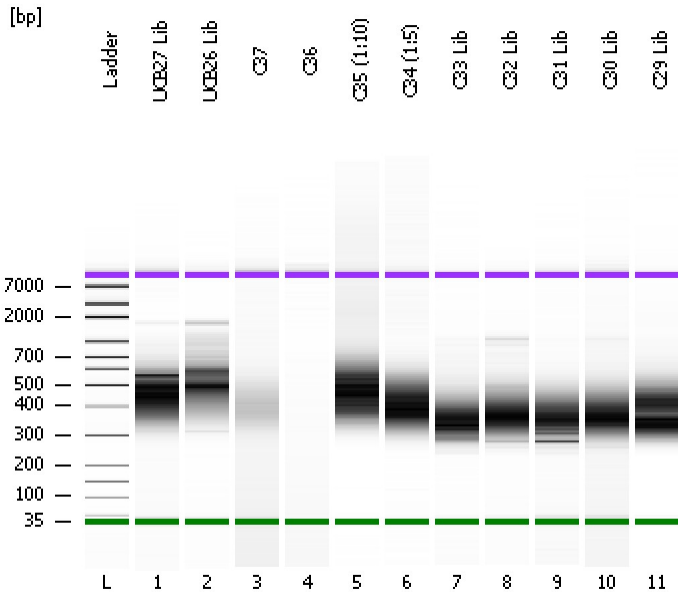


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-05\2012-03-05\_003.xad

Created: 3/5/2012 11:42:21 AM  
Modified: 3/5/2012 12:32:21 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

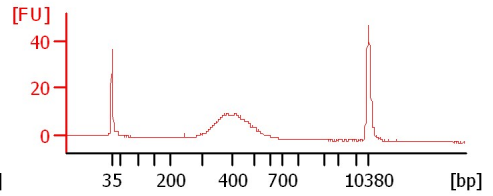
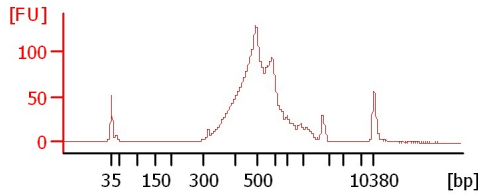
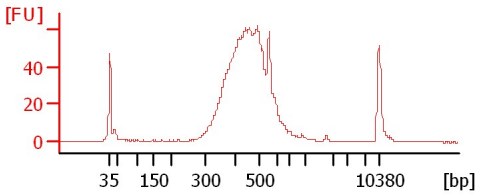
Chip Information:

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

**UCB27 Lib**

**UCB26 Lib**

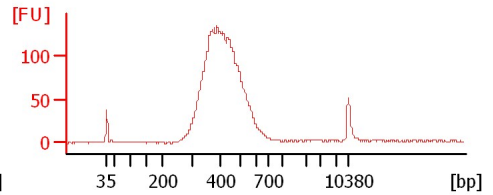
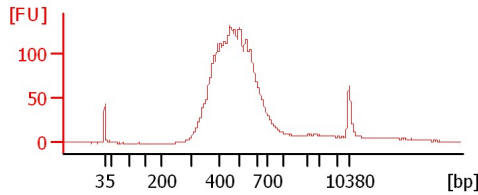
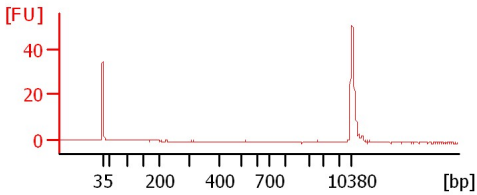
**C37**



**C36**

**C35 (1:10)**

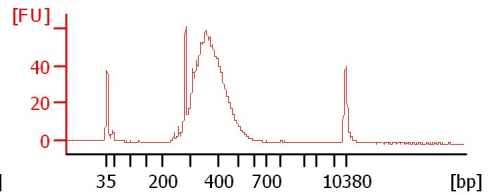
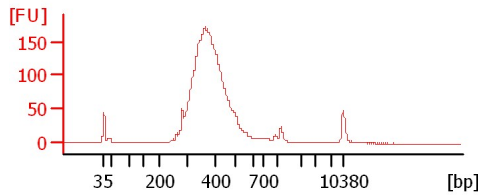
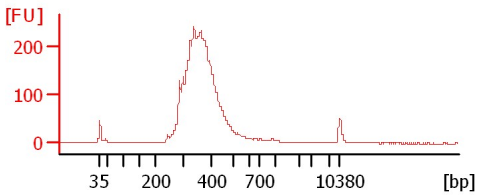
**C34 (1:5)**



