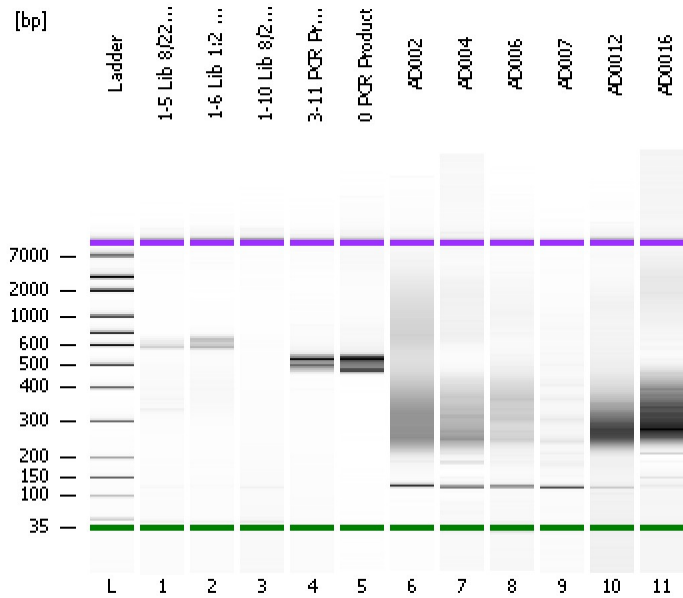


Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-22\2012-08-22_004.xad

Created: 8/22/2012 4:50:33 PM
 Modified: 8/22/2012 5:43:22 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

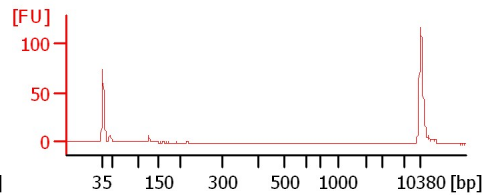
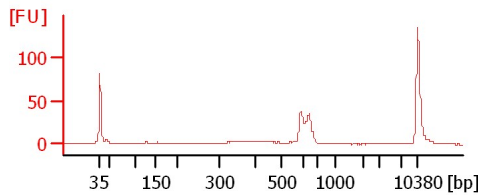
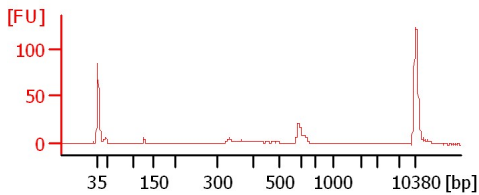
Chip Information:

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

1-5 Lib 8/22/12

1-6 Lib 1:2 8/22/12

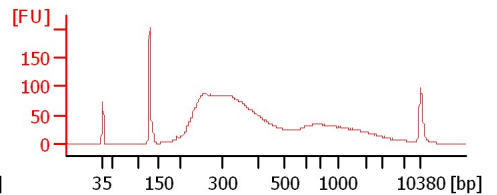
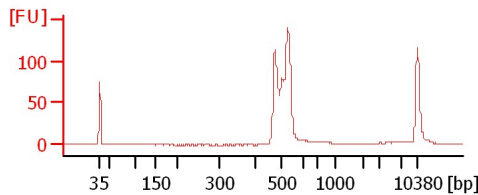
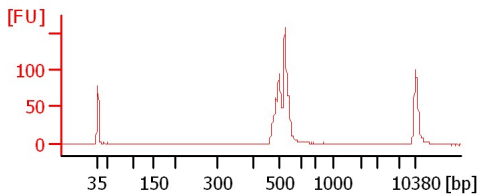
1-10 Lib 8/22/12



3-11 PCR Product

0 PCR Product

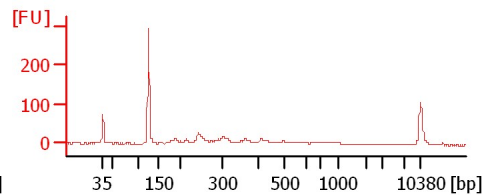
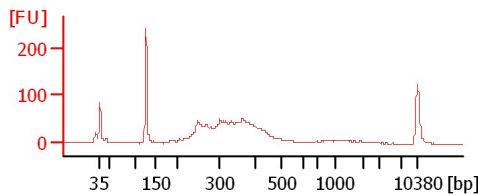
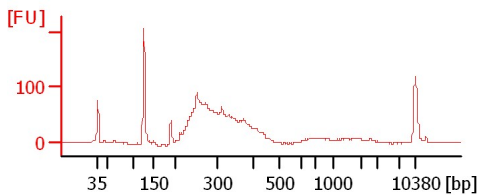
AD002



AD004

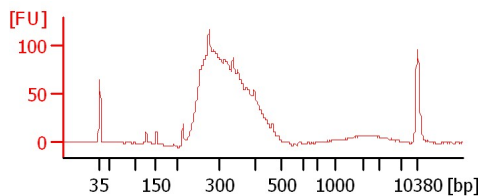
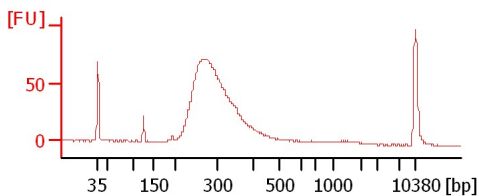
AD006

AD007



AD0012

AD0016



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-22\2012-08-22_004.xad

Created: 8/22/2012 4:50:33 PM
 Modified: 8/22/2012 5:43:22 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
1-5 Lib 8/22/12		<input type="checkbox"/>	✓			
1-6 Lib 1:2 8/22/12		<input type="checkbox"/>	✓			
1-10 Lib 8/22/12		<input type="checkbox"/>	✓			
3-11 PCR Product		<input type="checkbox"/>	✓			
0 PCR Product		<input type="checkbox"/>	✓			
AD002		<input type="checkbox"/>	✓			
AD004		<input type="checkbox"/>	✓			
AD006		<input type="checkbox"/>	✓			
AD007		<input type="checkbox"/>	✓			
AD0012		<input type="checkbox"/>	✓			
AD0016		<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\2012-08-22\2012-08-22_004.xad

