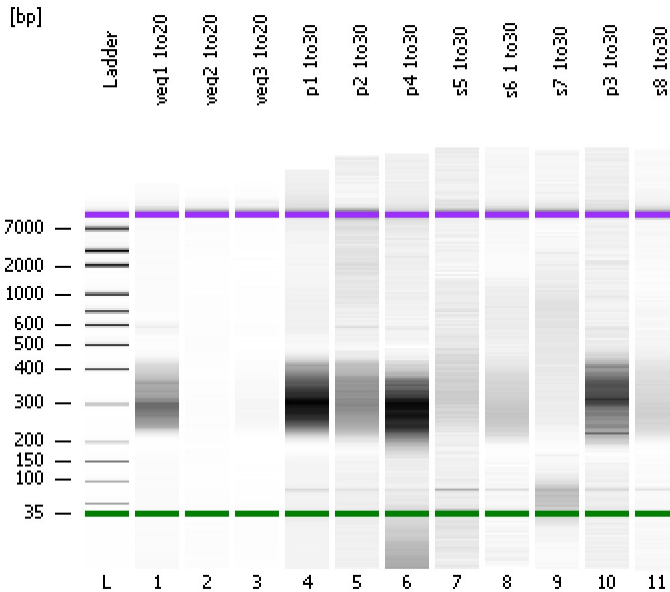


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-11\2013-10-11_004.xad

Created: 10/11/2013 1:21:35 PM
Modified: 10/11/2013 2:16:52 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

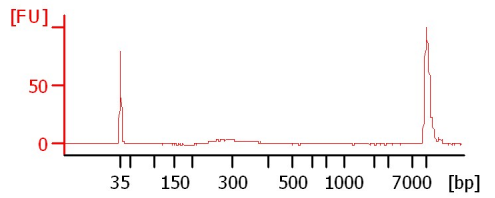
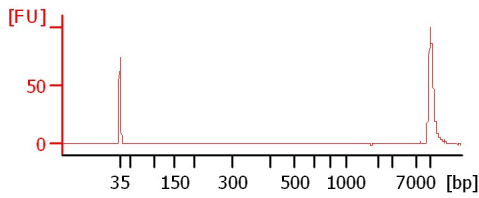
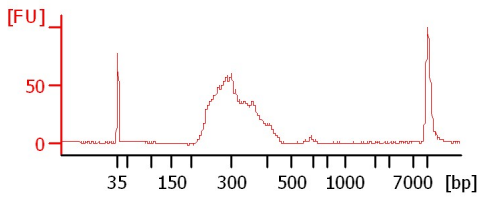
Chip Information:

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

veg1 1to20

veg2 1to20

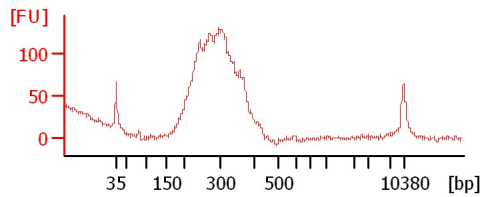
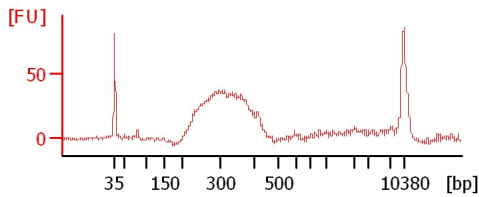
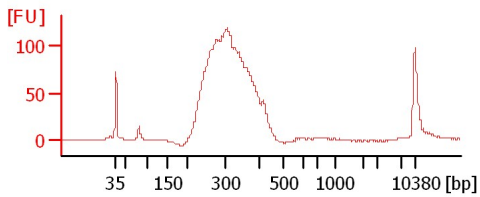
veg3 1to20



p1 1to30

p2 1to30

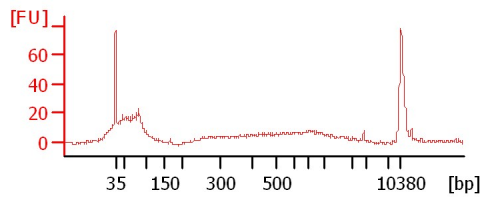
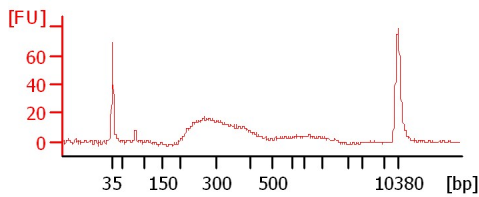
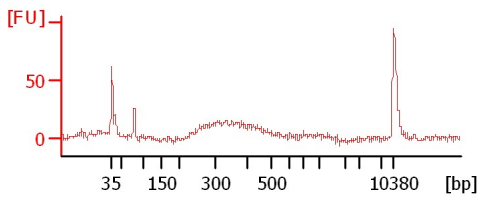
p4 1to30



s5 1to30

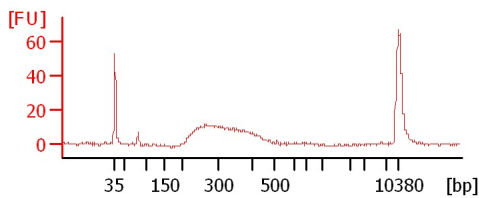
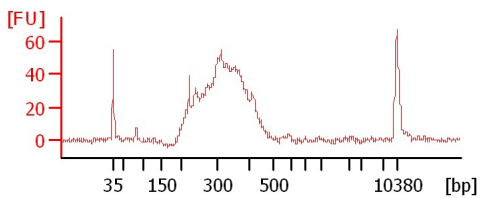
s6 1to30

s7 1to30



p3 1to30

s8 1to30



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-11\2013-10-11_004.xad

Created: 10/11/2013 1:21:35 PM
 Modified: 10/11/2013 2:16:52 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
veg1 1to20		<input type="checkbox"/>	✓			
veg2 1to20		<input type="checkbox"/>	✓			
veg3 1to20		<input type="checkbox"/>	✓			
p1 1to30		<input type="checkbox"/>	✓			
p2 1to30		<input type="checkbox"/>	✓			
p4 1to30		<input type="checkbox"/>	✓			
s5 1to30		<input type="checkbox"/>	✓			
s6 1 to30		<input type="checkbox"/>	✓			
s7 1to30		<input type="checkbox"/>	✓			
p3 1to30		<input type="checkbox"/>	✓			
s8 1to30		<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\2013-10-11\2013-10-11_004.xad

