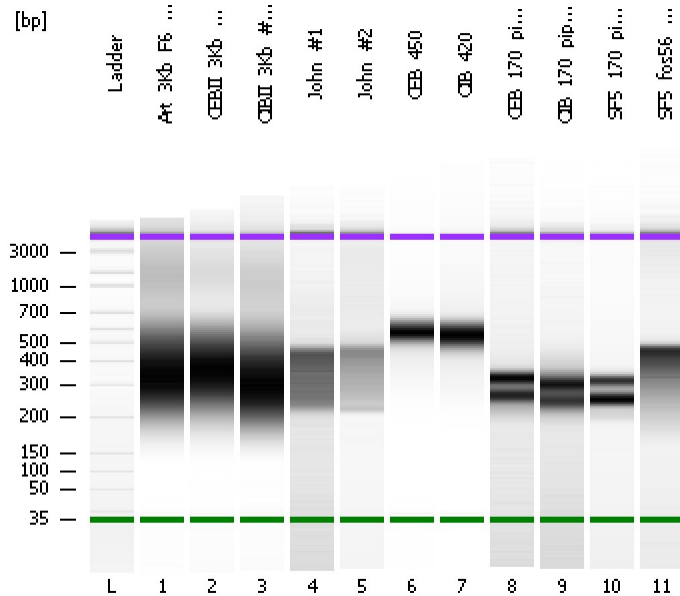


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-16\2012-03-16_003.xad

Created: 3/16/2012 2:39:04 PM
Modified: 3/19/2012 4:17:58 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

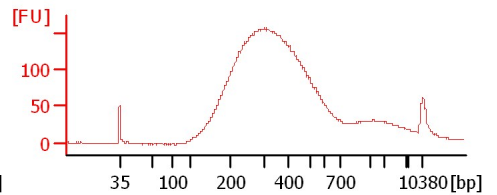
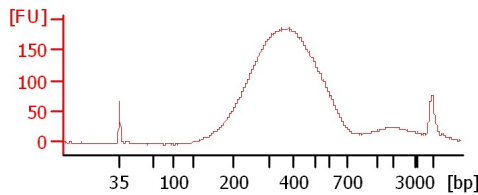
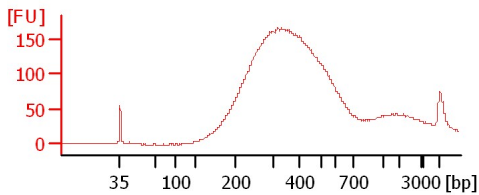
Chip Information:

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

Art_3Kb_F6_#9

CEBII_3Kb_#10

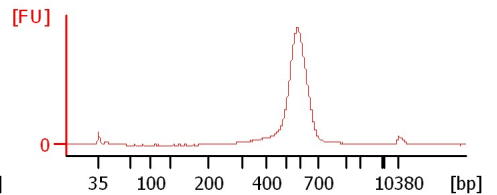
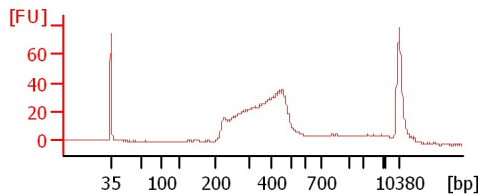
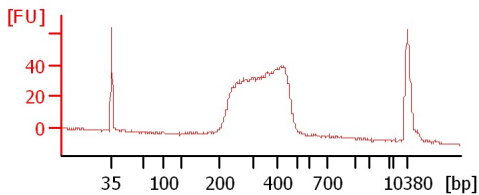
CIBII_3Kb_#11



John_#1

John_#2

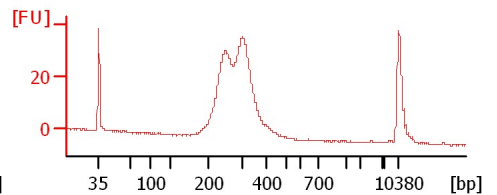
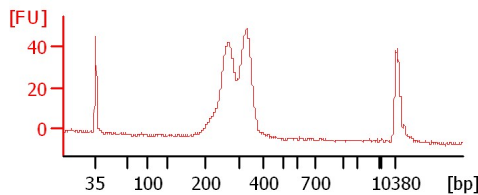
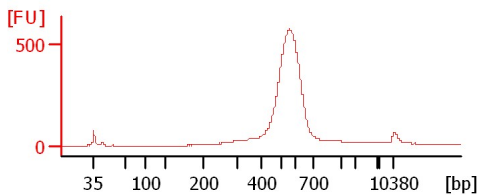
CEB_450



CIB_420

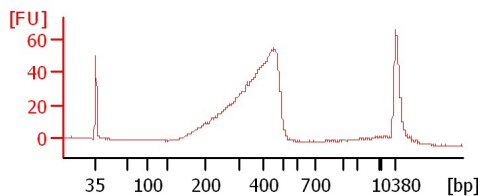
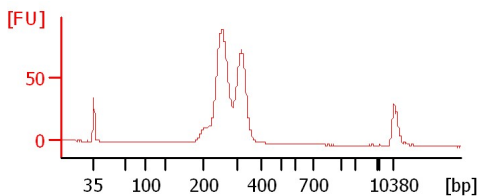
CEB_170_pippin_#31

CIB_170_pippin_#32



SF5_170_pippin

SF5_fos56_200-600



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-16\2012-03-16_003.xad

Created: 3/16/2012 2:39:04 PM
 Modified: 3/19/2012 4:17:58 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
Art_3Kb_F6_#9		<input type="checkbox"/>	✓			
CEBII_3Kb_#10		<input type="checkbox"/>	✓			
CIBII_3Kb_#11		<input type="checkbox"/>	✓			
John_#1		<input type="checkbox"/>	✓			
John_#2		<input type="checkbox"/>	✓			
CEB_450		<input type="checkbox"/>	✓			
CIB_420		<input type="checkbox"/>	✓			
CEB_170_pippin_#31		<input type="checkbox"/>	✓			
CIB_170_pippin_#32		<input type="checkbox"/>	✓			
SF5_170_pippin		<input type="checkbox"/>	✓			
SF5_fos56_200-600		<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\2012-03-16\2012-03-16_003.xad

Created: 3/16/2012 2:39:04 PM
Modified: 3/19/2012 4:17:58 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