Created: 8/22/2012 4:50:33 PM
Modified: 8/22/2012 5:43:22 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

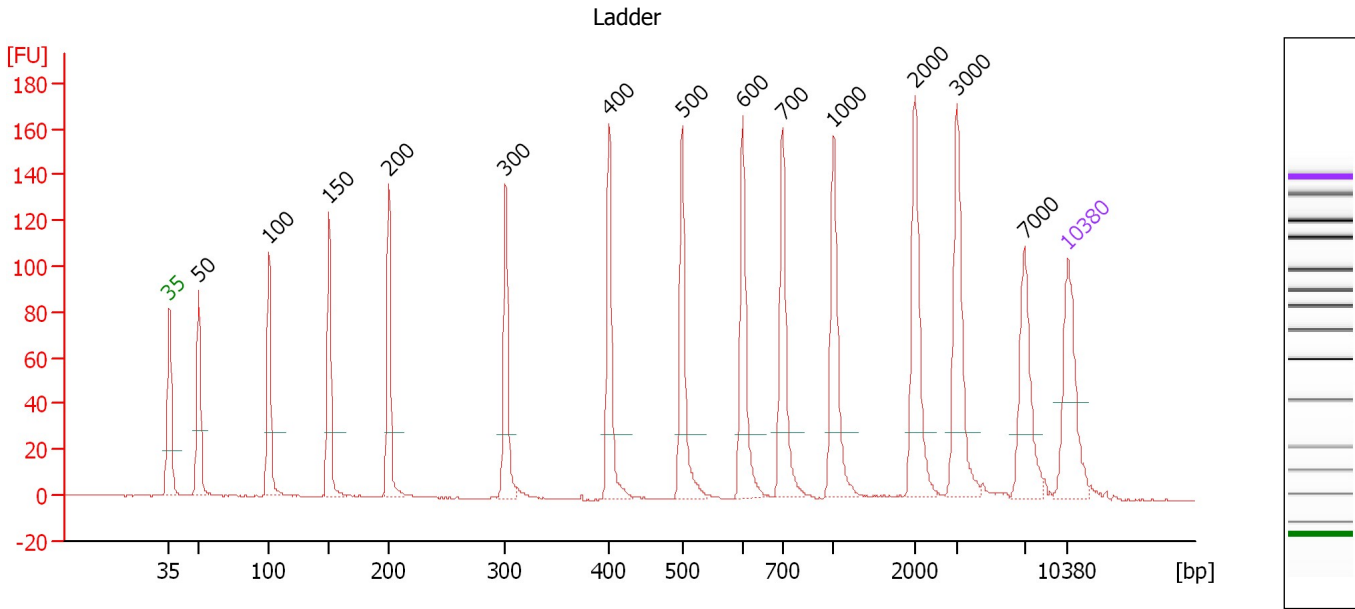
Ladder

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\2012-08-22\2012-08-22_004.xad

Created: 8/22/2012 4:50:33 PM
 Modified: 8/22/2012 5:43:22 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

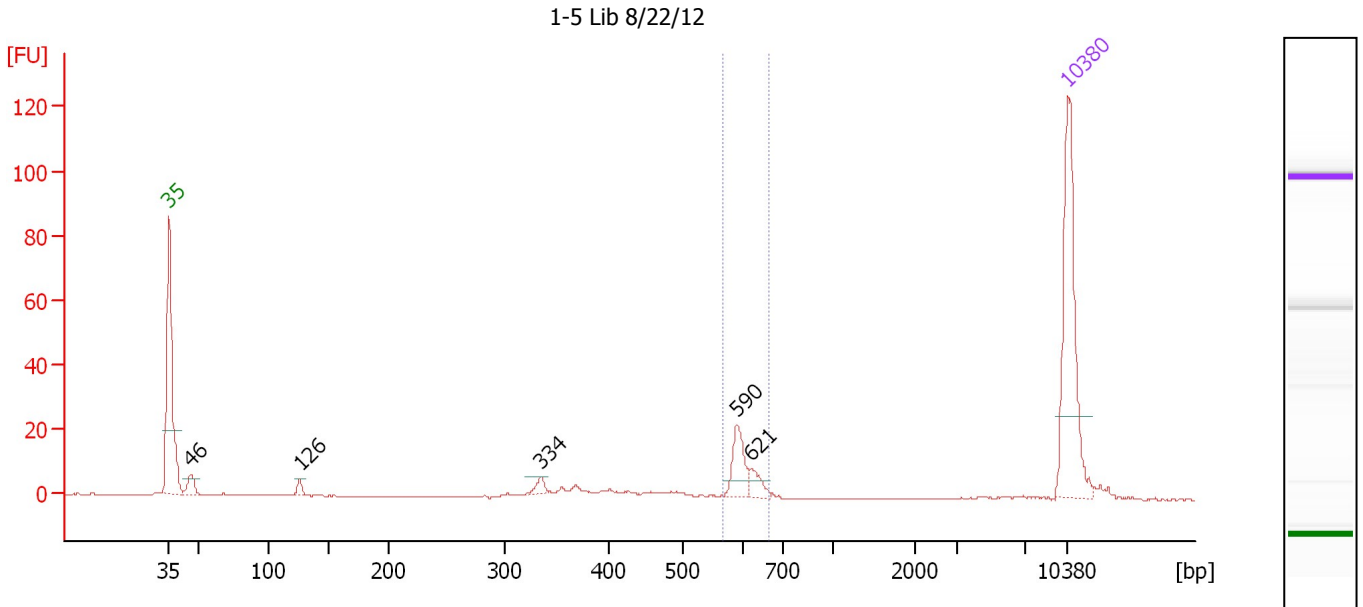
Peak table for Ladder

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\2012-08-22\2012-08-22_004.xad

Created: 8/22/2012 4:50:33 PM
 Modified: 8/22/2012 5:43:22 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : 1-5 Lib 8/22/12

Number of peaks found: 5 Corr. Area 1: 39.6
 Noise: 0.1

Peak table for sample 1 : 1-5 Lib 8/22/12

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	46	12.26	405.4	
3	126	5.23	63.2	
4	334	5.63	25.5	
5	590	22.22	57.0	
6	621	9.66	23.6	
7	10,380	75.00	10.9	Upper Marker