Created: 10/11/2013 1:21:35 PM
Modified: 10/11/2013 2:16:52 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

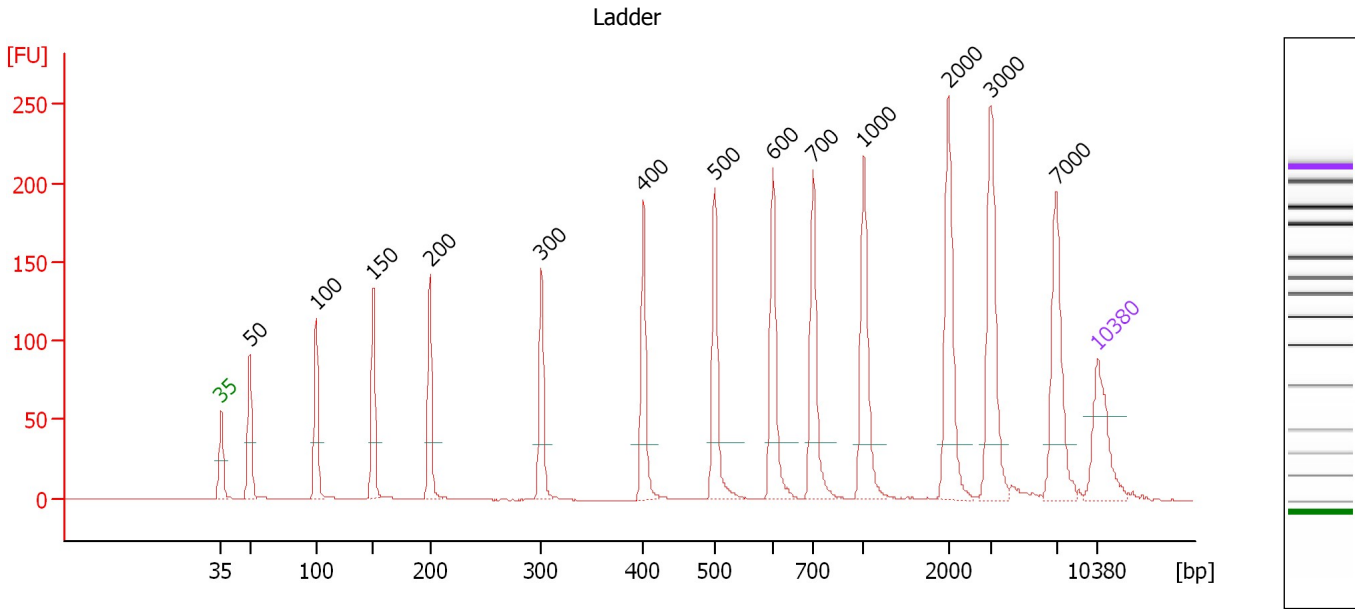
Ladder

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\2013-10-11\2013-10-11_004.xad

Created: 10/11/2013 1:21:35 PM
 Modified: 10/11/2013 2:16:52 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

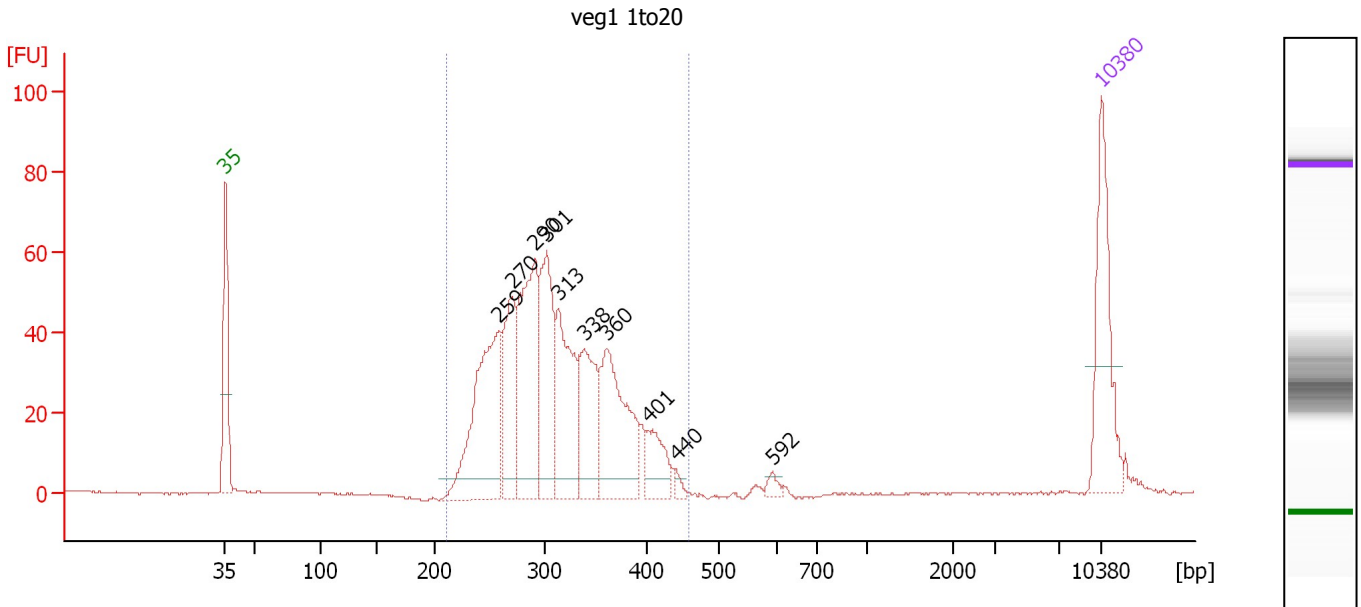
Peak table for Ladder

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\2013-10-11\2013-10-11_004.xad

Created: 10/11/2013 1:21:35 PM
 Modified: 10/11/2013 2:16:52 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : veg1 1to20

