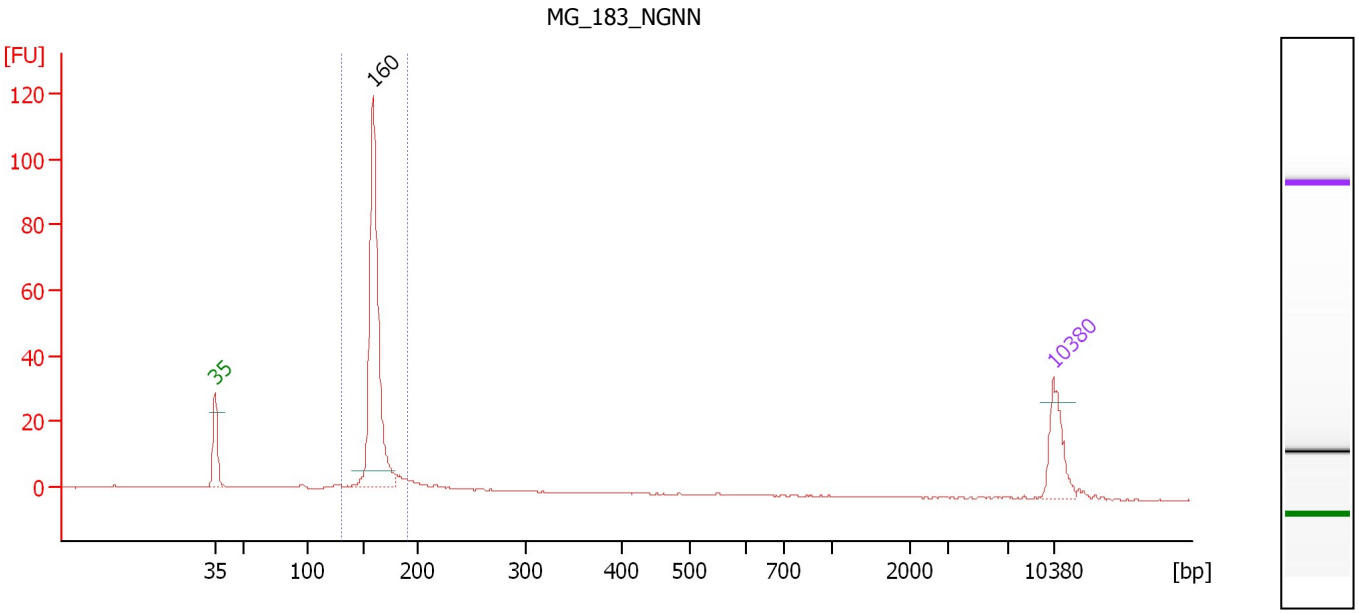
Region table for sample 8 : PL_104_NNNN

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/µl]	Molarity [pmol/l]	Color
120	163	217	1,311.7	85	8.1	1,769.21	16,499.3	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-07\2014-11-07_002.xad

Created: 11/7/2014 12:22:53 PM
Modified: 11/7/2014 1:03:02 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : MG_183_NGNN

Number of peaks found:	1	Corr. Area 1:	202.0
Noise:	0.1		

Peak table for sample 9 : MG_183_NGNN

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	160	652.85	6,199.1	
3	10,380	75.00	10.9	Upper Marker