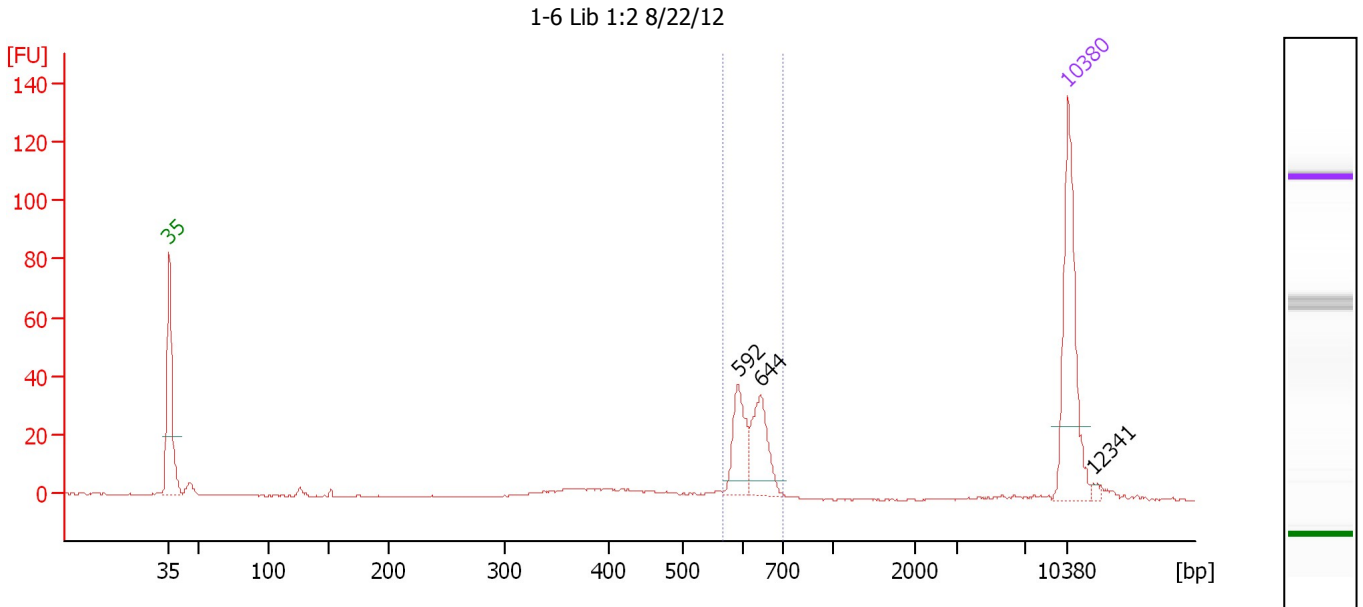
Region table for sample 1 : 1-5 Lib 8/22/12

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
569	666	606	80.8	32.26	39.6	38	3.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-22\2012-08-22_004.xad

Created: 8/22/2012 4:50:33 PM
 Modified: 8/22/2012 5:43:22 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : 1-6 Lib 1:2 8/22/12

Number of peaks found: 3 Corr. Area 1: 113.1
 Noise: 0.2

Peak table for sample 2 : 1-6 Lib 1:2 8/22/12

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	592	38.56	98.6	
3	644	44.27	104.2	
4	10,380	75.00	10.9	Upper Marker
5	12,341	0.00	0.0	

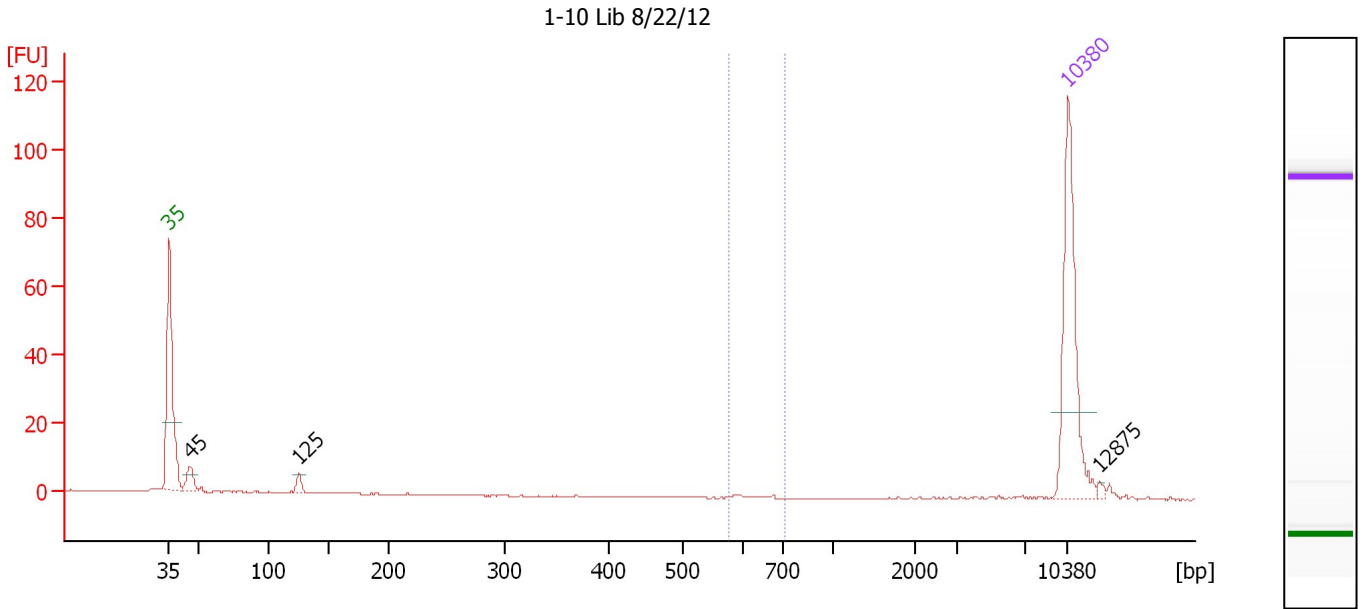
Region table for sample 2 : 1-6 Lib 1:2 8/22/12

