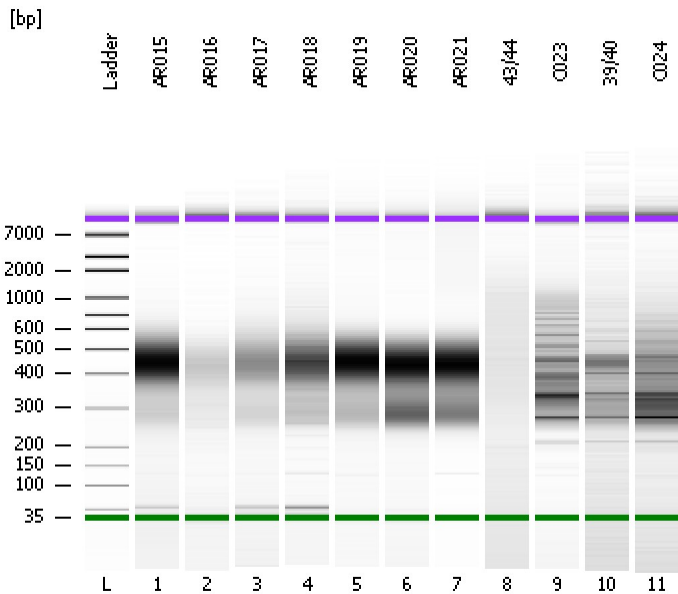


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-06\2012-03-06_008.xad

Created: 3/6/2012 4:16:39 PM
Modified: 3/8/2012 2:41:52 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

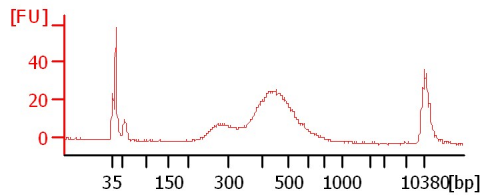
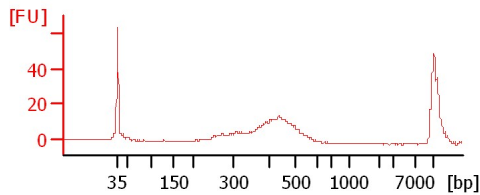
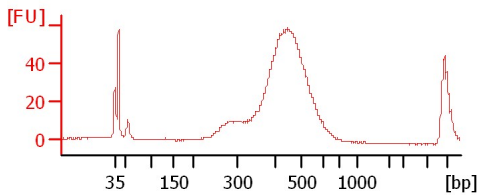
Chip Information:

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

AR015

AR016

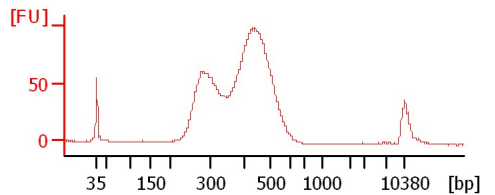
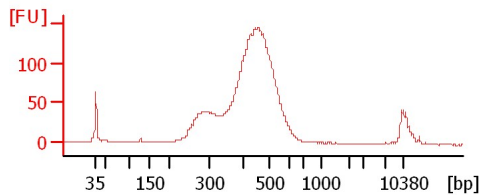
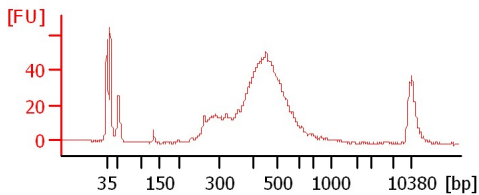
AR017



AR018

AR019

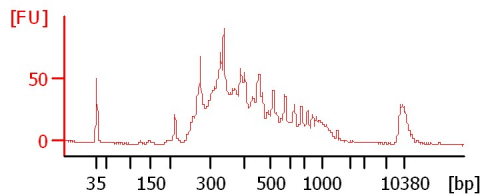
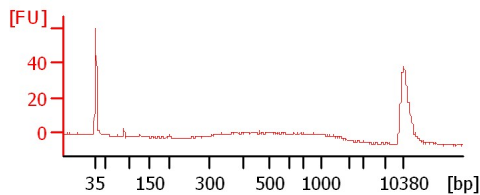
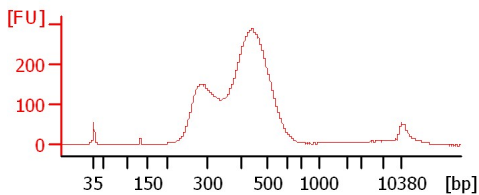
AR020



AR021

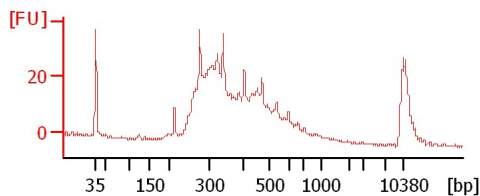
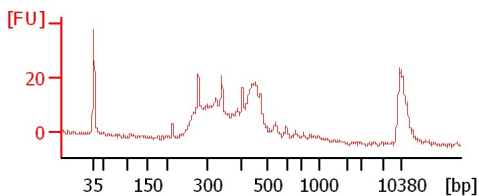
43/44

C023



39/40

C024



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-06\2012-03-06_008.xad

Created: 3/6/2012 4:16:39 PM
 Modified: 3/8/2012 2:41:52 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
AR015		<input type="checkbox"/>	✓			
AR016		<input type="checkbox"/>	✓			
AR017		<input type="checkbox"/>	✓			
AR018		<input type="checkbox"/>	✓			
AR019		<input type="checkbox"/>	✓			
AR020		<input type="checkbox"/>	✓			
AR021		<input type="checkbox"/>	✓			
43/44		<input type="checkbox"/>	✓			
C023		<input type="checkbox"/>	✓			
39/40		<input type="checkbox"/>	✓			
C024		<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\2012-03-06\2012-03-06_008.xad