Number of peaks found: 10 Corr. Area 1: 841.0
 Noise: 0.2

Peak table for sample 1 : veg1 1to20

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	259	191.78	1,123.1	
3	270	98.61	554.0	
4	290	163.95	856.1	
5	301	123.13	619.3	
6	313	116.35	563.7	
7	338	89.70	402.2	
8	360	130.63	549.9	
9	401	37.99	143.5	
10	440	6.08	20.9	
11	592	6.48	16.6	
12	10,380	75.00	10.9	Upper Marker

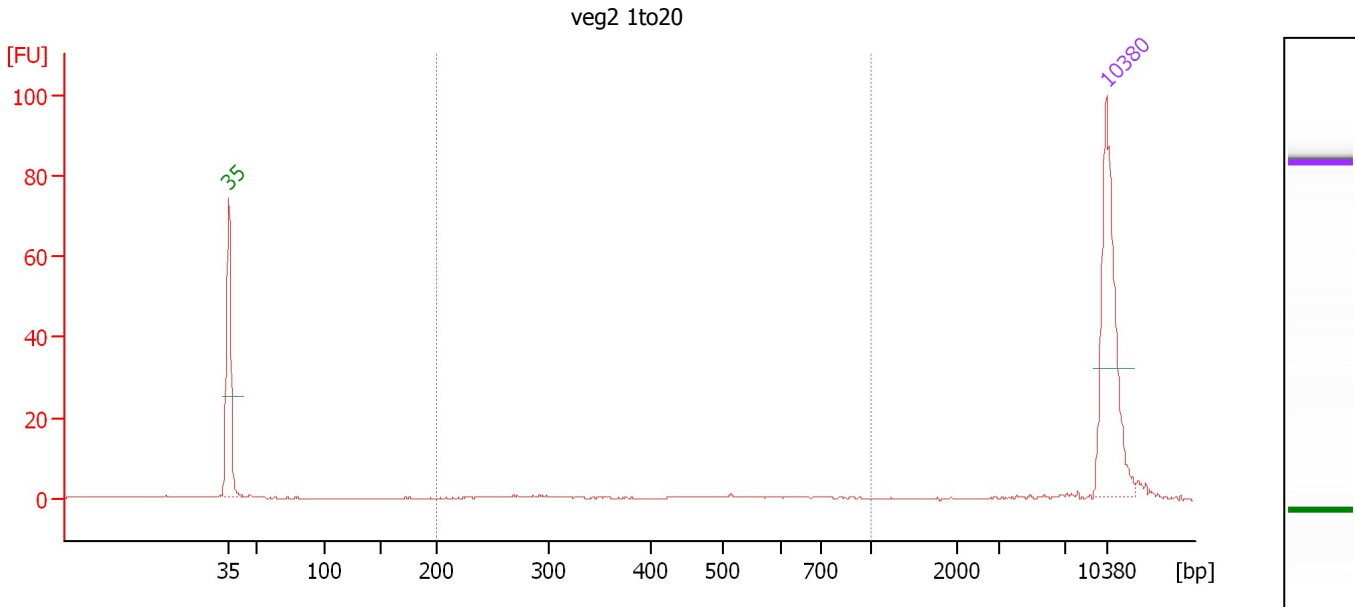
Region table for sample 1 : veg1 1to20

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
212	457	310	4,675.2	927.45	841.0	98	15.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-11\2013-10-11_004.xad

Created: 10/11/2013 1:21:35 PM
 Modified: 10/11/2013 2:16:52 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : veg2 1to20

Number of peaks found: 0 Corr. Area 1: 11.9
 Noise: 0.2

Peak table for sample 2 : veg2 1to20

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

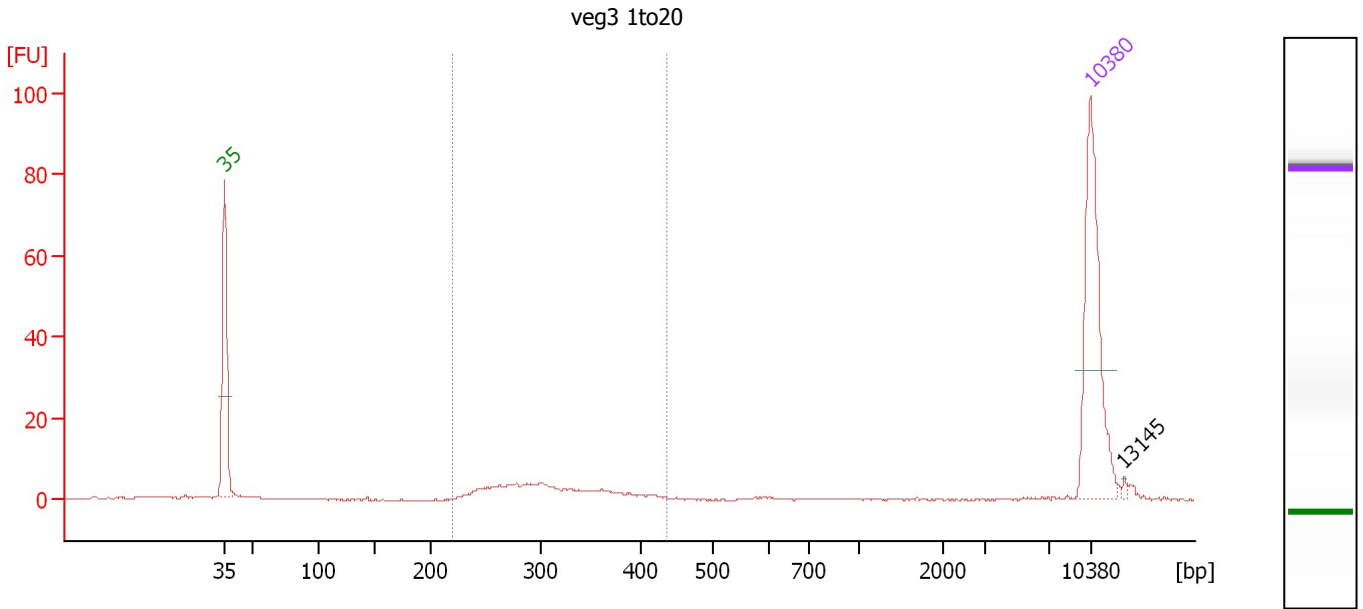
Region table for sample 2 : veg2 1to20

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	441	52.1	12.29	11.9	37	38.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-11\2013-10-11_004.xad