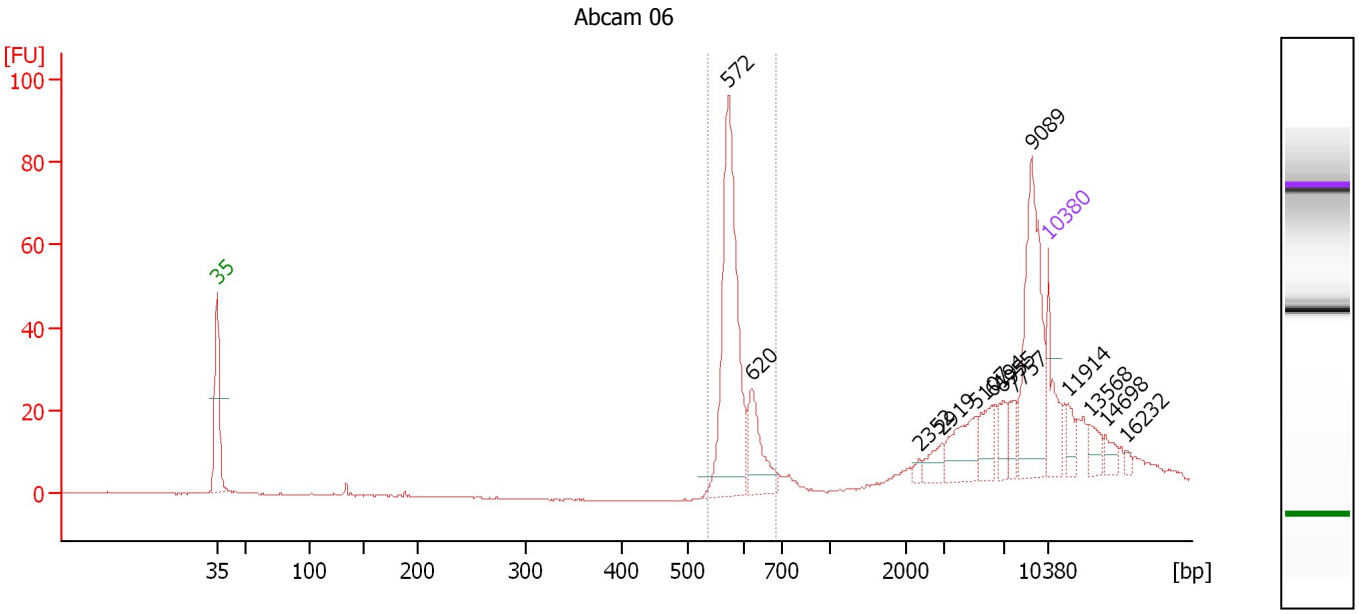
Region table for sample 9 : MG_183_NGNN

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/µl]	Molarity [pmol/l]	Color
132	162	191	202.0	75	4.8	719.65	6,750.3	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-07\2014-11-07_002.xad

Created: 11/7/2014 12:22:53 PM
Modified: 11/7/2014 1:03:02 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : Abcam 06

Number of peaks found:	13	Corr. Area 1:	184.3
Noise:	0.1		

Peak table for sample 10 : Abcam 06

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	572	500.85	1,327.4	
3	620	120.28	293.8	
4	2,352	10.11	6.5	
5	2,919	31.94	16.6	
6	5,107	85.68	25.4	
7	6,194	54.70	13.4	
8	6,955	36.57	8.0	
9	7,757	32.39	6.3	
10	9,089	251.53	41.9	
11	10,380	75.00	10.9	Upper Marker
12	11,914	0.00	0.0	
13	13,568	0.00	0.0	
14	14,698	0.00	0.0	
15	16,232	0.00	0.0	