Created: 3/6/2012 4:16:39 PM
Modified: 3/8/2012 2:41:52 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/ μ l] : 1950
Uses Standard Area for Ladder Fragments
Lower Marker Concentration [pg/ μ l] : 125
Upper Marker Concentration [pg/ μ l] : 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

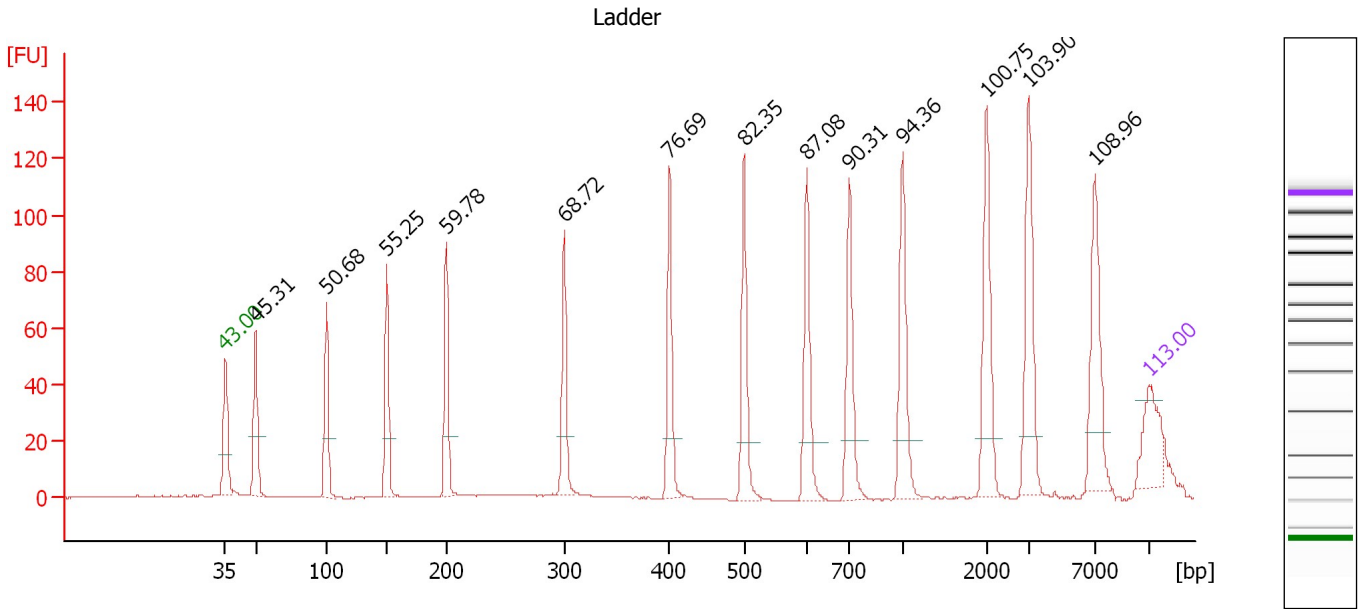
Ladder

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\2012-03-06\2012-03-06_008.xad

Created: 3/6/2012 4:16:39 PM
 Modified: 3/8/2012 2:41:52 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

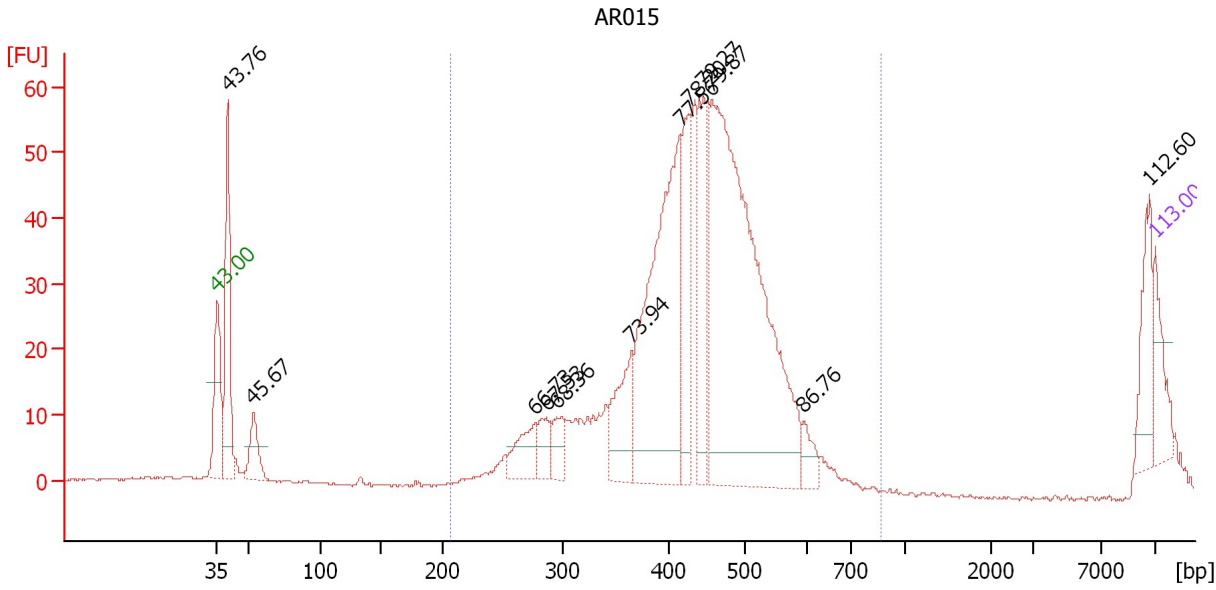
Peak table for Ladder

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\2012-03-06\2012-03-06_008.xad