Created: 10/11/2013 1:21:35 PM
 Modified: 10/11/2013 2:16:52 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : veg3 1to20

Number of peaks found: 1 Corr. Area 1: 58.4
 Noise: 0.2

Peak table for sample 3 : veg3 1to20

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
3	13,145	0.00	0.0	

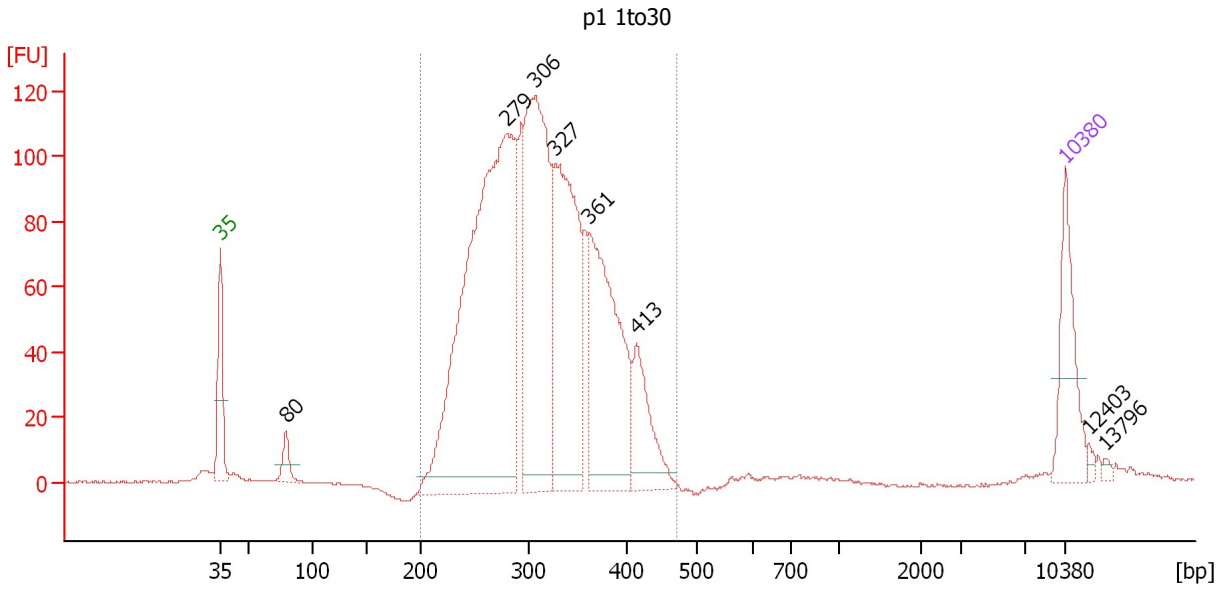
Region table for sample 3 : veg3 1to20

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
219	437	309	295.4	58.35	58.4	67	15.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-11\2013-10-11_004.xad

Created: 10/11/2013 1:21:35 PM
 Modified: 10/11/2013 2:16:52 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : p1 1to30

Number of peaks found: 8 Corr. Area 1: 1,999.8
 Noise: 0.2

Peak table for sample 4 : p1 1to30

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	80	28.40	540.2	
3	279	876.06	4,756.9	
4	306	428.53	2,119.9	
5	327	350.53	1,624.6	
6	361	302.06	1,269.2	
7	413	96.14	352.3	
8	10,380	75.00	10.9	Upper Marker
9	12,403	0.00	0.0	
10	13,796	0.00	0.0	

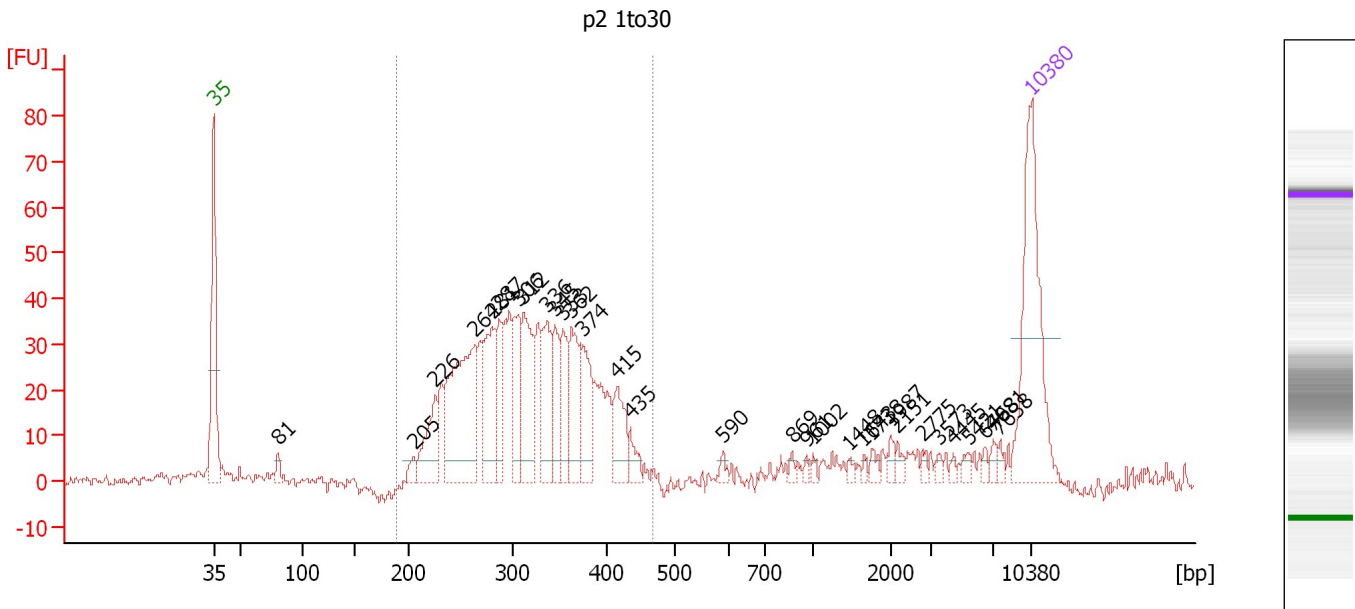
Region table for sample 4 : p1 1to30

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	472	313	10,529.4	2,101.81	1,999.8	96	16.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-11\2013-10-11_004.xad