**C33 Lib**

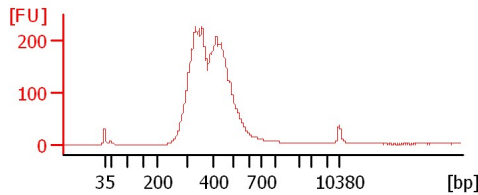
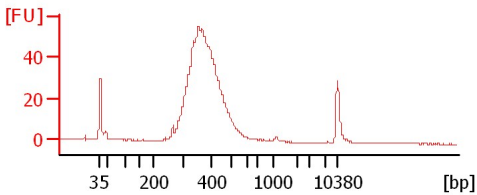
**C32 Lib**

**C31 Lib**



**C30 Lib**

**C29 Lib**



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-05\2012-03-05\_003.xad

Created: 3/5/2012 11:42:21 AM  
Modified: 3/5/2012 12:32:21 PM

**Electrophoresis File Run Summary (Chip Summary)**

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
UCB27 Lib		<input type="checkbox"/>	✓			
UCB26 Lib		<input type="checkbox"/>	✓			
C37		<input type="checkbox"/>	✓			
C36		<input type="checkbox"/>	✓			
C35 (1:10)		<input type="checkbox"/>	✓			
C34 (1:5)		<input type="checkbox"/>	✓			
C33 Lib		<input type="checkbox"/>	✓			
C32 Lib		<input type="checkbox"/>	✓			
C31 Lib		<input type="checkbox"/>	✓			
C30 Lib		<input type="checkbox"/>	✓			
C29 Lib		<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\2012-03-05\2012-03-05\_003.xad

Created: 3/5/2012 11:42:21 AM  
Modified: 3/5/2012 12:32:21 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

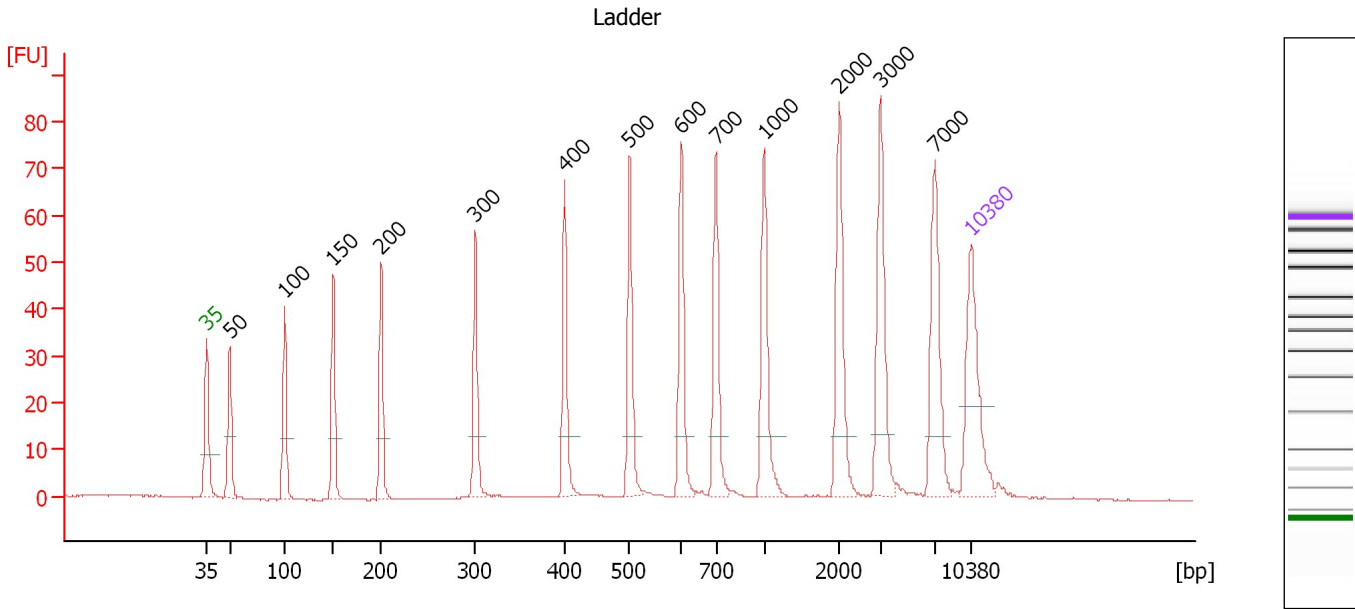
**Ladder**

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\2012-03-05\2012-03-05\_003.xad