Created: 3/6/2012 4:16:39 PM
 Modified: 3/8/2012 2:41:52 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : AR015

Number of peaks found: 12 Corr. Area 1: 825.2
 Noise: 0.2

Peak table for sample 1 : AR015

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	40	400.51	15,200.0	
3	53	117.49	3,335.4	
4	278	108.92	594.2	
5	287	70.65	373.4	
6	296	76.83	393.3	
7	366	184.15	763.3	
8	415	789.00	2,877.3	
9	427	233.09	827.6	
10	446	214.66	729.7	
11	456	1,409.38	4,680.2	
12	593	47.50	121.3	
13	10,047	106.31	16.0	
14	10,380	75.00	10.9	Upper Marker

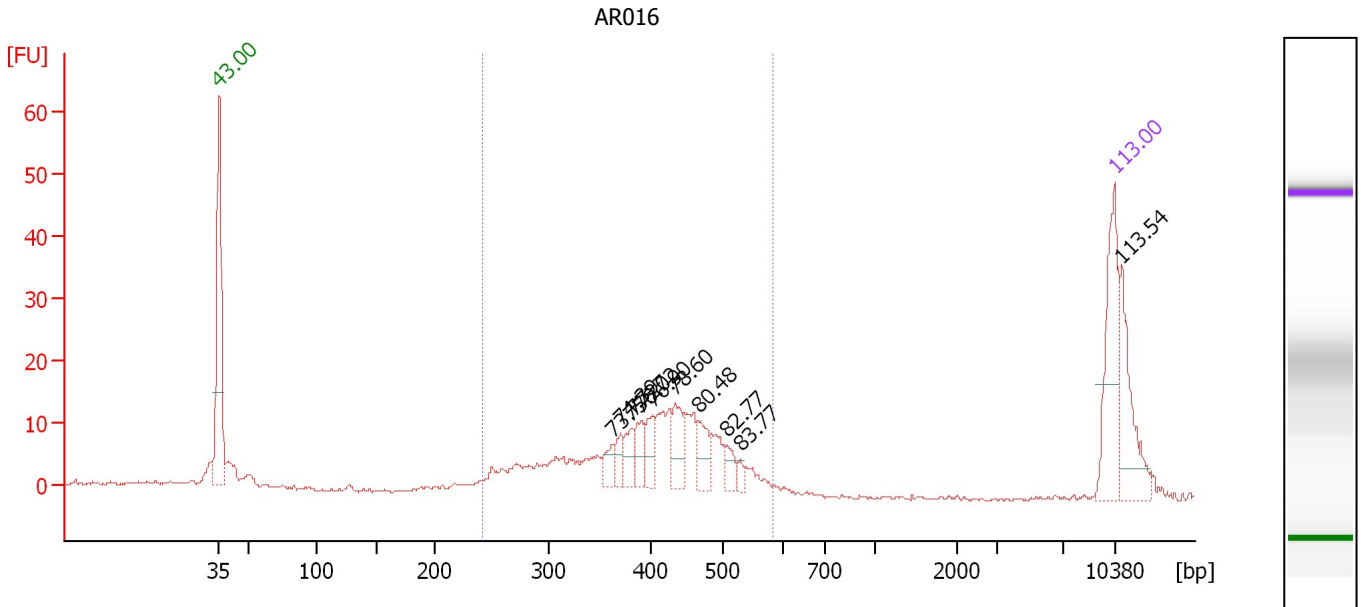
Region table for sample 1 : AR015

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
207	12,944.1	436	3,543.76	870	825.2	86	17.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-06\2012-03-06_008.xad

Created: 3/6/2012 4:16:39 PM
 Modified: 3/8/2012 2:41:52 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : AR016

Number of peaks found: 10 Corr. Area 1: 208.3
 Noise: 0.2

Peak table for sample 2 : AR016

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	363	18.03	75.2	
3	371	15.94	65.1	
4	382	21.95	87.0	
5	392	24.90	96.3	
6	404	23.88	89.6	
7	434	36.40	127.1	
8	467	29.12	94.5	
9	509	17.42	51.9	
10	530	6.73	19.2	
11	10,380	75.00	10.9	Upper Marker
12	10,833	0.00	0.0	