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
568	699	621	209.1	85.60	113.1	66	4.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-22\2012-08-22_004.xad

Created: 8/22/2012 4:50:33 PM
 Modified: 8/22/2012 5:43:22 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : 1-10 Lib 8/22/12

Number of peaks found: 3 Corr. Area 1: 0.4
 Noise: 0.1

Peak table for sample 3 : 1-10 Lib 8/22/12

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	45	15.46	516.3	
3	125	6.82	82.7	
4	10,380	75.00	10.9	Upper Marker
5	12,875	0.00	0.0	

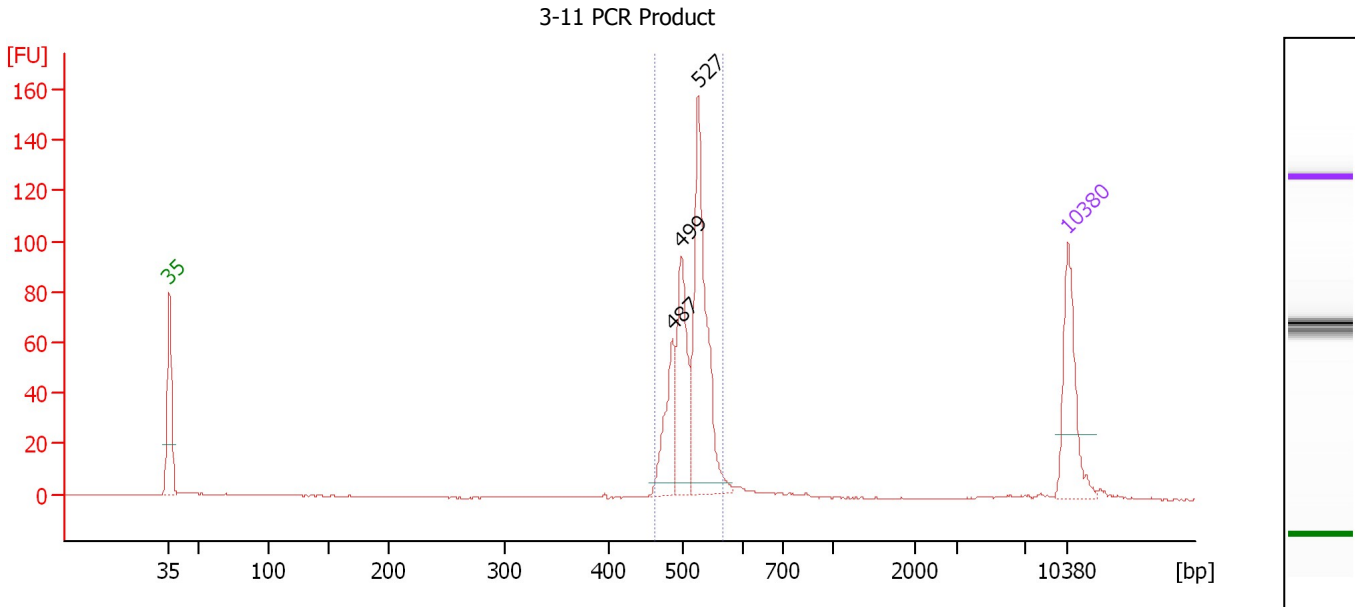
Region table for sample 3 : 1-10 Lib 8/22/12

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
577	708	618	0.9	0.36	0.4	1	5.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-22\2012-08-22_004.xad

Created: 8/22/2012 4:50:33 PM
 Modified: 8/22/2012 5:43:22 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : 3-11 PCR Product

Number of peaks found: 3 Corr. Area 1: 385.3
 Noise: 0.1

Peak table for sample 4 : 3-11 PCR Product

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	487	77.08	239.7	
3	499	111.72	339.4	
4	527	218.32	627.7	
5	10,380	75.00	10.9	Upper Marker

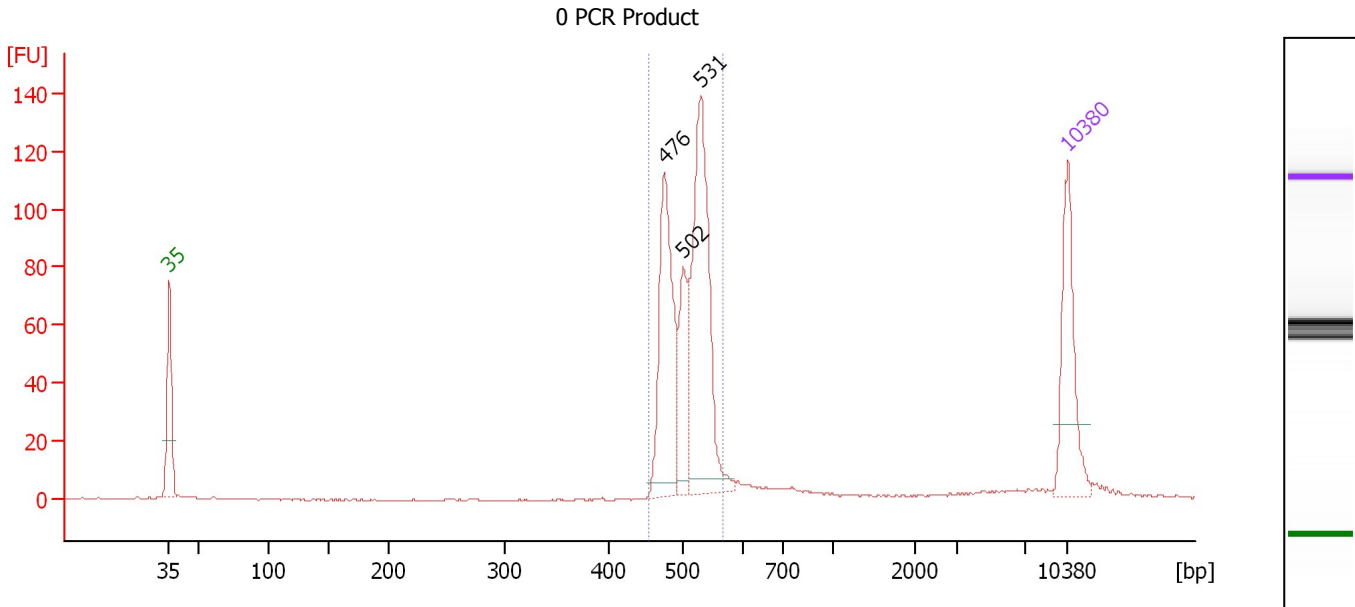
Region table for sample 4 : 3-11 PCR Product