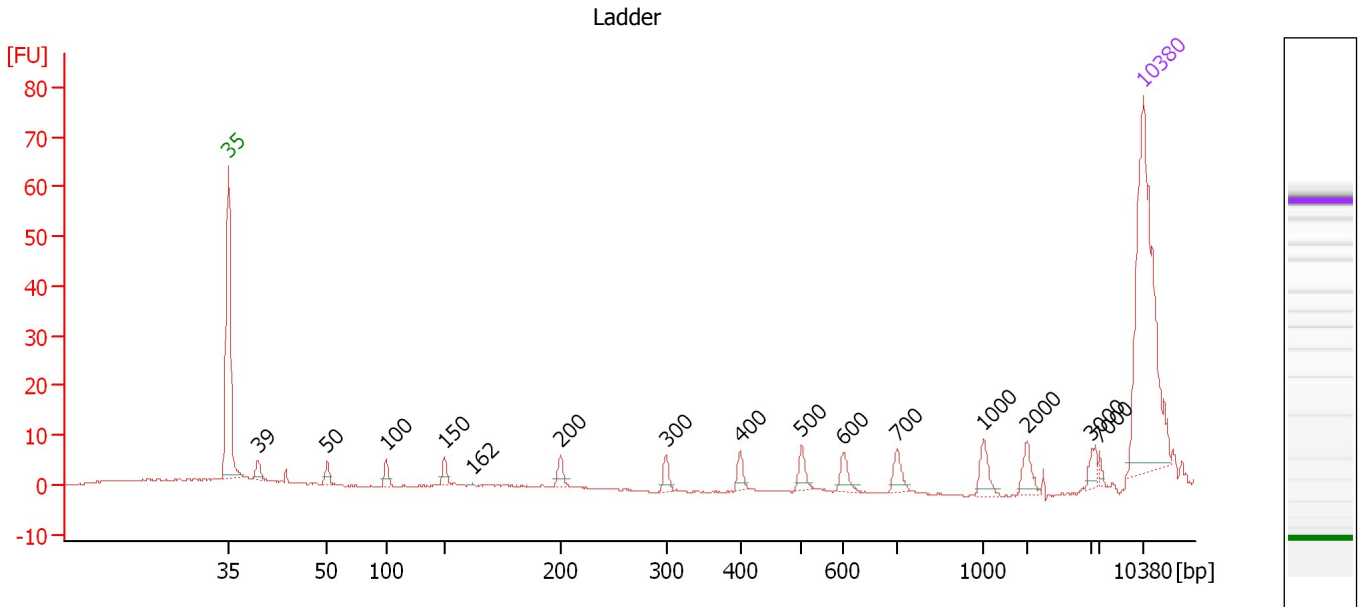
Ladder

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\2012-03-16\2012-03-16_003.xad

Created: 3/16/2012 2:39:04 PM
 Modified: 3/19/2012 4:17:58 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

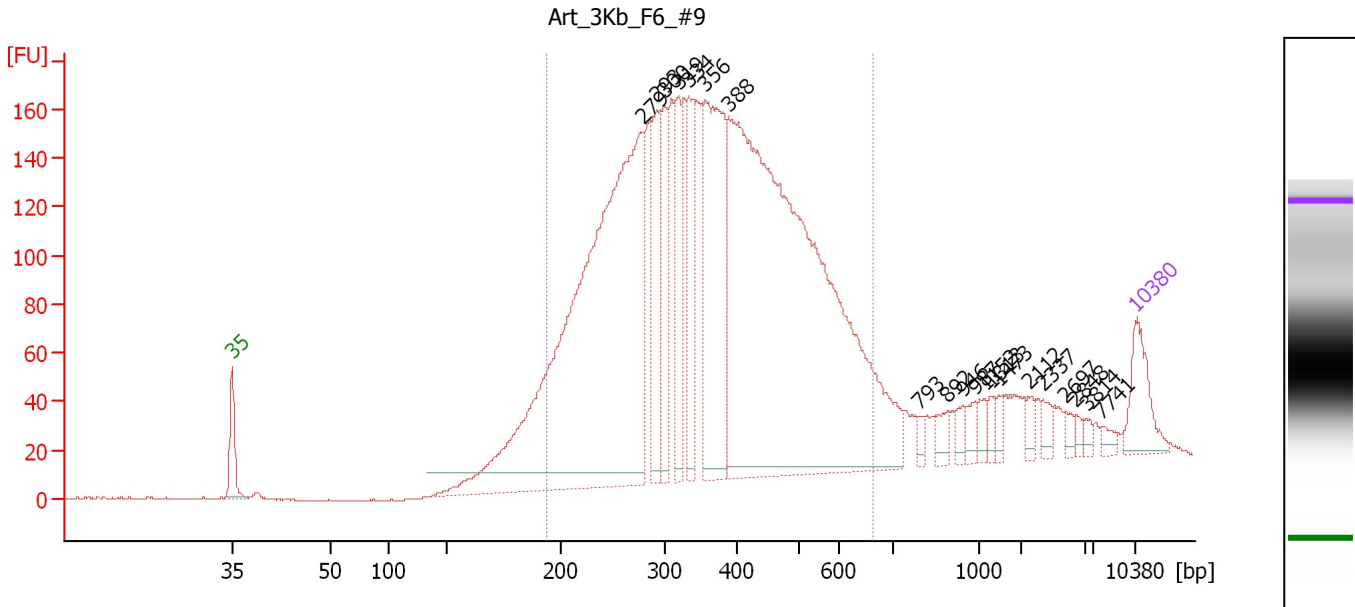
Peak table for Ladder

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	39	0.00	0.0	
3	50	150.00	4,545.5	Ladder Peak
4	100	150.00	2,272.7	Ladder Peak
5	150	150.00	1,515.2	Ladder Peak
6	162	0.00	0.0	
7	200	150.00	1,136.4	Ladder Peak
8	300	150.00	757.6	Ladder Peak
9	400	150.00	568.2	Ladder Peak
10	500	150.00	454.5	Ladder Peak
11	600	150.00	378.8	Ladder Peak
12	700	150.00	324.7	Ladder Peak
13	1,000	150.00	227.3	Ladder Peak
14	2,000	150.00	113.6	Ladder Peak
15	3,000	150.00	75.8	Ladder Peak
16	7,000	150.00	32.5	Ladder Peak
17	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-16\2012-03-16_003.xad

Created: 3/16/2012 2:39:04 PM
 Modified: 3/19/2012 4:17:58 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : Art 3Kb F6 #9

Number of peaks found: 20 Corr. Area 1: 3,707.9
 Noise: 0.2

Peak table for sample 1 : Art 3Kb F6 #9

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	279	1,872.58	10,186.0	
3	293	239.70	1,240.1	
4	300	176.92	893.5	
5	319	173.81	825.6	
6	334	180.55	820.2	
7	356	503.25	2,141.2	
8	388	2,029.32	7,921.4	
9	793	14.04	26.8	
10	892	27.06	46.0	
11	946	22.15	35.5	
12	987	21.48	33.0	
13	1,152	20.73	27.3	
14	1,313	17.32	20.0	
15	1,473	14.79	15.2	
16	2,112	17.90	12.8	
17	2,337	20.23	13.1	
18	2,697	12.37	6.9	
19	2,848	10.57	5.6	
20	3,814	9.93	3.9	
21	7,741	13.05	2.6	
22	10,380	75.00	10.9	Upper Marker