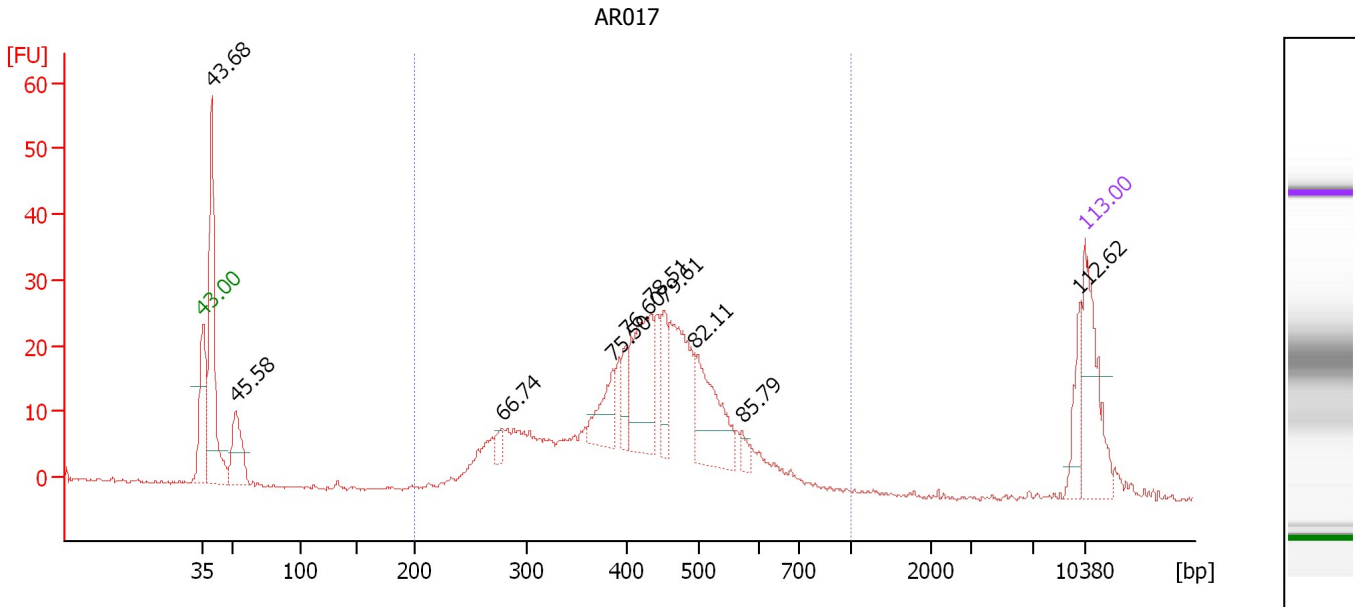
Region table for sample 2 : AR016

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
243	1,861.1	406	471.57	583	208.3	76	18.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-06\2012-03-06_008.xad

Created: 3/6/2012 4:16:39 PM
 Modified: 3/8/2012 2:41:52 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : AR017

Number of peaks found: 10 Corr. Area 1: 458.3
 Noise: 0.3

Peak table for sample 3 : AR017

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	39	253.07	9,730.3	
3	53	78.29	2,256.4	
4	278	13.18	71.9	
5	385	46.81	184.2	
6	399	25.21	95.7	
7	432	114.18	400.3	
8	452	36.40	122.1	
9	496	96.51	295.0	
10	573	9.98	26.4	
11	10,062	27.26	4.1	
12	10,380	75.00	10.9	Upper Marker

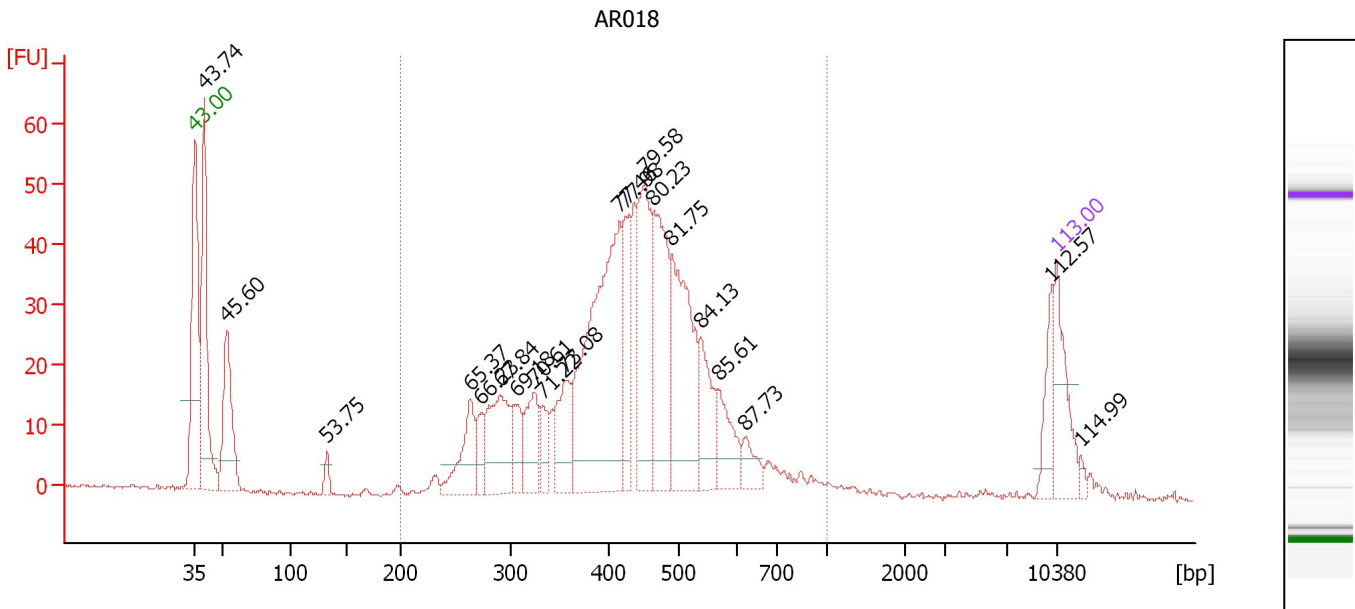
Region table for sample 3 : AR017

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/µl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	3,821.4	433	1,005.81	1,000	458.3	79	23.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-06\2012-03-06_008.xad

Created: 3/6/2012 4:16:39 PM
 Modified: 3/8/2012 2:41:52 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : AR018

Number of peaks found: 20 Corr. Area 1: 833.3
 Noise: 0.3

Peak table for sample 4 : AR018

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	40	309.31	11,776.6	
3	53	182.12	5,231.2	
4	134	19.81	224.7	
5	262	93.55	540.0	
6	272	35.95	200.1	
7	290	140.47	733.6	
8	306	48.96	242.6	
9	324	77.69	363.6	
10	331	37.68	172.3	
11	355	89.38	381.8	
12	414	429.95	1,574.9	
13	423	96.66	346.4	
14	451	196.51	659.9	
15	463	198.41	649.8	
16	489	234.04	724.5	
17	538	87.41	246.3	
18	569	62.33	166.0	
19	620	29.89	73.0	
20	10,018	37.51	5.7	
21	10,380	75.00	10.9	Upper Marker
22	12,046	0.00	0.0	