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
463	567	515	1,197.0	405.79	385.3	90	4.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-22\2012-08-22_004.xad

Created: 8/22/2012 4:50:33 PM
 Modified: 8/22/2012 5:43:22 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : 0 PCR Product

Number of peaks found: 3 Corr. Area 1: 507.9
 Noise: 0.2

Peak table for sample 5 : 0 PCR Product

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	476	164.99	525.2	
3	502	66.20	199.7	
4	531	227.75	649.9	
5	10,380	75.00	10.9	Upper Marker

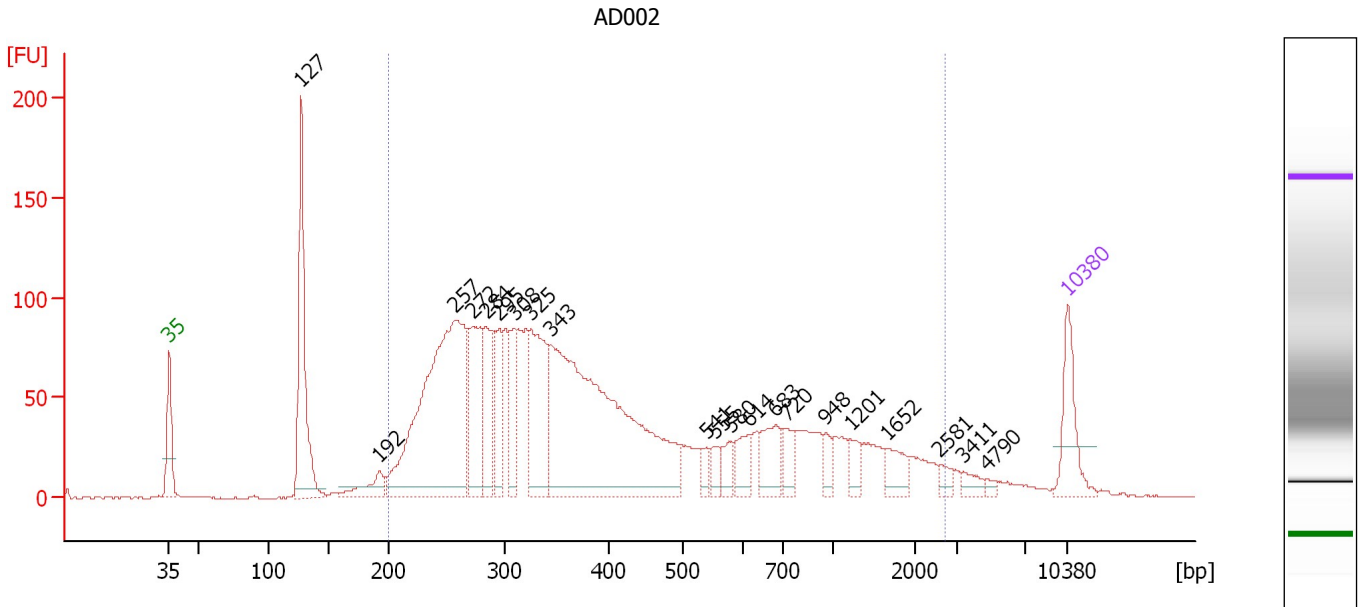
Region table for sample 5 : 0 PCR Product

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
455	566	509	1,389.3	465.32	507.9	84	5.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-22\2012-08-22_004.xad

Created: 8/22/2012 4:50:33 PM
 Modified: 8/22/2012 5:43:22 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : AD002

Number of peaks found: 21 Corr. Area 1: 2,662.9
 Noise: 0.3


Peak table for sample 6 : AD002

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	127	350.64	4,179.2	
3	192	57.04	449.6	
4	257	743.74	4,386.5	
5	272	210.16	1,170.5	
6	284	113.61	607.0	
7	295	101.54	522.4	
8	308	106.39	523.4	
9	325	223.50	1,043.6	
10	343	867.11	3,826.1	
11	541	20.05	56.2	
12	555	23.31	63.6	
13	580	30.04	78.5	
14	614	46.93	115.8	
15	683	74.12	164.5	
16	720	37.08	78.0	
17	948	25.10	40.1	
18	1,201	25.17	31.8	
19	1,652	40.81	37.4	
20	2,581	14.23	8.4	
21	3,411	16.08	7.1	
22	4,790	6.06	1.9	
23	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-22\2012-08-22_004.xad