Created: 10/11/2013 1:21:35 PM
 Modified: 10/11/2013 2:16:52 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : p2 1to30

Number of peaks found: 31 Corr. Area 1: 720.6
 Noise: 1.3

Peak table for sample 5 : p2 1to30

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	81	6.85	128.8	
3	205	7.39	54.6	
4	226	36.82	246.6	
5	264	113.01	648.5	
6	281	56.36	304.0	
7	287	30.84	162.8	
8	306	39.99	198.0	
9	312	53.30	259.2	
10	336	41.12	185.3	
11	345	27.24	119.7	
12	353	29.89	128.3	
13	362	38.10	159.4	
14	374	34.75	140.8	
15	415	27.71	101.2	
16	435	9.22	32.1	
17	590	3.52	9.1	
18	869	2.82	4.9	
19	961	2.14	3.4	
20	1,002	2.45	3.7	
21	1,448	2.07	2.2	
22	1,643	1.89	1.7	
23	1,738	3.76	3.3	
24	1,987	3.85	2.9	
25	2,151	3.30	2.3	
26	2,775	2.63	1.4	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-11\2013-10-11_004.xad


Created: 10/11/2013 1:21:35 PM
 Modified: 10/11/2013 2:16:52 PM

Electropherogram Summary Continued ...

... Peak table for sample 5 : p2 1to30

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	3,573	2.58	1.1	
28	4,445	1.87	0.6	
29	5,421	3.10	0.9	
30	6,468	2.29	0.5	
31	7,081	3.51	0.8	
32	7,638	2.82	0.6	
33	10,380	75.00	10.9	Upper Marker

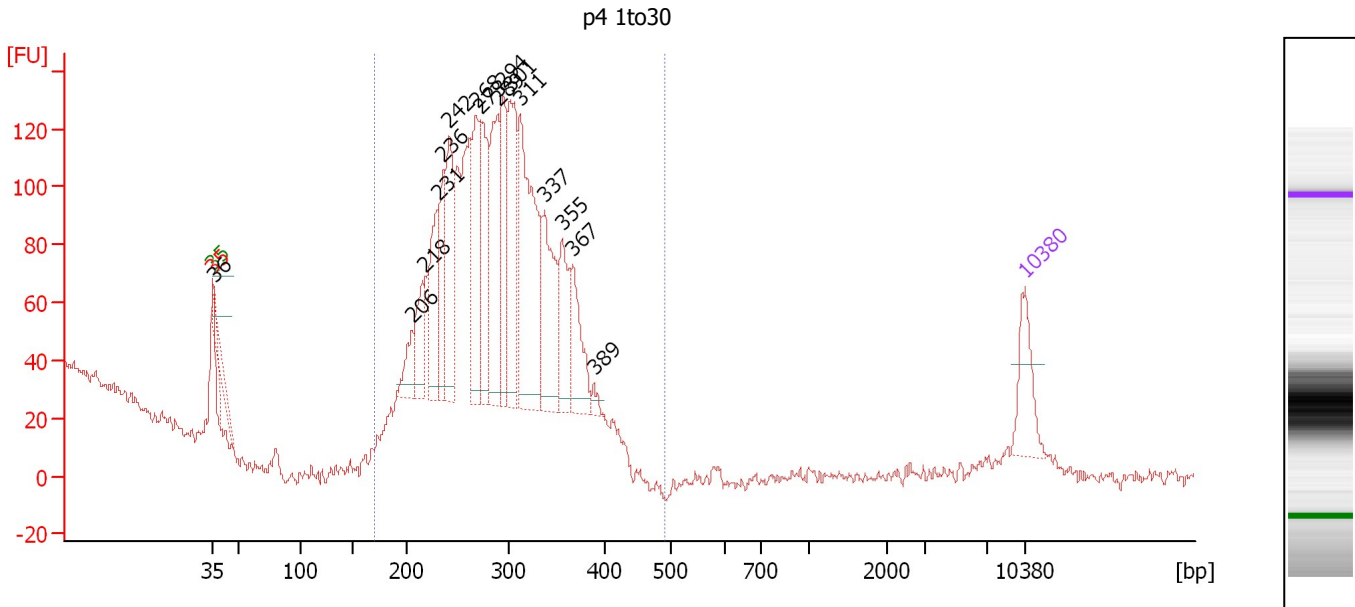
Region table for sample 5 : p2 1to30

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
188	468	317	3,469.4	694.27	720.6	84	18.0	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-11\2013-10-11_004.xad

Created: 10/11/2013 1:21:35 PM
 Modified: 10/11/2013 2:16:52 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : p4 1to30

Number of peaks found: 16 Corr. Area 1: 1,678.9
 Noise: 2.6

Peak table for sample 6 : p4 1to30

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	35	0.42	17.9	excluded peak
3	36	0.00	0.0	
4	206	62.39	459.1	
5	218	107.84	748.6	
6	231	159.18	1,043.7	
7	236	149.29	957.5	
8	242	216.01	1,353.1	
9	268	241.50	1,367.5	
10	273	184.09	1,022.8	
11	289	244.16	1,281.7	
12	294	180.11	928.9	
13	301	239.44	1,205.1	
14	311	418.58	2,041.5	
15	337	201.77	908.1	
16	355	132.13	563.5	
17	367	123.15	508.2	
18	389	12.84	50.0	
19	10,380	75.00	10.9	Upper Marker