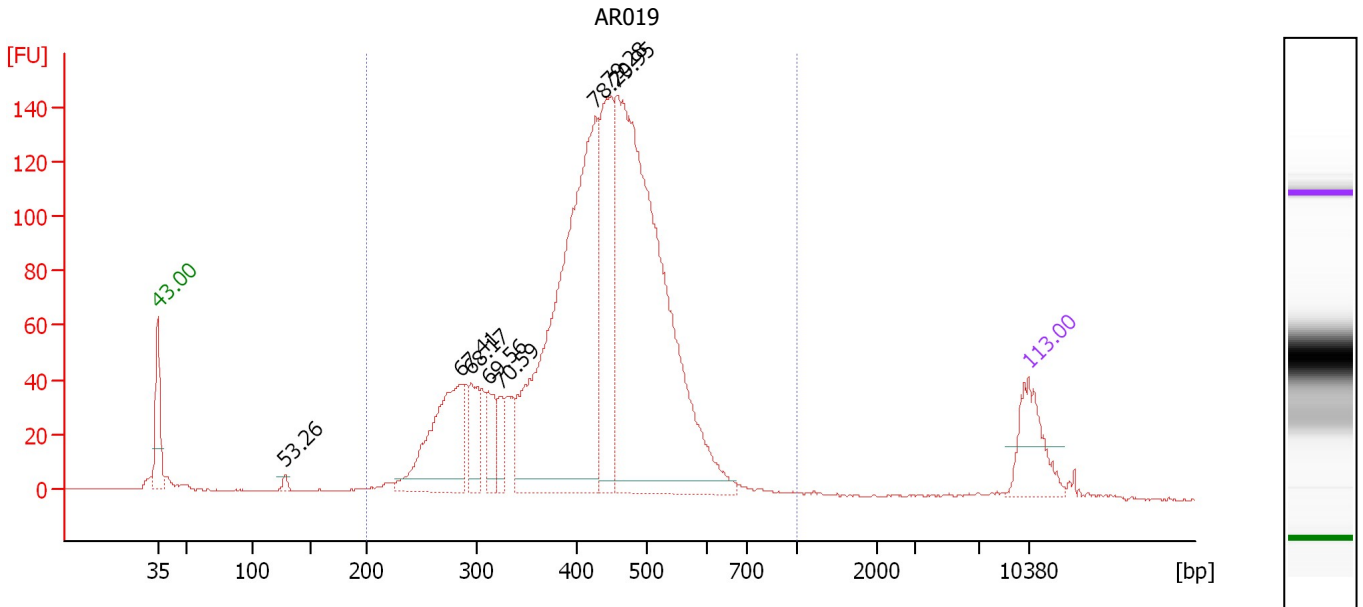
Region table for sample 4 : AR018

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/µl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	7,733.2	437	2,053.39	1,000	833.3	82	24.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-06\2012-03-06_008.xad

Created: 3/6/2012 4:16:39 PM
 Modified: 3/8/2012 2:41:52 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : AR019

Number of peaks found: 8 Corr. Area 1: 2,245.9
 Noise: 0.4

Peak table for sample 5 : AR019

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	128	9.17	108.4	
3	285	255.57	1,357.1	
4	294	82.00	422.8	
5	311	60.24	293.9	
6	323	38.86	182.0	
7	427	833.95	2,960.7	
8	446	258.31	878.0	
9	458	1,003.74	3,323.3	
10	10,380	75.00	10.9	Upper Marker

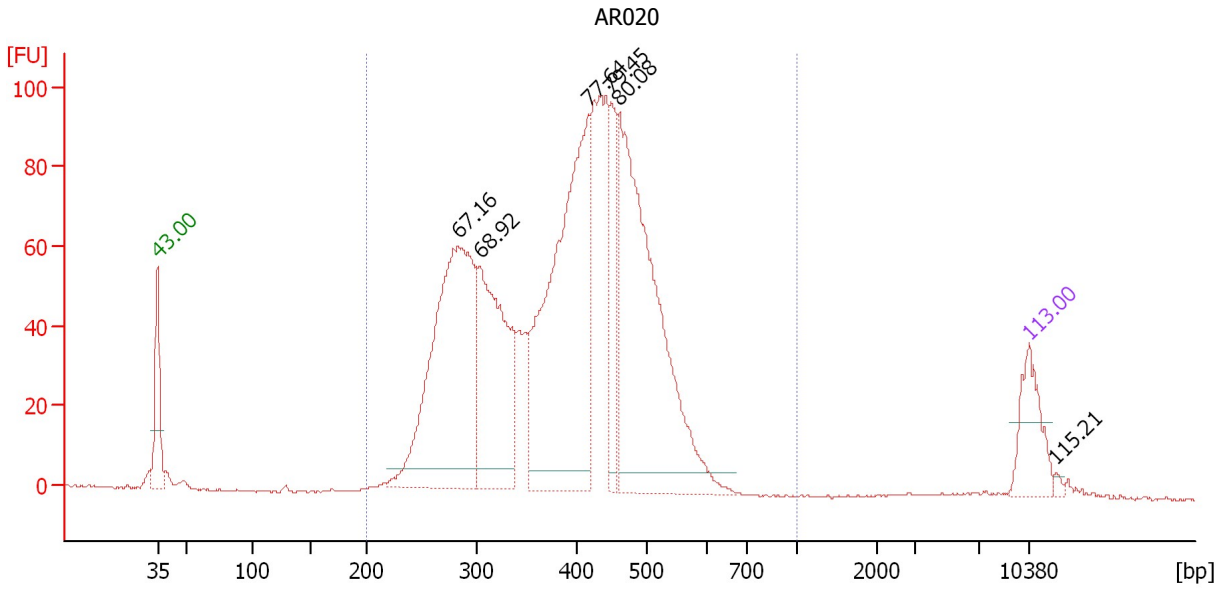
Region table for sample 5 : AR019

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/µl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	10,323.4	428	2,716.75	1,000	2,245.9	97	20.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-06\2012-03-06_008.xad