Created: 3/5/2012 11:42:21 AM  
 Modified: 3/5/2012 12:32:21 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.1

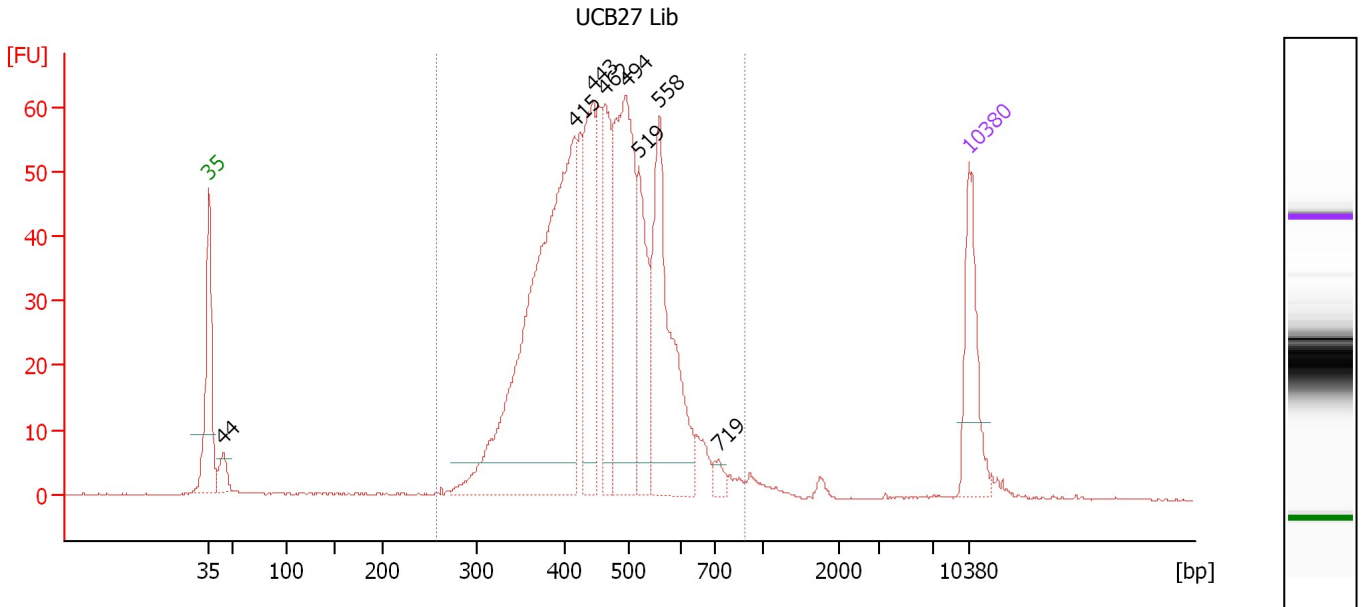
**Peak table for Ladder**

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\2012-03-05\2012-03-05\_003.xad

Created: 3/5/2012 11:42:21 AM  
 Modified: 3/5/2012 12:32:21 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : UCB27 Lib**

Number of peaks found: 8      Corr. Area 1: 980.0  
 Noise: 0.2

**Peak table for sample 1 : UCB27 Lib**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	44	30.10	1,025.6	
3	415	632.45	2,308.7	
4	443	166.47	569.3	
5	462	125.01	410.0	
6	494	282.66	866.7	
7	519	112.85	329.8	
8	558	233.07	633.0	
9	719	11.82	24.9	
10	10,380	75.00	10.9	Upper Marker