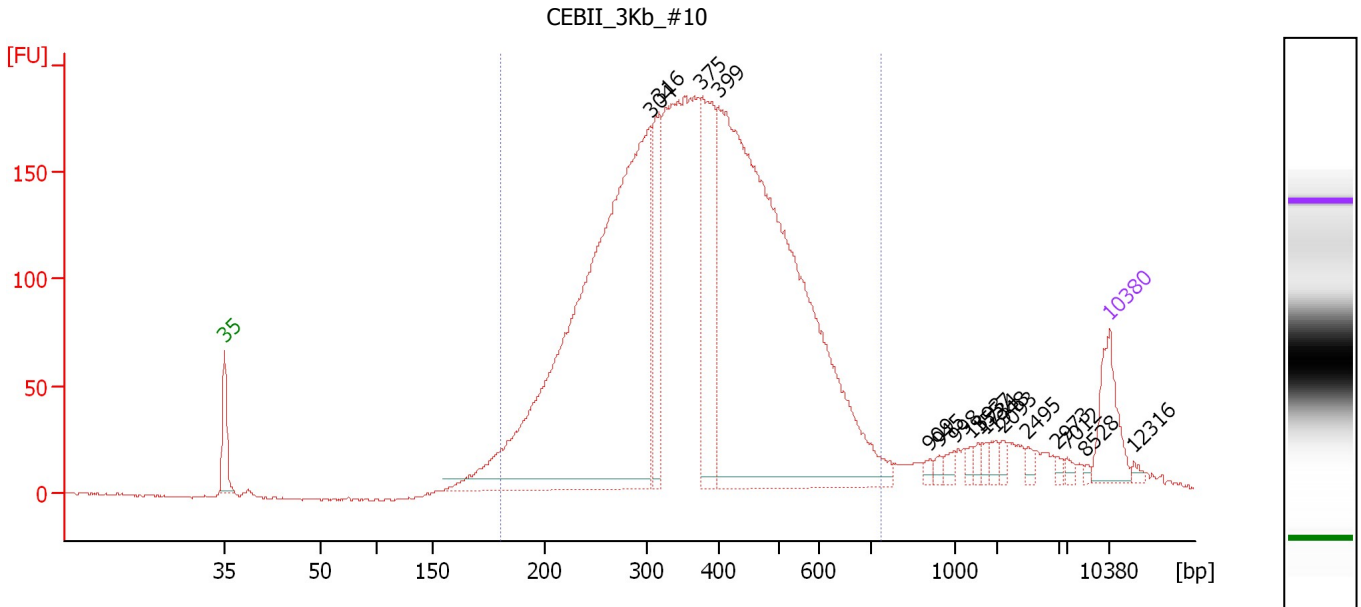
Region table for sample 1 : Art 3Kb F6 #9

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
194	23,965.8	370	5,147.08	664	3,707.9	86	31.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-16\2012-03-16_003.xad

Created: 3/16/2012 2:39:04 PM
 Modified: 3/19/2012 4:17:58 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : CEBII 3Kb #10

Number of peaks found: 17 Corr. Area 1: 4,287.1
 Noise: 0.5

Peak table for sample 2 : CEBII 3Kb #10

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	304	1,736.78	8,669.3	
3	316	203.70	976.1	
4	375	315.59	1,275.3	
5	399	1,702.98	6,459.1	
6	909	9.35	15.6	
7	945	8.71	14.0	
8	998	12.76	19.4	
9	1,393	8.11	8.8	
10	1,557	9.72	9.5	
11	1,734	8.55	7.5	
12	1,948	12.93	10.1	
13	2,093	8.33	6.0	
14	2,495	8.94	5.4	
15	2,973	5.35	2.7	
16	7,012	6.73	1.5	
17	8,528	4.15	0.7	
18	10,380	75.00	10.9	Upper Marker
19	12,316	0.00	0.0	

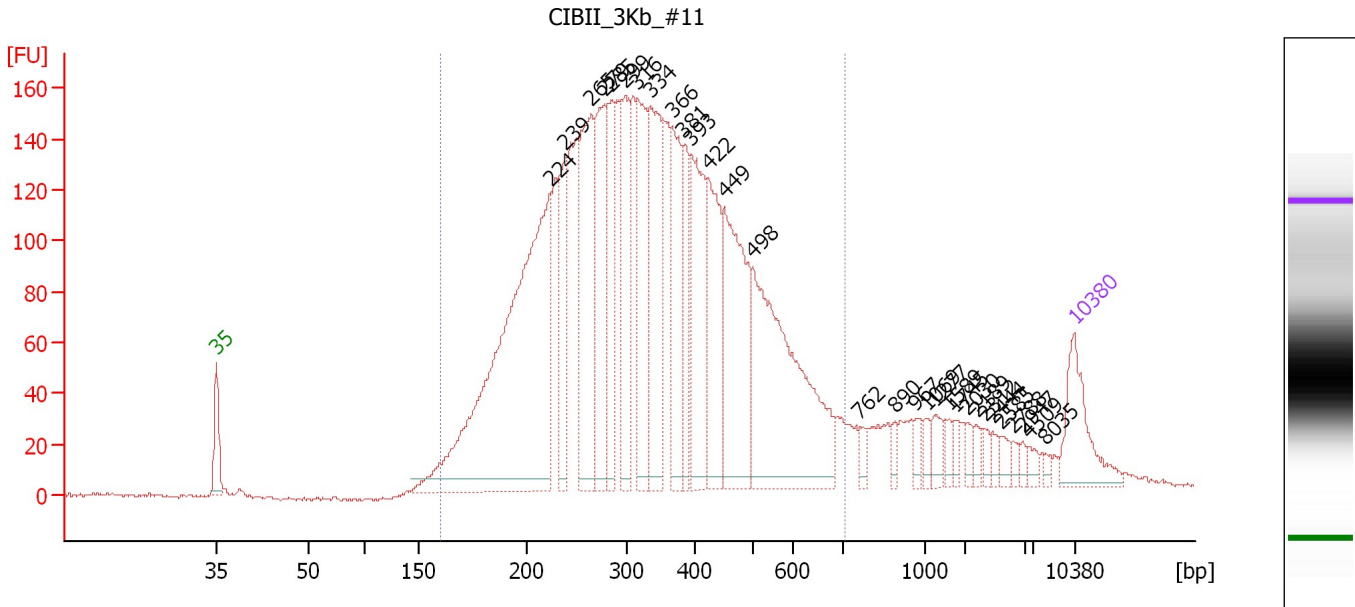
Region table for sample 2 : CEBII 3Kb #10

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
180	22,111.7	378	4,793.18	732	4,287.1	93	31.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-16\2012-03-16_003.xad