Created: 3/6/2012 4:16:39 PM
 Modified: 3/8/2012 2:41:52 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : AR020

Number of peaks found: 6 Corr. Area 1: 1,807.4
 Noise: 0.3

Peak table for sample 6 : AR020

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	283	698.73	3,746.7	
3	303	397.19	1,989.1	
4	417	700.16	2,545.0	
5	449	119.28	402.7	
6	460	690.18	2,273.8	
7	10,380	75.00	10.9	Upper Marker
8	12,230	0.00	0.0	

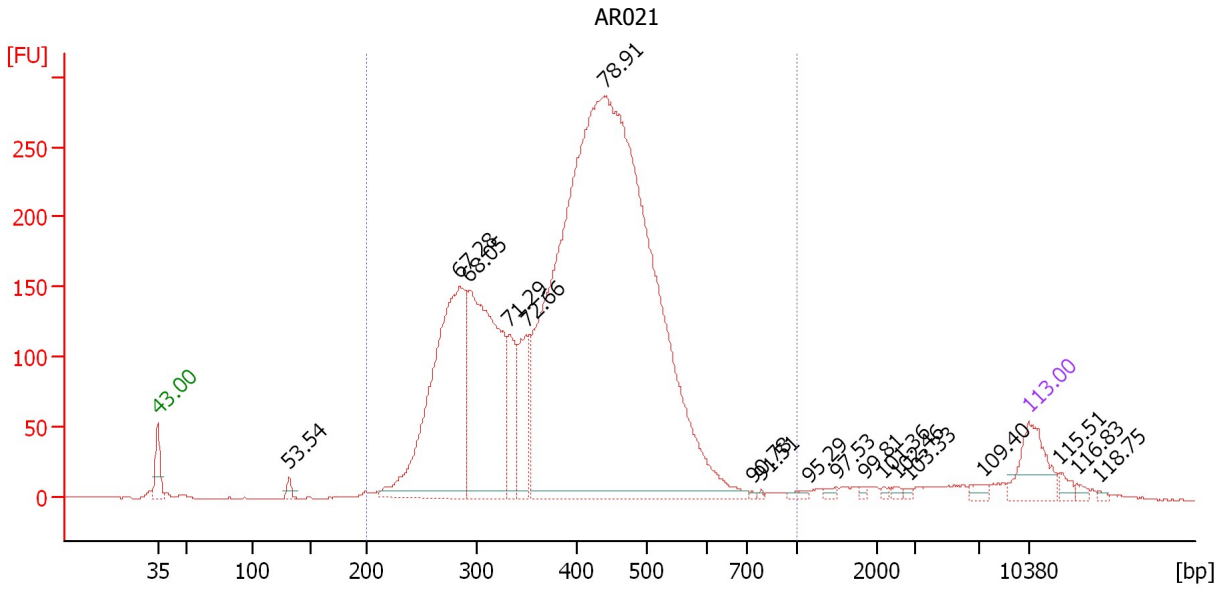
Region table for sample 6 : AR020

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	12,639.6	396	3,058.70	1,000	1,807.4	98	21.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-06\2012-03-06_008.xad

Created: 3/6/2012 4:16:39 PM
 Modified: 3/8/2012 2:41:52 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : AR021

Number of peaks found: 18 Corr. Area 1: 5,122.0
 Noise: 0.2

Peak table for sample 7 : AR021

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	131	15.50	178.9	
3	284	749.33	3,999.7	
4	293	620.37	3,213.1	
5	332	133.96	610.8	
6	349	142.27	616.8	
7	439	2,914.20	10,050.3	
8	734	2.89	6.0	
9	789	2.77	5.3	
10	1,147	7.45	9.8	
11	1,497	6.38	6.5	
12	1,854	4.25	3.5	
13	2,196	3.54	2.4	
14	2,543	5.28	3.1	
15	2,818	3.53	1.9	
16	7,367	11.36	2.3	
17	10,380	75.00	10.9	Upper Marker
18	12,478	0.00	0.0	
19	13,584	0.00	0.0	
20	15,186	0.00	0.0	