Created: 8/22/2012 4:50:33 PM
Modified: 8/22/2012 5:43:22 PM

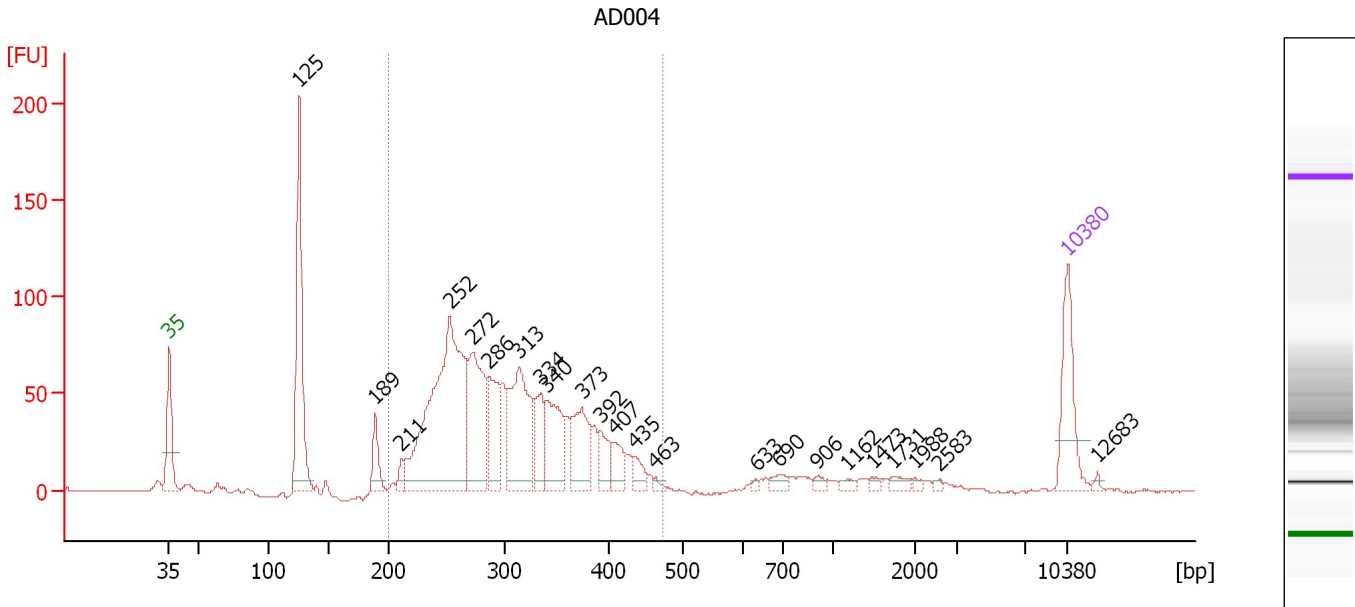
Electropherogram Summary Continued ...**... Region table for sample 6 : AD002**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Co lor
200	2,704	532	14,101.0	3,225.18	2,662.9	88	82.9	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-22\2012-08-22_004.xad

Created: 8/22/2012 4:50:33 PM
 Modified: 8/22/2012 5:43:22 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : AD004

Number of peaks found: 23 Corr. Area 1: 1,260.4
 Noise: 0.3


Peak table for sample 7 : AD004

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	125	281.48	3,411.7	
3	189	44.11	354.3	
4	211	17.13	123.0	
5	252	482.45	2,898.1	
6	272	176.95	986.6	
7	286	85.90	455.1	
8	313	183.20	885.9	
9	334	61.47	279.2	
10	340	98.68	440.4	
11	373	89.29	362.3	
12	392	34.72	134.2	
13	407	35.43	131.9	
14	435	21.31	74.2	
15	463	5.30	17.3	
16	633	3.24	7.8	
17	690	11.98	26.3	
18	906	6.51	10.9	
19	1,162	6.14	8.0	
20	1,473	4.97	5.1	
21	1,731	8.69	7.6	
22	1,988	3.81	2.9	
23	2,583	3.07	1.8	
24	10,380	75.00	10.9	Upper Marker
25	12,683	0.00	0.0	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-22\2012-08-22_004.xad

Created: 8/22/2012 4:50:33 PM
Modified: 8/22/2012 5:43:22 PM

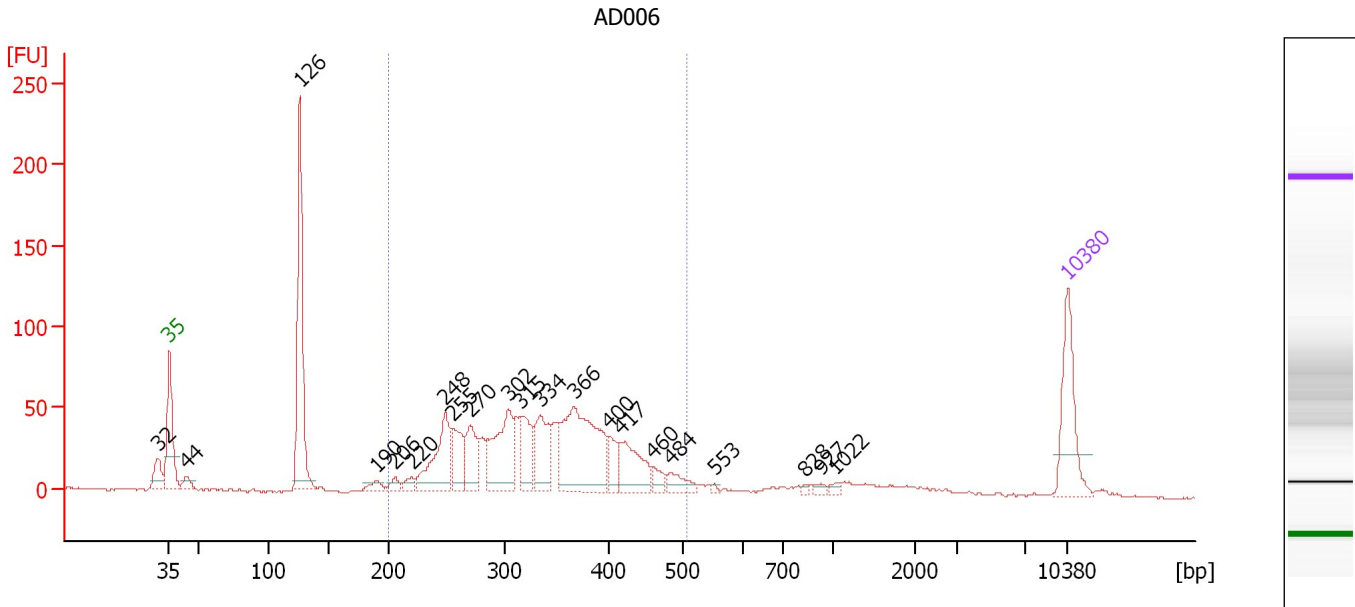
Electropherogram Summary Continued ...**... Region table for sample 7 : AD004**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Co lor
200	473	307	7,386.0	1,430.18	1,260.4	78	18.8	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-22\2012-08-22_004.xad

Created: 8/22/2012 4:50:33 PM
 Modified: 8/22/2012 5:43:22 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : AD006