Created: 3/16/2012 2:39:04 PM
 Modified: 3/19/2012 4:17:58 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : CIBII 3Kb #11

Number of peaks found: 30 Corr. Area 1: 4,160.5
 Noise: 0.9

Peak table for sample 3 : CIBII 3Kb #11

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	224	951.28	6,446.5	
3	239	162.09	1,029.0	
4	265	294.09	1,681.1	
5	279	215.03	1,169.7	
6	285	164.43	874.2	
7	299	160.97	815.7	
8	316	219.86	1,053.5	
9	334	226.10	1,026.1	
10	366	158.91	657.7	
11	381	97.21	386.1	
12	393	207.12	798.6	
13	422	184.73	663.4	
14	449	276.75	934.8	
15	498	430.05	1,307.9	
16	762	15.28	30.4	
17	890	12.90	22.0	
18	967	16.07	25.2	
19	1,069	14.50	20.5	
20	1,277	22.92	27.2	
21	1,589	11.43	10.9	
22	1,745	11.02	9.6	
23	2,030	10.82	8.1	
24	2,189	10.32	7.1	
25	2,312	10.28	6.7	
26	2,444	10.76	6.7	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-16\2012-03-16_003.xad


Created: 3/16/2012 2:39:04 PM
 Modified: 3/19/2012 4:17:58 PM

Electropherogram Summary Continued ...

... Peak table for sample 3 : CIBII 3Kb #11

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	2,585	12.78	7.5	
28	2,788	7.37	4.0	
29	2,947	6.51	3.3	
30	4,509	9.61	3.2	
31	8,035	5.59	1.1	
32	10,380	75.00	10.9	Upper Marker

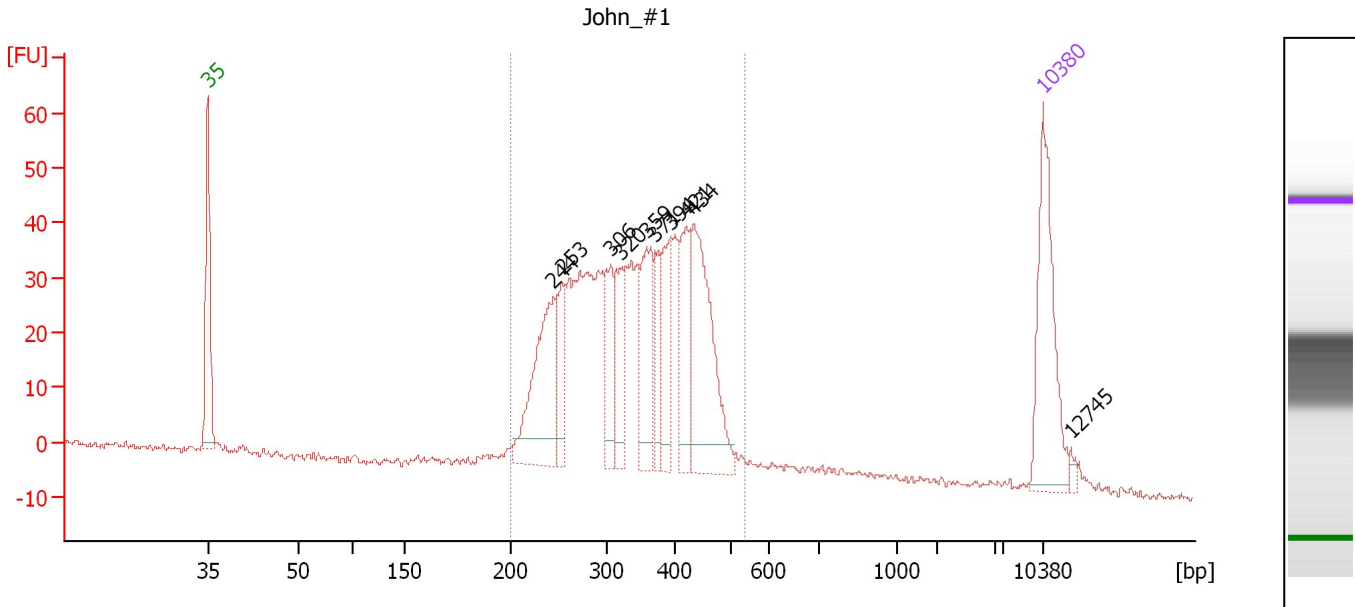
Region table for sample 3 : CIBII 3Kb #11

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
160	23,738.9	344	4,534.67	708	4,160.5	91	36.0	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-16\2012-03-16_003.xad

Created: 3/16/2012 2:39:04 PM
 Modified: 3/19/2012 4:17:58 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : John #1

Number of peaks found: 10 Corr. Area 1: 765.4
 Noise: 0.8

Peak table for sample 4 : John #1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	244	126.07	781.3	
3	253	49.86	298.2	
4	306	49.72	246.2	
5	320	56.40	266.8	
6	359	70.11	296.0	
7	371	37.35	152.3	
8	394	50.42	193.7	
9	421	54.95	197.9	
10	434	132.30	462.1	
11	10,380	75.00	10.9	Upper Marker
12	12,745	0.00	0.0	