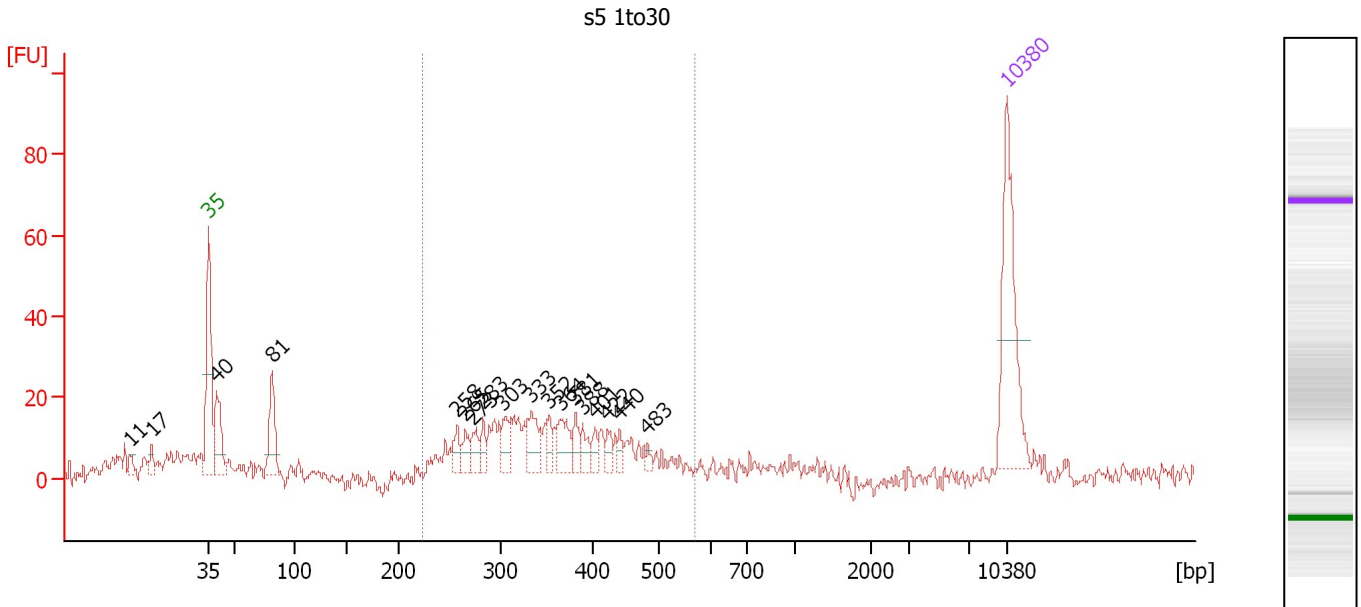
Region table for sample 6 : p4 1to30

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
170	492	289	16,530.1	3,067.38	1,678.9	100	15.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-11\2013-10-11_004.xad

Created: 10/11/2013 1:21:35 PM
 Modified: 10/11/2013 2:16:52 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : s5 1to30

Number of peaks found: 18 Corr. Area 1: 276.1
 Noise: 2.4

Peak table for sample 7 : s5 1to30

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	11	0.00	0.0	
2	17	0.00	0.0	
3	35	125.00	5,411.3	Lower Marker
4	40	49.47	1,893.9	
5	81	46.52	871.0	
6	258	14.40	84.7	
7	265	12.80	73.1	
8	273	14.33	79.6	
9	283	11.75	63.0	
10	303	19.46	97.4	
11	333	25.02	113.8	
12	352	11.70	50.4	
13	364	24.82	103.4	
14	381	11.40	45.3	
15	388	11.76	45.9	
16	401	7.87	29.7	
17	422	8.73	31.4	
18	440	6.95	23.9	
19	483	4.17	13.1	
20	10,380	75.00	10.9	Upper Marker

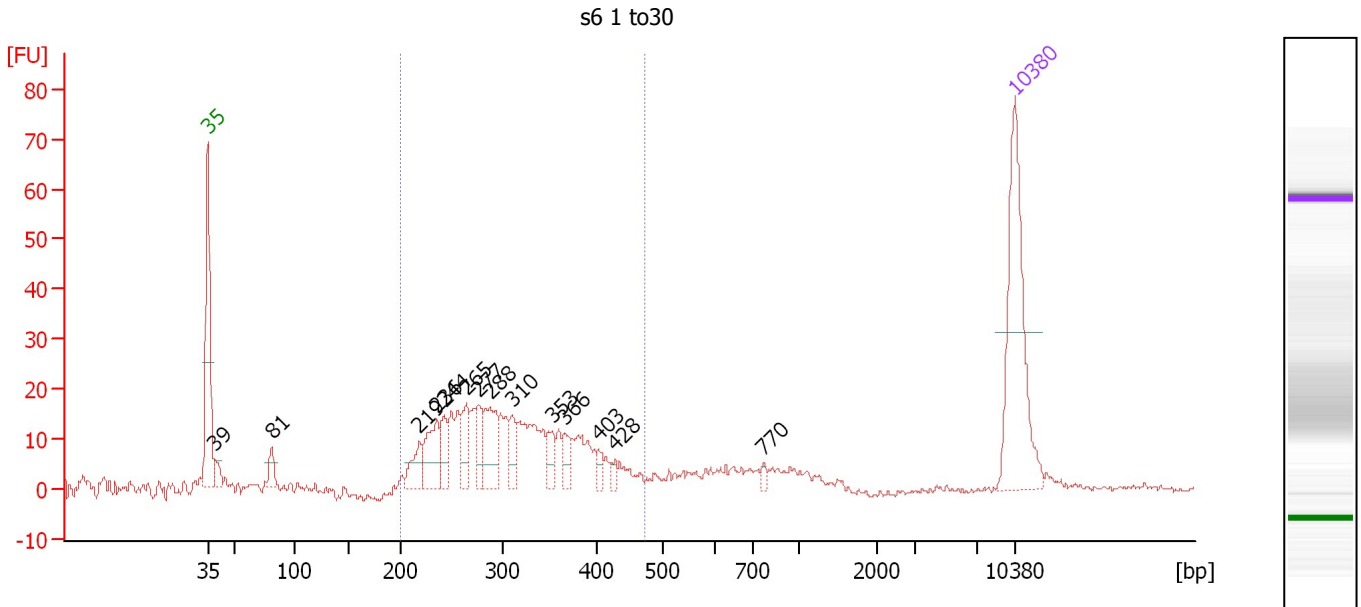
Region table for sample 7 : s5 1to30

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
224	570	355	1,459.6	322.23	276.1	60	20.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-11\2013-10-11_004.xad

Created: 10/11/2013 1:21:35 PM
 Modified: 10/11/2013 2:16:52 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : s6 1 to30