Number of peaks found: 21 Corr. Area 1: 1,030.2
 Noise: 0.7


Peak table for sample 8 : AD006

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	32	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	44	15.45	535.0	
4	126	267.65	3,221.2	
5	190	11.59	92.2	
6	206	11.16	82.2	
7	220	11.87	81.6	
8	248	108.74	663.8	
9	255	59.61	354.9	
10	270	60.00	336.9	
11	302	118.79	595.6	
12	315	62.30	300.0	
13	334	77.86	353.6	
14	366	203.16	841.6	
15	400	30.79	116.5	
16	417	69.81	253.9	
17	460	15.45	50.9	
18	484	23.67	74.2	
19	553	2.96	8.1	
20	828	3.10	5.7	
21	927	5.18	8.5	
22	1,022	4.97	7.4	
23	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-22\2012-08-22_004.xad

Created: 8/22/2012 4:50:33 PM
Modified: 8/22/2012 5:43:22 PM

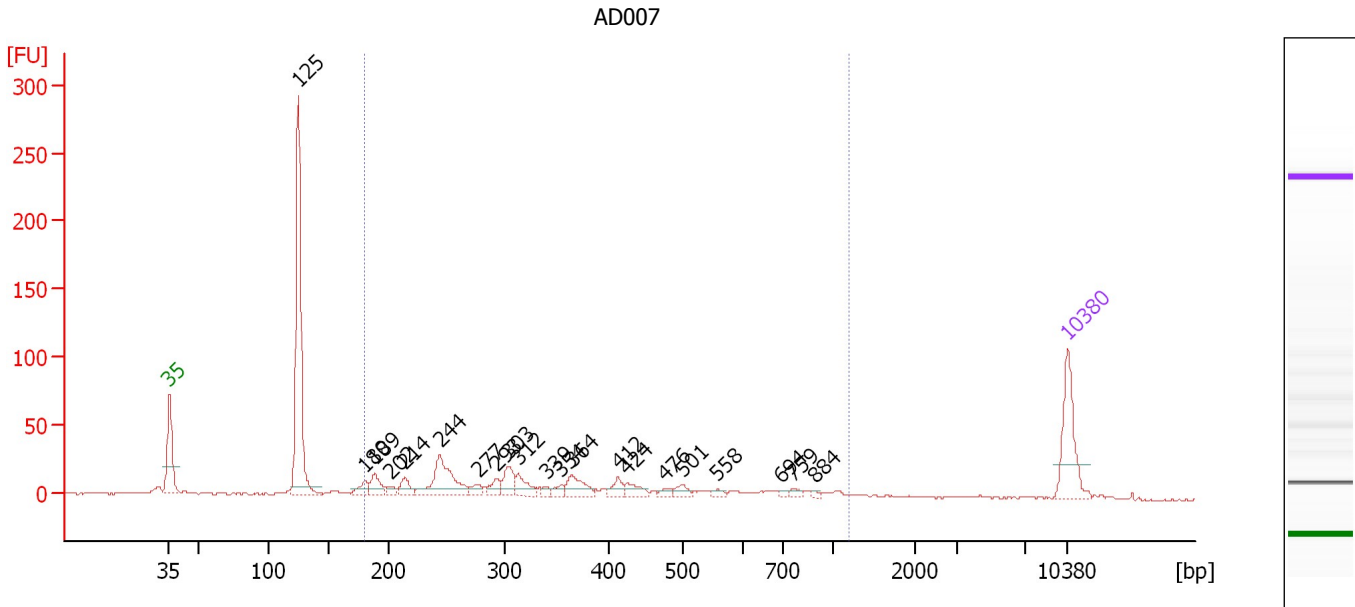
Electropherogram Summary Continued ...**... Region table for sample 8 : AD006**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Co lor
200	507	336	4,655.5	977.51	1,030.2	70	19.8	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-22\2012-08-22_004.xad

Created: 8/22/2012 4:50:33 PM
 Modified: 8/22/2012 5:43:22 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : AD007

Number of peaks found: 21 Corr. Area 1: 396.9
 Noise: 0.3


Peak table for sample 9 : AD007

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	125	399.09	4,845.7	
3	180	21.52	180.9	
4	189	30.61	245.9	
5	202	11.38	85.5	
6	214	23.24	164.4	
7	244	103.62	643.7	
8	277	14.21	77.8	
9	293	19.67	101.9	
10	303	35.02	175.2	
11	312	28.55	138.7	
12	339	7.70	34.4	
13	354	10.76	46.1	
14	364	35.88	149.4	
15	412	17.08	62.8	
16	424	19.66	70.2	
17	476	7.89	25.1	
18	501	13.29	40.2	
19	558	6.54	17.7	
20	694	4.21	9.2	
21	759	6.95	13.9	
22	884	3.32	5.7	
23	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-22\2012-08-22_004.xad