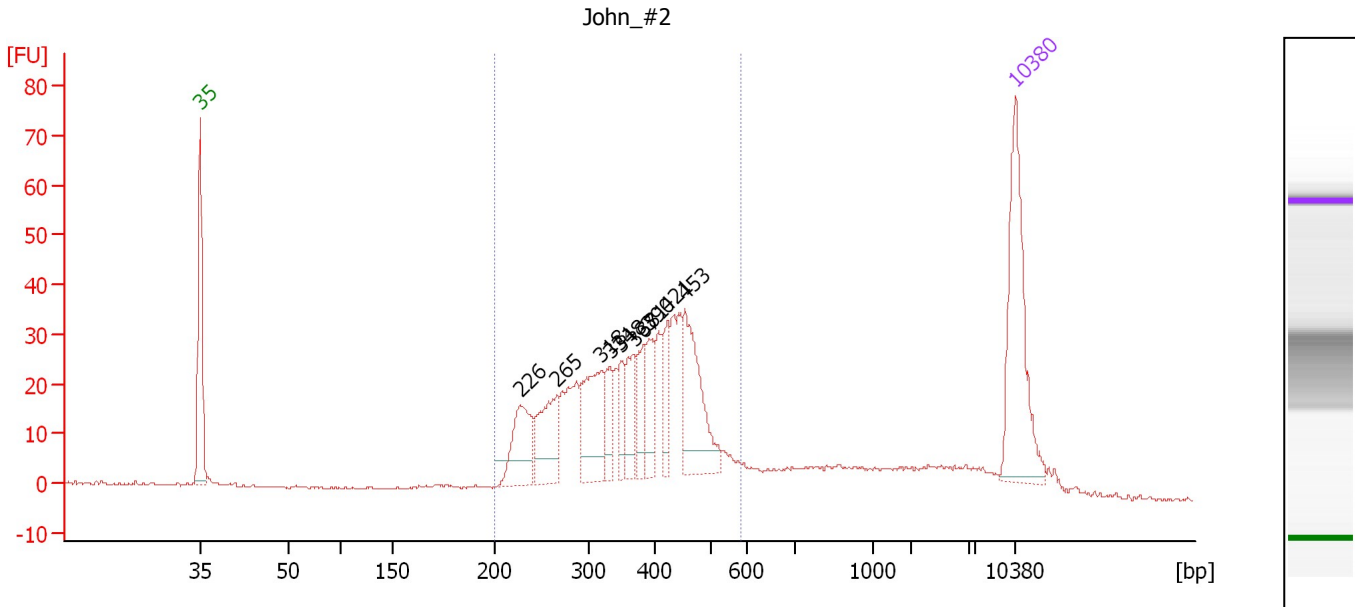
Region table for sample 4 : John #1

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	4,485.1	343	947.26	539	765.4	95	22.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-16\2012-03-16_003.xad

Created: 3/16/2012 2:39:04 PM
 Modified: 3/19/2012 4:17:58 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : John #2

Number of peaks found: 10 Corr. Area 1: 559.1
 Noise: 0.3

Peak table for sample 5 : John #2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	226	56.82	381.6	
3	265	52.97	302.5	
4	318	66.28	316.1	
5	331	23.65	108.4	
6	348	20.96	91.2	
7	367	25.63	105.8	
8	381	26.68	106.2	
9	390	26.08	101.4	
10	421	24.21	87.0	
11	453	73.74	246.5	
12	10,380	75.00	10.9	Upper Marker

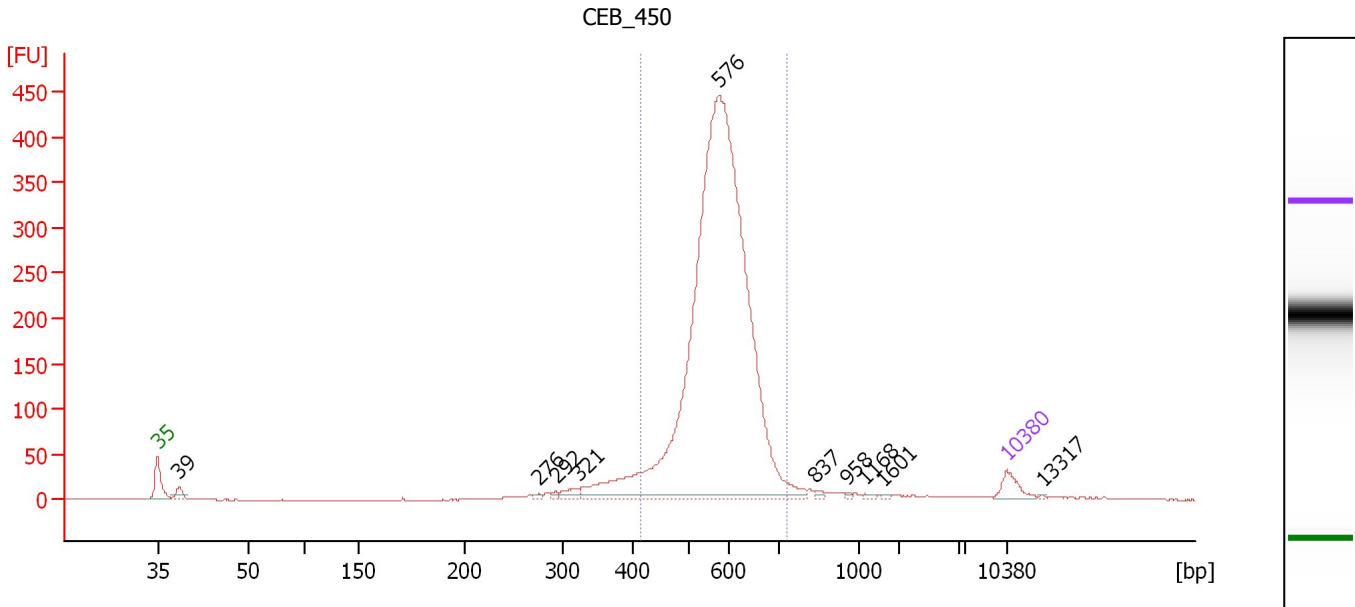
Region table for sample 5 : John #2

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	2,747.1	365	609.15	580	559.1	81	23.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-16\2012-03-16_003.xad

Created: 3/16/2012 2:39:04 PM
 Modified: 3/19/2012 4:17:58 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : CEB 450

Number of peaks found: 10 Corr. Area 1: 2,536.2
 Noise: 0.3

Peak table for sample 6 : CEB 450

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	39	75.02	2,950.3	
3	276	18.35	100.9	
4	292	19.70	102.1	
5	321	63.80	301.0	
6	576	5,565.47	14,633.9	
7	837	18.52	33.5	
8	958	8.83	14.0	
9	1,168	11.95	15.5	
10	1,601	6.18	5.9	
11	10,380	75.00	10.9	Upper Marker
12	13,317	0.00	0.0	