Number of peaks found: 14 Corr. Area 1: 363.6
 Noise: 0.6

Peak table for sample 8 : s6 1 to30

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	39	10.73	417.8	
3	81	12.89	241.8	
4	219	18.86	130.7	
5	236	33.97	218.3	
6	244	18.46	114.8	
7	265	21.72	124.3	
8	277	17.28	94.6	
9	288	36.41	191.9	
10	310	14.94	73.0	
11	353	13.07	56.1	
12	366	11.54	47.8	
13	403	5.92	22.2	
14	428	4.67	16.5	
15	770	2.92	5.7	
16	10,380	75.00	10.9	Upper Marker

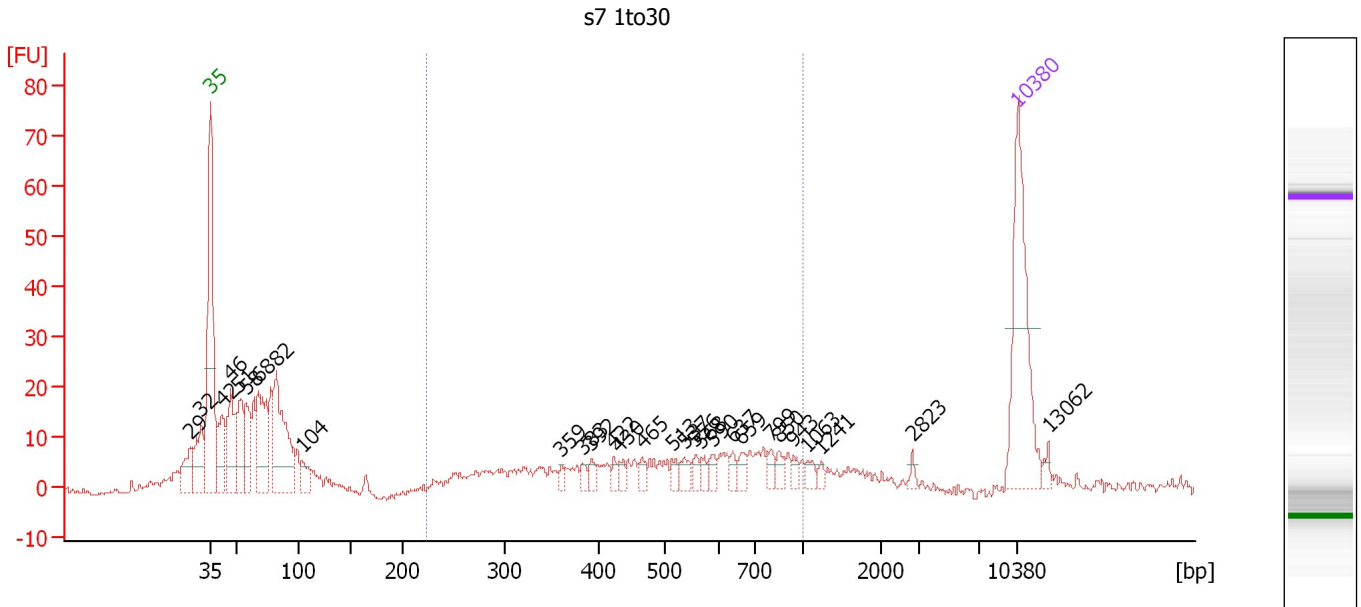
Region table for sample 8 : s6 1 to30

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	475	310	2,115.0	410.85	363.6	64	20.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-11\2013-10-11_004.xad

Created: 10/11/2013 1:21:35 PM
 Modified: 10/11/2013 2:16:52 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : s7 1to30

Number of peaks found: 29 Corr. Area 1: 186.5
 Noise: 0.4

Peak table for sample 9 : s7 1to30

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	29	0.00	0.0	
2	32	0.00	0.0	
3	35	125.00	5,411.3	Lower Marker
4	42	42.88	1,560.6	
5	46	51.70	1,685.9	
6	51	45.05	1,327.1	
7	58	37.68	991.9	
8	68	67.25	1,506.6	
9	82	94.26	1,739.9	
10	104	15.49	226.6	
11	359	4.90	20.7	
12	383	5.42	21.5	
13	392	5.84	22.6	
14	422	5.04	18.1	
15	430	5.83	20.5	
16	465	6.27	20.4	
17	513	5.44	16.1	
18	537	8.66	24.4	
19	556	5.69	15.5	
20	568	4.62	12.3	
21	590	6.34	16.3	
22	637	4.91	11.7	
23	659	7.00	16.1	
24	799	5.87	11.1	
25	850	5.66	10.1	
26	943	4.70	7.6	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-11\2013-10-11_004.xad

Created: 10/11/2013 1:21:35 PM
 Modified: 10/11/2013 2:16:52 PM

Electropherogram Summary Continued ...

... Peak table for sample 9 : s7 1to30

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	1,063	5.17	7.4	
28	1,241	3.14	3.8	
29	2,823	2.81	1.5	
30	10,380	75.00	10.9	Upper Marker
31	13,062	0.00	0.0	