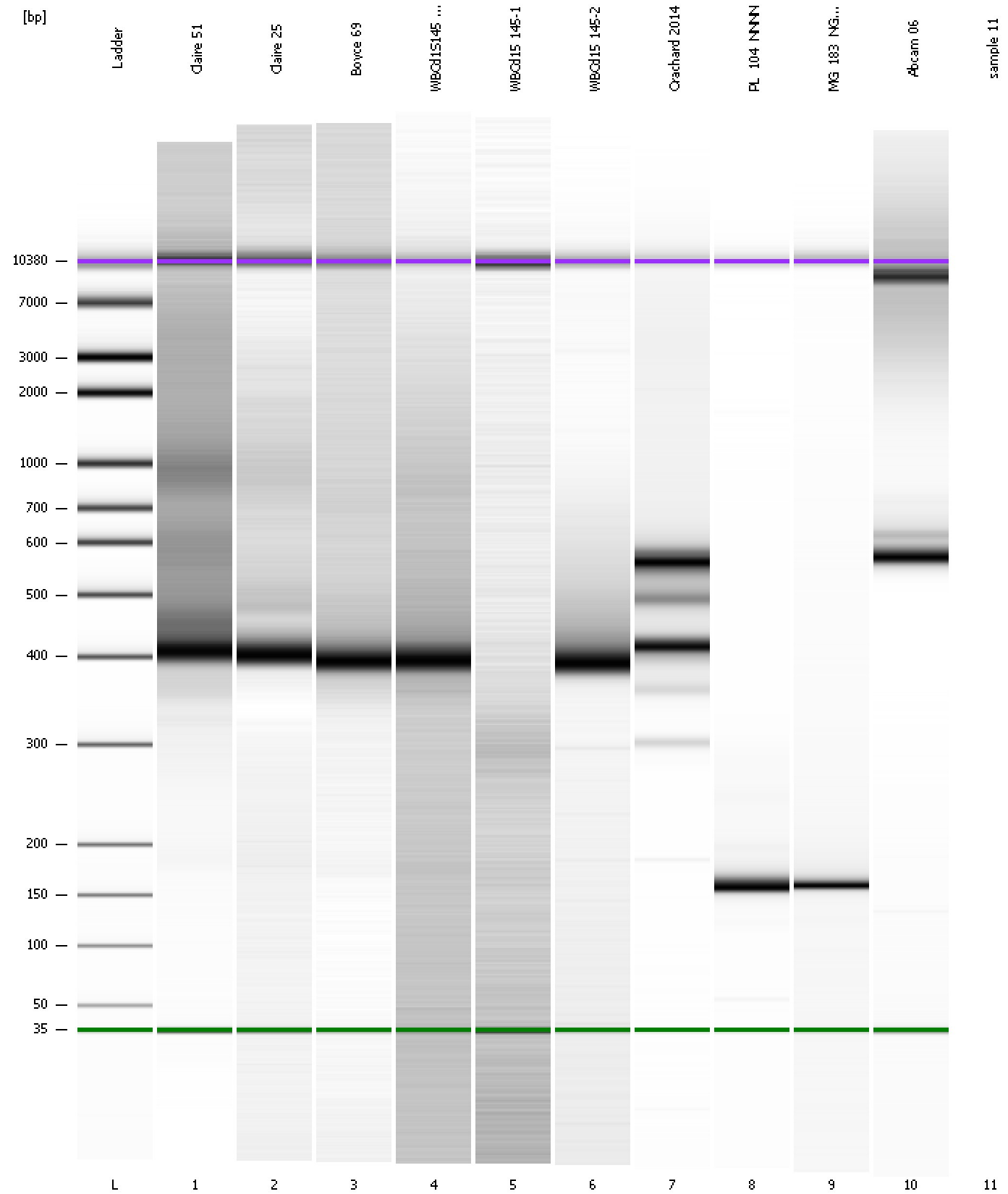
Region table for sample 10 : Abcam 06

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/µl]	Molarity [pmol/l]	Color
537	586	686	184.3	38	4.4	558.51	1,447.6	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-07\2014-11-07_002.xad

Created: 11/7/2014 12:22:53 PM
Modified: 11/7/2014 1:03:02 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-07\2014-11-07_002.xad

Created: 11/7/2014 12:22:53 PM
Modified: 11/7/2014 1:03:02 PM

Invalid Samples

Sample 11 has not been run, no results available.

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-11-07\2014-11-07_002.xad

Created: 11/7/2014 12:22:53 PM
Modified: 11/7/2014 1:03:02 PM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 11)		Instrument	Run		11/7/2014 1:01:21 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2014-11-07\2014-11-07_002.xad)		Instrument	Run		11/7/2014 12:22:59 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		11/7/2014 12:22:59 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		11/7/2014 12:22:59 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		11/7/2014 12:22:59 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		11/7/2014 12:22:59 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		11/7/2014 12:22:59 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		11/7/2014 12:22:59 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1