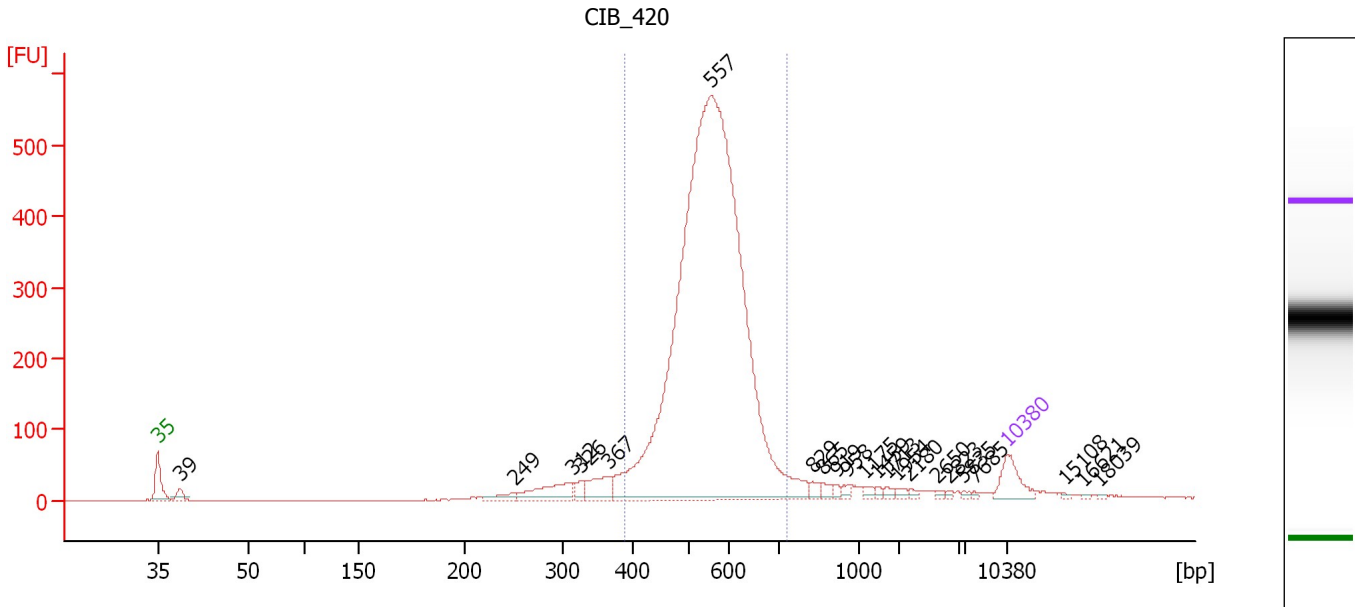
Region table for sample 6 : CEB 450

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
414	14,344.9	575	5,366.64	736	2,536.2	88	10.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-16\2012-03-16_003.xad

Created: 3/16/2012 2:39:04 PM
 Modified: 3/19/2012 4:17:58 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : CIB_420

Number of peaks found: 22 Corr. Area 1: 3,909.4
 Noise: 0.4

Peak table for sample 7 : CIB_420

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	39	43.08	1,688.0	
3	249	37.02	224.9	
4	312	133.85	649.4	
5	326	29.07	135.3	
6	367	98.75	408.1	
7	557	4,140.51	11,268.9	
8	829	22.84	41.7	
9	865	22.17	38.8	
10	919	11.83	19.5	
11	958	14.62	23.1	
12	1,175	13.94	18.0	
13	1,459	9.29	9.6	
14	1,713	10.88	9.6	
15	1,954	12.71	9.9	
16	2,180	7.67	5.3	
17	2,650	7.23	4.1	
18	2,823	5.67	3.0	
19	5,835	7.01	1.8	
20	7,685	4.79	0.9	
21	10,380	75.00	10.9	Upper Marker
22	15,108	0.00	0.0	
23	16,621	0.00	0.0	
24	18,039	0.00	0.0	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-16\2012-03-16_003.xad

Created: 3/16/2012 2:39:04 PM
Modified: 3/19/2012 4:17:58 PM

Electropherogram Summary Continued ...

... Region table for sample 7 :

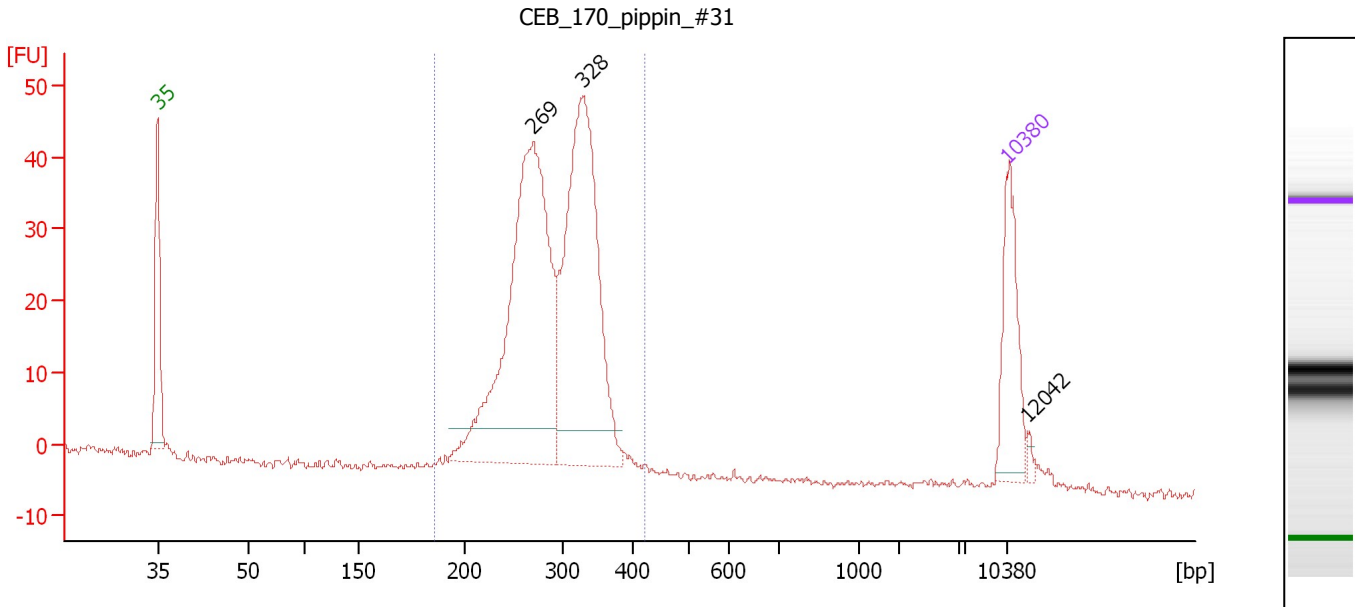
CIB_420

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
390	11,396.4	552	4,077.82	732	3,909.4	86	11.9	■

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-16\2012-03-16_003.xad

Created: 3/16/2012 2:39:04 PM
 Modified: 3/19/2012 4:17:58 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : CEB 170 pippin #31

Number of peaks found: 3 Corr. Area 1: 465.9
 Noise: 0.5

Peak table for sample 8 : CEB 170 pippin #31

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	269	552.08	3,107.9	
3	328	442.58	2,043.3	
4	10,380	75.00	10.9	Upper Marker
5	12,042	0.00	0.0	