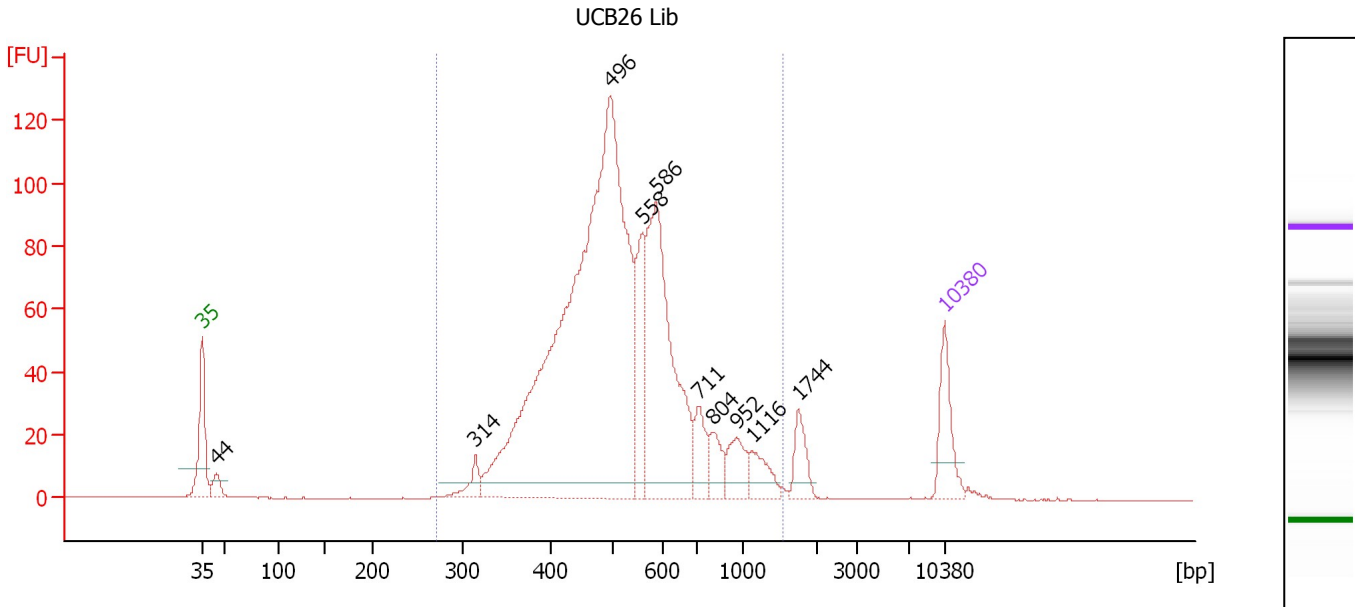
**Region table for sample 1 : UCB27 Lib**

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
258	6,219.2	461	1,809.97	882	980.0	95	18.8	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-05\2012-03-05\_003.xad

Created: 3/5/2012 11:42:21 AM  
 Modified: 3/5/2012 12:32:21 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : UCB26 Lib**

Number of peaks found: 10      Corr. Area 1: 1,585.4  
 Noise: 0.1

**Peak table for sample 2 : UCB26 Lib**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	44	37.23	1,272.4	
3	314	38.82	187.4	
4	496	1,728.58	5,285.5	
5	558	148.21	402.4	
6	586	489.30	1,265.9	
7	711	65.63	139.8	
8	804	49.33	93.0	
9	952	59.04	94.0	
10	1,116	46.54	63.2	
11	1,744	46.42	40.3	
12	10,380	75.00	10.9	Upper Marker

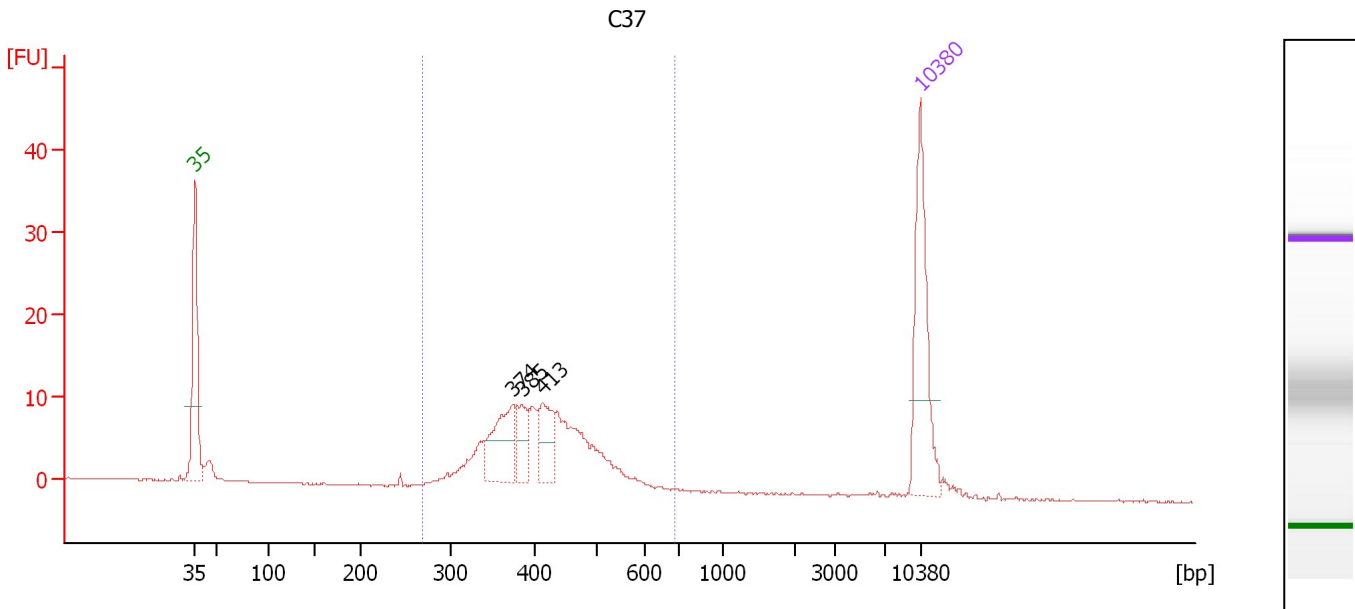
**Region table for sample 2 : UCB26 Lib**