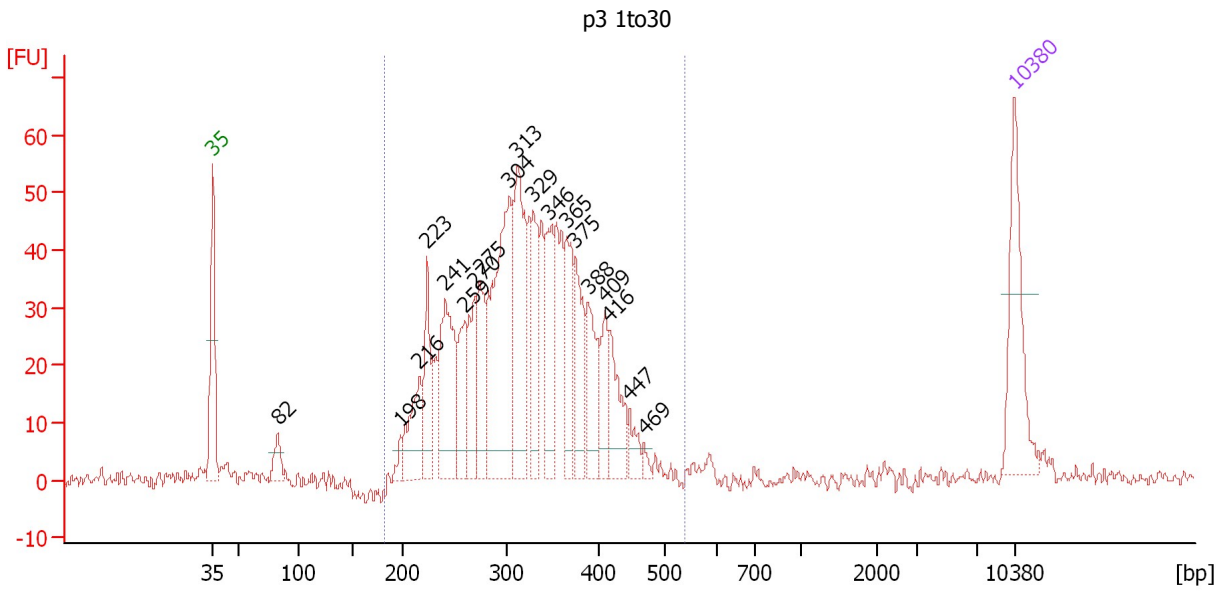
Region table for sample 9 : s7 1to30

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
222	1,000	521	771.9	217.79	186.5	34	36.5	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-11\2013-10-11_004.xad

Created: 10/11/2013 1:21:35 PM
 Modified: 10/11/2013 2:16:52 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : p3 1to30

Number of peaks found: 19 Corr. Area 1: 931.2
 Noise: 1.2

Peak table for sample 10 : p3 1to30

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	82	24.66	455.6	
3	198	11.81	90.6	
4	216	68.52	481.2	
5	223	59.84	406.5	
6	241	125.96	791.0	
7	259	56.95	332.5	
8	270	61.52	344.7	
9	275	76.30	421.0	
10	304	234.52	1,168.5	
11	313	144.09	698.2	
12	329	72.85	335.2	
13	346	76.28	333.6	
14	365	68.45	283.9	
15	375	64.96	262.4	
16	388	62.01	242.0	
17	409	42.90	158.8	
18	416	55.24	201.2	
19	447	18.62	63.1	
20	469	6.31	20.4	
21	10,380	75.00	10.9	Upper Marker

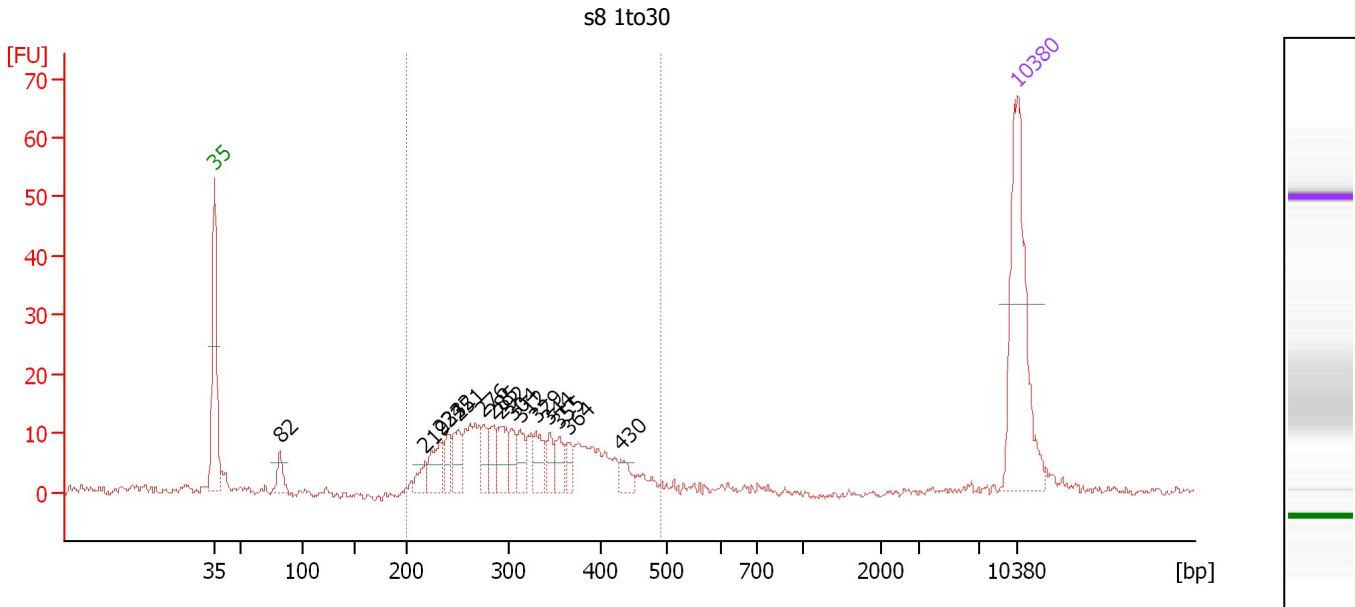
Region table for sample 10 : p3 1to30

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
181	540	322	7,750.4	1,560.25	931.2	92	19.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-11\2013-10-11_004.xad

Created: 10/11/2013 1:21:35 PM
 Modified: 10/11/2013 2:16:52 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : s8 1to30

Number of peaks found: 15 Corr. Area 1: 214.4
 Noise: 0.7

Peak table for sample 11 : s8 1to30

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	82	13.47	249.1	
3	219	9.71	67.3	
4	233	23.47	152.5	
5	242	13.31	83.3	
6	251	19.15	115.4	
7	276	13.53	74.4	
8	285	15.06	80.1	
9	292	21.32	110.7	
10	304	12.73	63.5	
11	312	14.36	69.7	
12	329	15.50	71.3	
13	344	10.05	44.2	
14	355	12.11	51.7	
15	364	8.07	33.6	
16	430	8.50	30.0	
17	10,380	75.00	10.9	Upper Marker

Region table for sample 11 : s8 1to30

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	492	316	1,368.0	271.38	214.4	93	19.7	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-11\2013-10-11_004.xad

Created: 10/11/2013 1:21:35 PM
Modified: 10/11/2013 2:16:52 PM

Gel Image