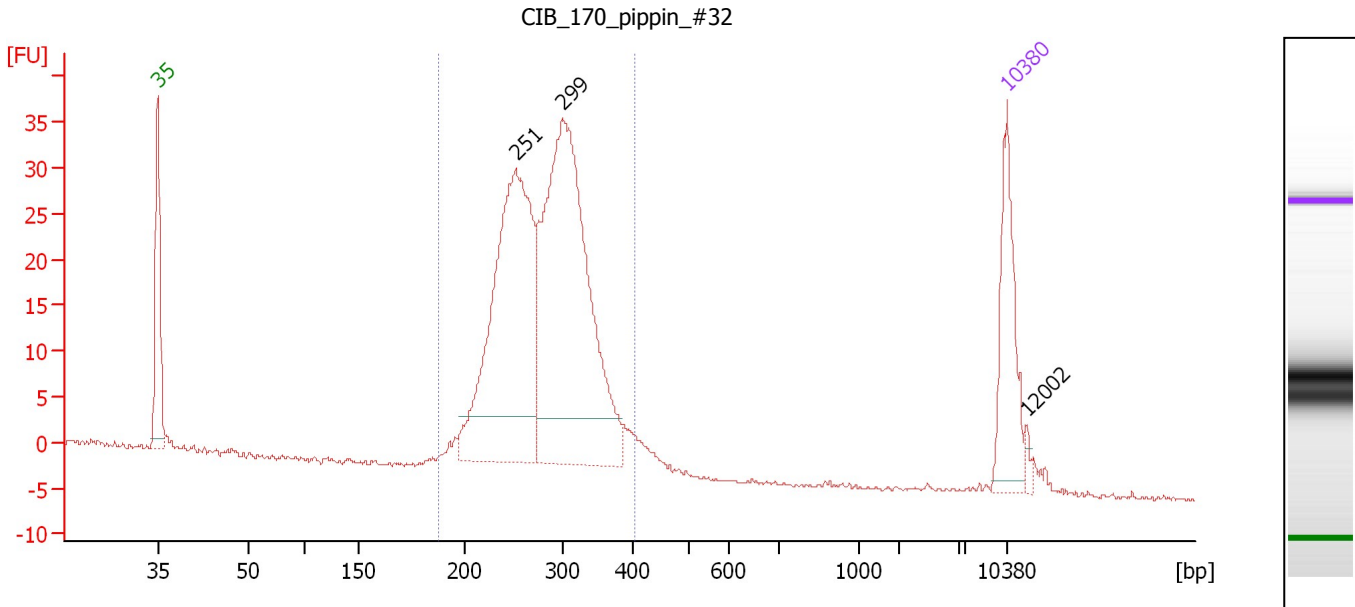
Region table for sample 8 : CEB 170 pippin #31

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
186	5,461.8	293	1,031.00	423	465.9	97	14.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-16\2012-03-16_003.xad

Created: 3/16/2012 2:39:04 PM
 Modified: 3/19/2012 4:17:58 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : CIB 170 pippin #32

Number of peaks found: 3 Corr. Area 1: 404.0
 Noise: 0.3

Peak table for sample 9 : CIB 170 pippin #32

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	251	440.99	2,657.2	
3	299	530.77	2,691.6	
4	10,380	75.00	10.9	Upper Marker
5	12,002	0.00	0.0	

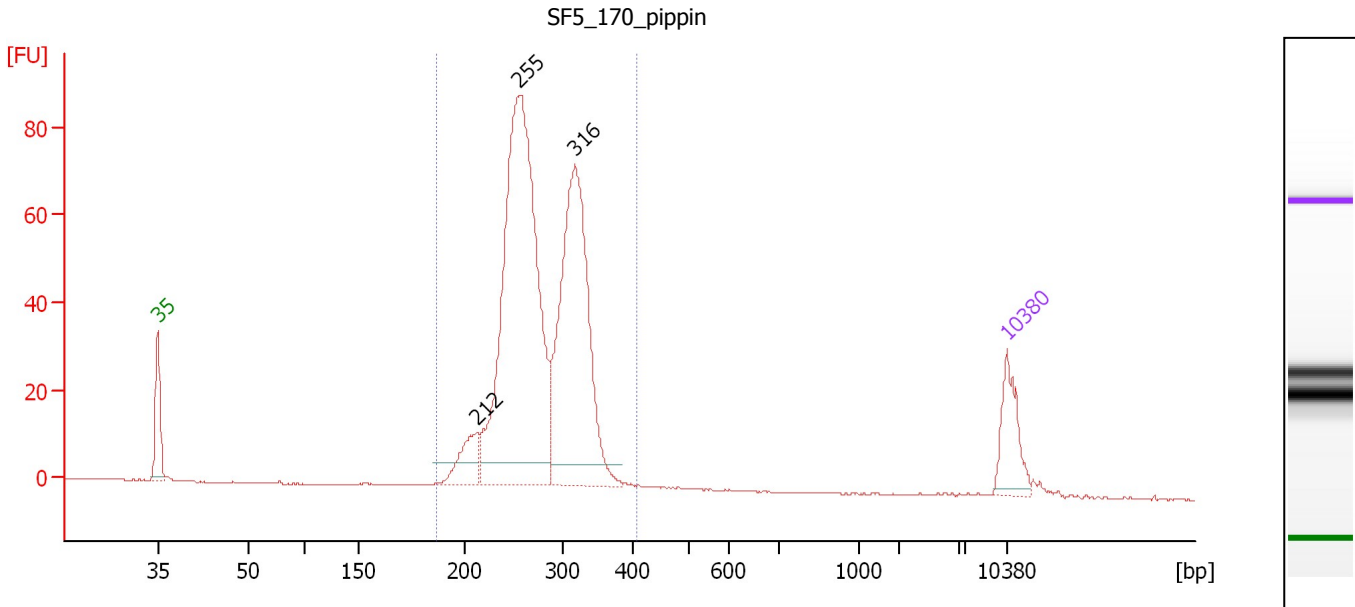
Region table for sample 9 : CIB 170 pippin #32

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
188	5,518.3	283	1,006.28	404	404.0	93	15.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-16\2012-03-16_003.xad

Created: 3/16/2012 2:39:04 PM
 Modified: 3/19/2012 4:17:58 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : SF5_170_pippin

Number of peaks found: 3 Corr. Area 1: 704.9
 Noise: 0.1

Peak table for sample 10 : SF5_170_pippin

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	212	91.18	650.4	
3	255	1,139.46	6,763.8	
4	316	688.98	3,304.6	
5	10,380	75.00	10.9	Upper Marker