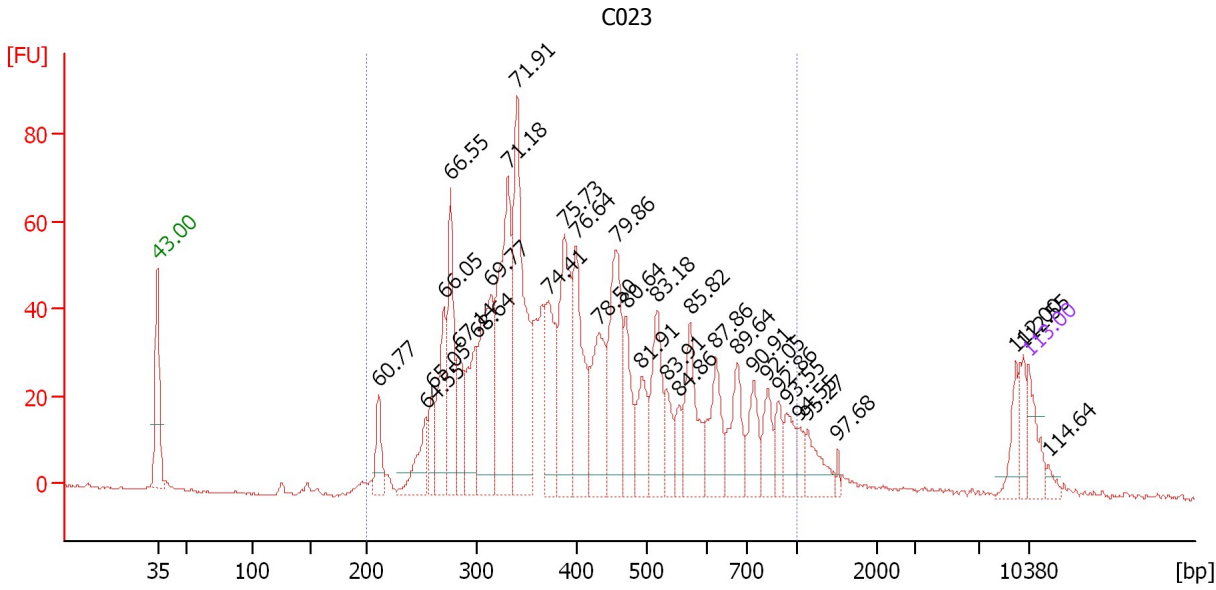
Region table for sample 7 : AR021

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	18,667.3	406	4,609.74	1,000	5,122.0	96	23.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-06\2012-03-06_008.xad

Created: 3/6/2012 4:16:39 PM
 Modified: 3/8/2012 2:41:52 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : C023

Number of peaks found: 33 Corr. Area 1: 1,325.1
 Noise: 0.2

Peak table for sample 9 : C023

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	211	111.97	803.7	
3	253	139.98	837.3	
4	259	97.12	568.4	
5	270	228.63	1,282.6	
6	276	305.94	1,681.5	
7	282	154.62	829.9	
8	299	212.67	1,077.4	
9	313	394.02	1,906.0	
10	331	540.50	2,474.8	
11	340	604.74	2,694.6	
12	371	219.66	896.1	
13	388	361.92	1,413.4	
14	399	318.78	1,209.4	
15	432	265.72	931.9	
16	456	345.80	1,148.6	
17	470	152.98	493.4	
18	492	139.39	429.0	
19	518	204.52	598.6	
20	533	83.60	237.6	
21	553	61.01	167.1	
22	573	202.62	535.4	
23	624	162.74	395.0	
24	679	149.97	334.6	
25	744	109.21	222.4	
26	828	85.98	157.3	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-06\2012-03-06_008.xad


Created: 3/6/2012 4:16:39 PM
 Modified: 3/8/2012 2:41:52 PM

Electropherogram Summary Continued ...

... Peak table for sample 9 : C023

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
27	889	60.69	103.4	
28	940	72.65	117.1	
29	1,029	34.67	51.0	
30	1,143	83.95	111.3	
31	1,520	13.07	13.0	
32	9,544	61.26	9.7	
33	10,000	53.22	8.1	
34	10,380	75.00	10.9	Upper Marker
35	11,748	0.00	0.0	

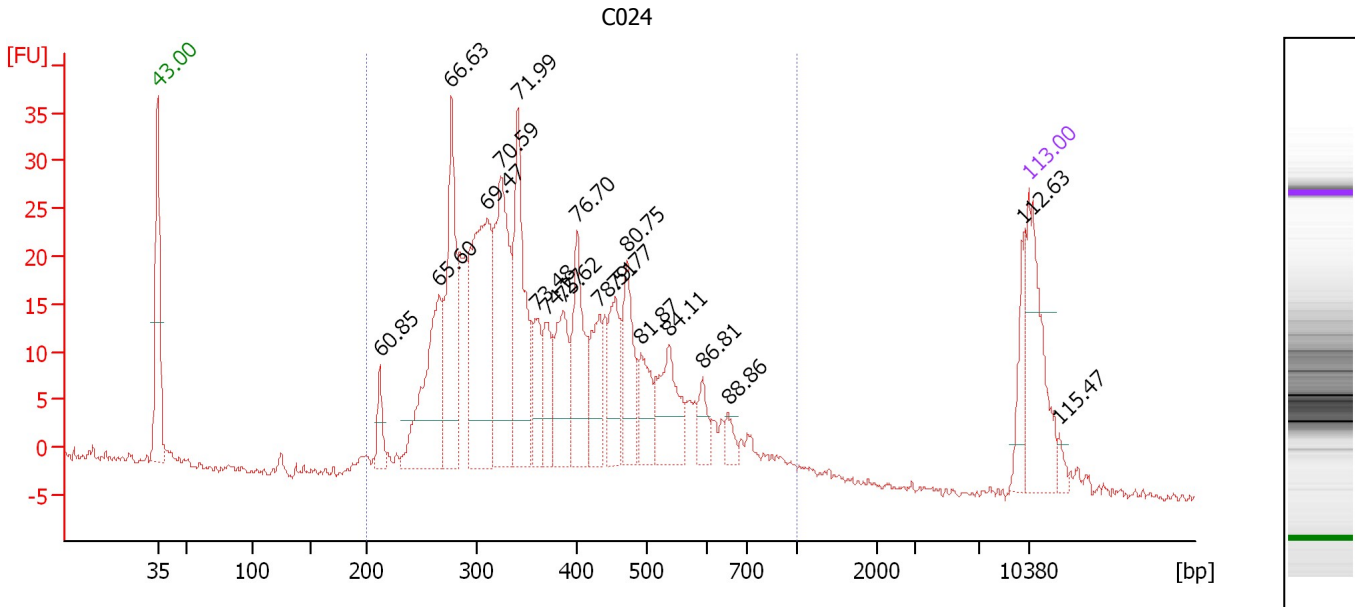
Region table for sample 9 : C023

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/µl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	23,466.4	435	5,806.07	1,000	1,325.1	94	36.4	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-06\2012-03-06_008.xad