Created: 8/22/2012 4:50:33 PM
Modified: 8/22/2012 5:43:22 PM

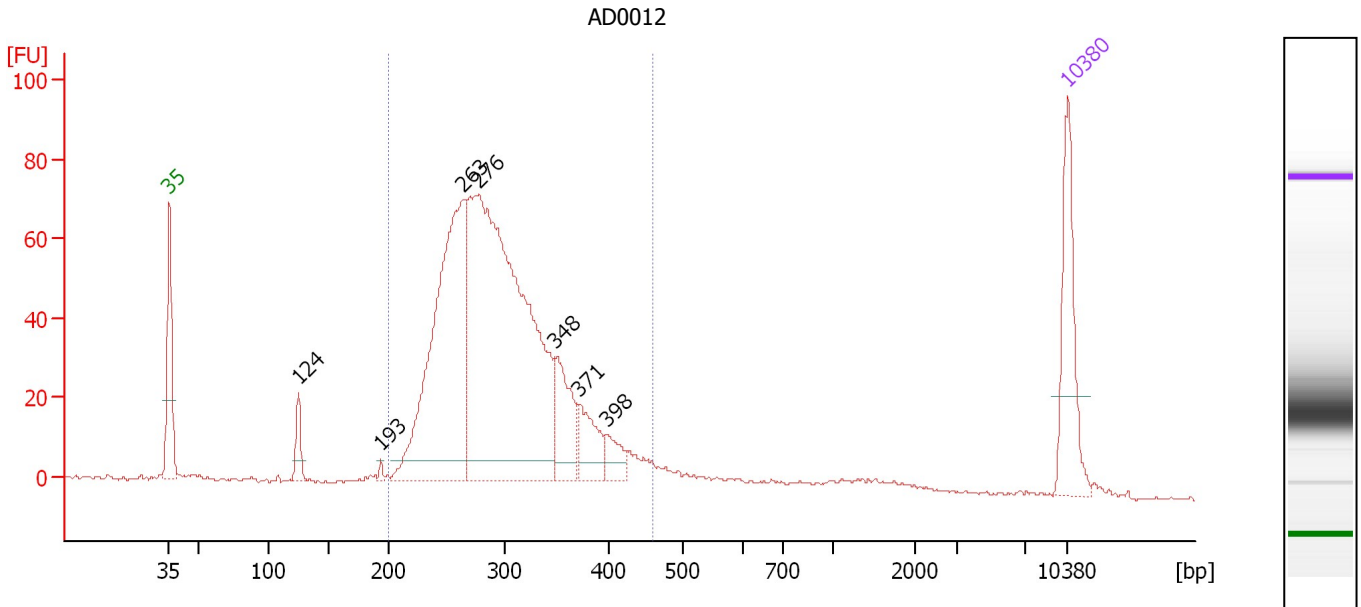
Electropherogram Summary Continued ...**... Region table for sample 9 : AD007**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Co lor
179	1,193	389	2,326.1	465.05	396.9	55	49.1	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-22\2012-08-22_004.xad

Created: 8/22/2012 4:50:33 PM
 Modified: 8/22/2012 5:43:22 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : AD0012

Number of peaks found: 7 Corr. Area 1: 1,051.4
 Noise: 0.3

Peak table for sample 10 : AD0012

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	124	27.96	340.5	
3	193	3.85	30.2	
4	263	402.80	2,316.8	
5	276	718.15	3,939.6	
6	348	75.49	329.0	
7	371	48.83	199.4	
8	398	24.00	91.3	
9	10,380	75.00	10.9	Upper Marker

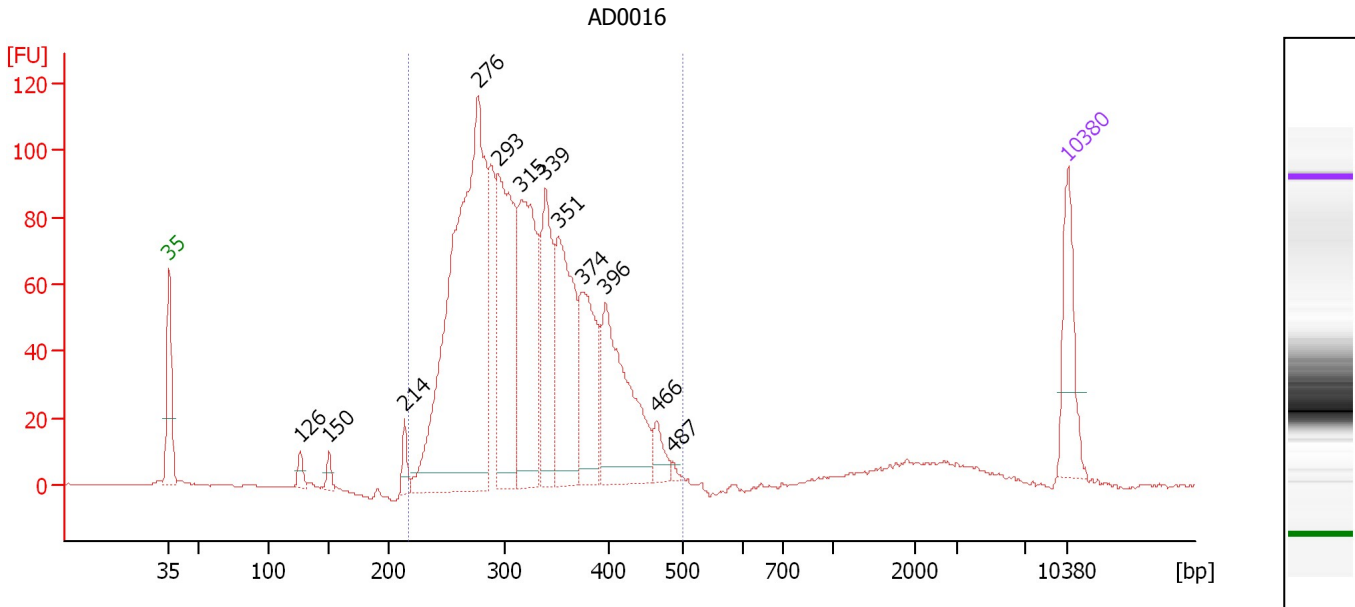
Region table for sample 10 : AD0012

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	460	299	6,892.4	1,315.00	1,051.4	88	16.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-22\2012-08-22_004.xad

Created: 8/22/2012 4:50:33 PM
 Modified: 8/22/2012 5:43:22 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : AD0016

Number of peaks found: 12 Corr. Area 1: 1,637.3
 Noise: 0.1

Peak table for sample 11 : AD0016

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	126	17.21	206.3	
3	150	16.17	163.2	
4	214	26.08	184.6	
5	276	806.92	4,425.5	
6	293	321.65	1,660.9	
7	315	292.01	1,404.6	
8	339	182.03	814.5	
9	351	226.89	978.5	
10	374	160.74	650.6	
11	396	226.19	865.1	
12	466	28.36	92.3	
13	487	4.63	14.4	
14	10,380	75.00	10.9	Upper Marker

Region table for sample 11 : AD0016

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
218	502	325	11,387.0	2,345.73	1,637.3	94	17.3	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-22\2012-08-22_004.xad

Created: 8/22/2012 4:50:33 PM
Modified: 8/22/2012 5:43:22 PM

Gel Image