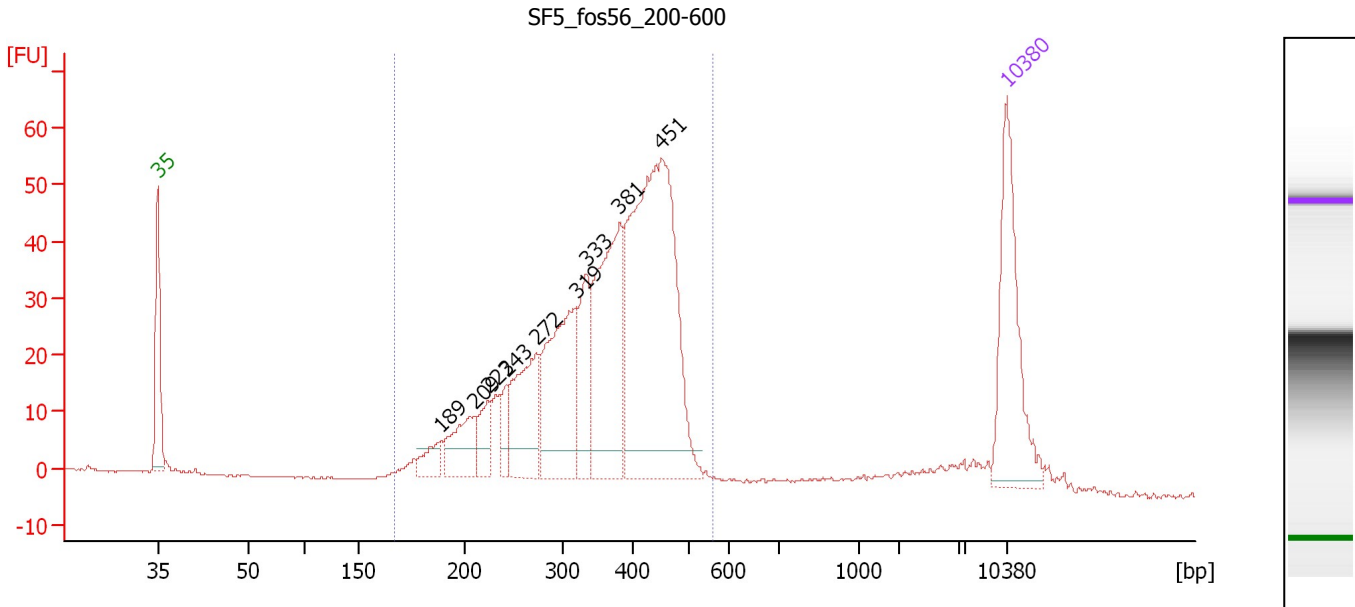
Region table for sample 10 : SF5_170_pippin

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
187	10,887.4	278	1,953.84	407	704.9	98	13.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-16\2012-03-16_003.xad

Created: 3/16/2012 2:39:04 PM
 Modified: 3/19/2012 4:17:58 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : SF5_fos56_200-600

Number of peaks found: 9 Corr. Area 1: 772.4
 Noise: 0.1

Peak table for sample 11 : SF5_fos56_200-600

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	189	19.44	156.2	
3	209	44.52	323.0	
4	223	24.32	165.5	
5	243	17.25	107.7	
6	272	78.59	437.2	
7	319	117.54	558.0	
8	333	52.03	236.8	
9	381	141.11	560.9	
10	451	302.73	1,017.6	
11	10,380	75.00	10.9	Upper Marker

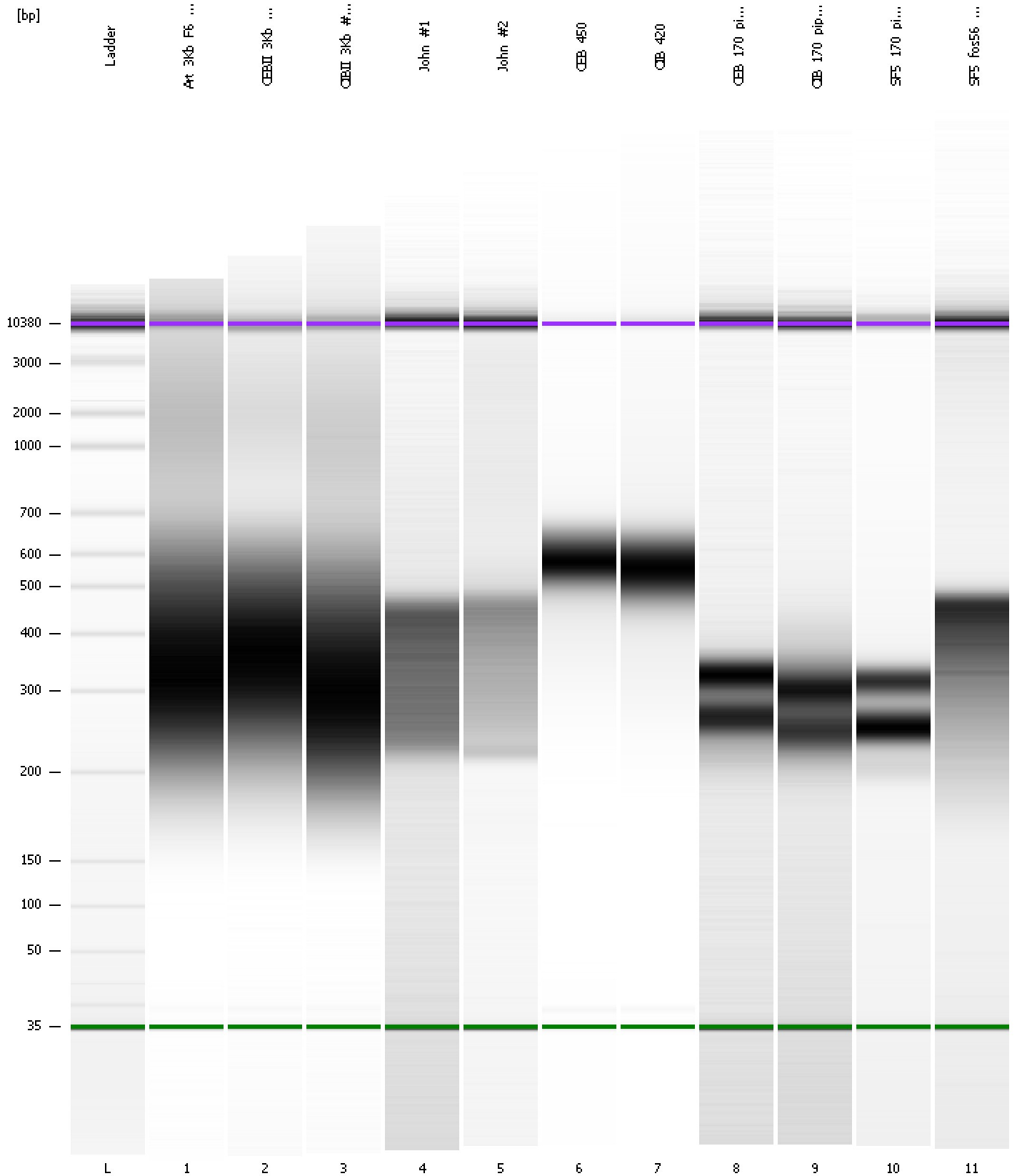
Region table for sample 11 : SF5_fos56_200-600

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
167	4,131.5	356	877.99	561	772.4	92	24.0	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-16\2012-03-16_003.xad

Created: 3/16/2012 2:39:04 PM
Modified: 3/19/2012 4:17:58 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-16\2012-03-16_003.xad

Created: 3/16/2012 2:39:04 PM
 Modified: 3/19/2012 4:17:58 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		3/16/2012 3:20:23 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2012-03-16\2012-03-16_003.xad)		Instrument	Run		3/16/2012 2:39:09 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		3/16/2012 2:39:09 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		3/16/2012 2:39:09 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		3/16/2012 2:39:09 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		3/16/2012 2:39:09 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		3/16/2012 2:39:09 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		3/16/2012 2:39:09 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1