Created: 3/6/2012 4:16:39 PM
 Modified: 3/8/2012 2:41:52 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : C024

Number of peaks found: 19 Corr. Area 1: 595.6
 Noise: 0.5

Peak table for sample 11 : C024

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	212	27.19	194.4	
3	265	138.97	794.2	
4	277	140.90	771.8	
5	309	197.76	968.3	
6	323	160.62	752.3	
7	341	138.66	616.0	
8	360	41.19	173.5	
9	370	43.46	178.1	
10	387	66.48	260.5	
11	400	80.94	306.4	
12	432	50.90	178.4	
13	454	58.26	194.2	
14	472	63.63	204.4	
15	492	40.59	125.1	
16	537	65.73	185.4	
17	594	19.68	50.2	
18	655	11.10	25.7	
19	10,068	26.38	4.0	
20	10,380	75.00	10.9	Upper Marker
21	12,445	0.00	0.0	

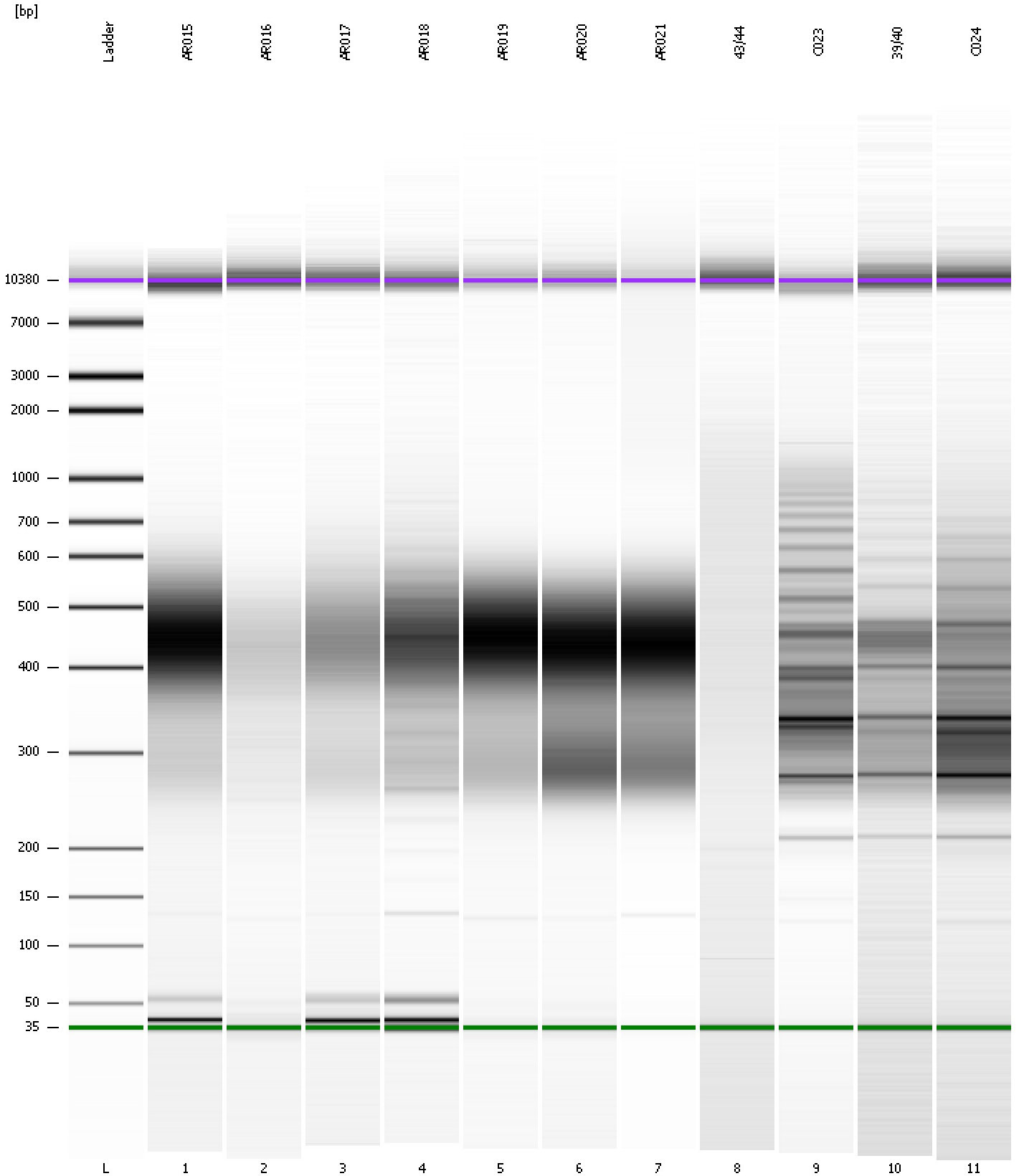
Region table for sample 11 : C024

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	6,887.5	394	1,595.81	1,000	595.6	95	31.7	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-06\2012-03-06_008.xad

Created: 3/6/2012 4:16:39 PM
Modified: 3/8/2012 2:41:52 PM

Gel Image



Assay Class: High Sensitivity DNA Assay Created: 3/6/2012 4:16:39 PM
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-06\2012-03-06_008.xad Modified: 3/8/2012 2:41:52 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		3/6/2012 4:57:52 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2012-03-06\2012-03-06_008.xad)		Instrument	Run		3/6/2012 4:16:39 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		3/6/2012 4:16:39 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		3/6/2012 4:16:39 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		3/6/2012 4:16:39 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		3/6/2012 4:16:39 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		3/6/2012 4:16:39 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		3/6/2012 4:16:39 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1