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
271	8,335.1	540	2,713.14	1,529	1,585.4	96	31.6	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-05\2012-03-05\_003.xad

Created: 3/5/2012 11:42:21 AM  
 Modified: 3/5/2012 12:32:21 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : C37**

Number of peaks found: 3                      Corr. Area 1: 149.3  
 Noise: 0.1

**Peak table for sample 3 : C37**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	374	58.41	236.5	
3	385	27.41	107.9	
4	413	35.66	130.8	
5	10,380	75.00	10.9	Upper Marker

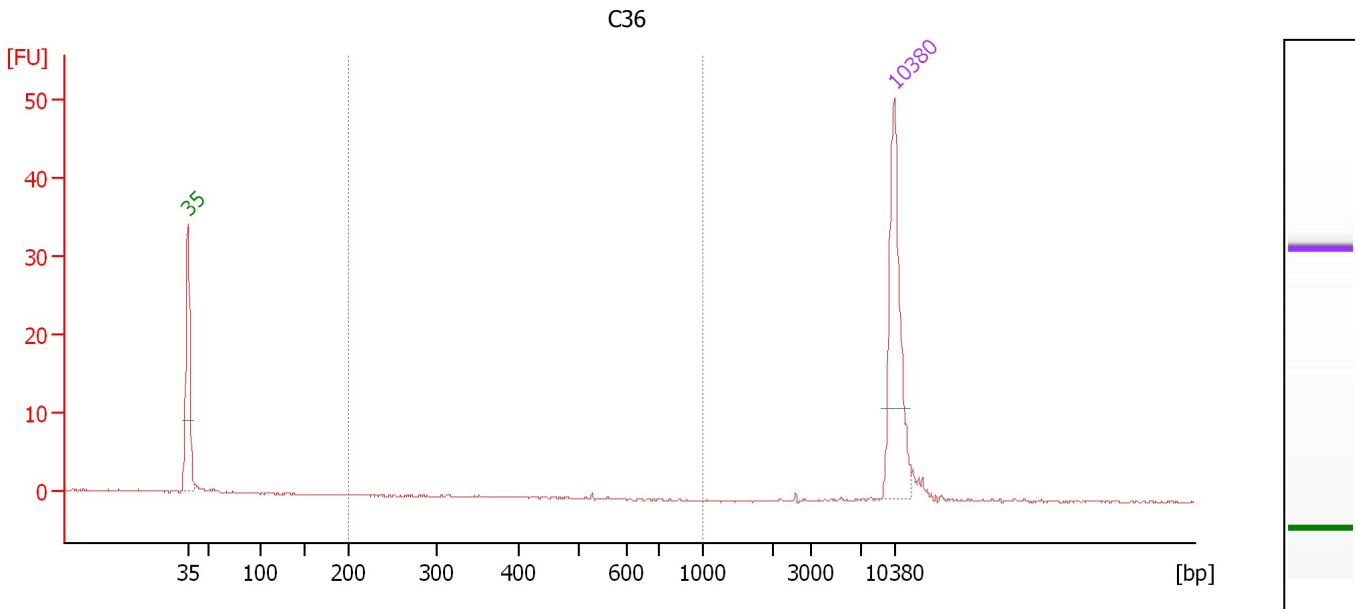
**Region table for sample 3 : C37**

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
268	1,147.1	416	304.34	691	149.3	89	16.5	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-05\2012-03-05\_003.xad

Created: 3/5/2012 11:42:21 AM  
 Modified: 3/5/2012 12:32:21 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : C36**

Number of peaks found: 0                      Corr. Area 1: 0.0  
 Noise: 0.1

**Peak table for sample 4 : C36**

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 4 : C36**

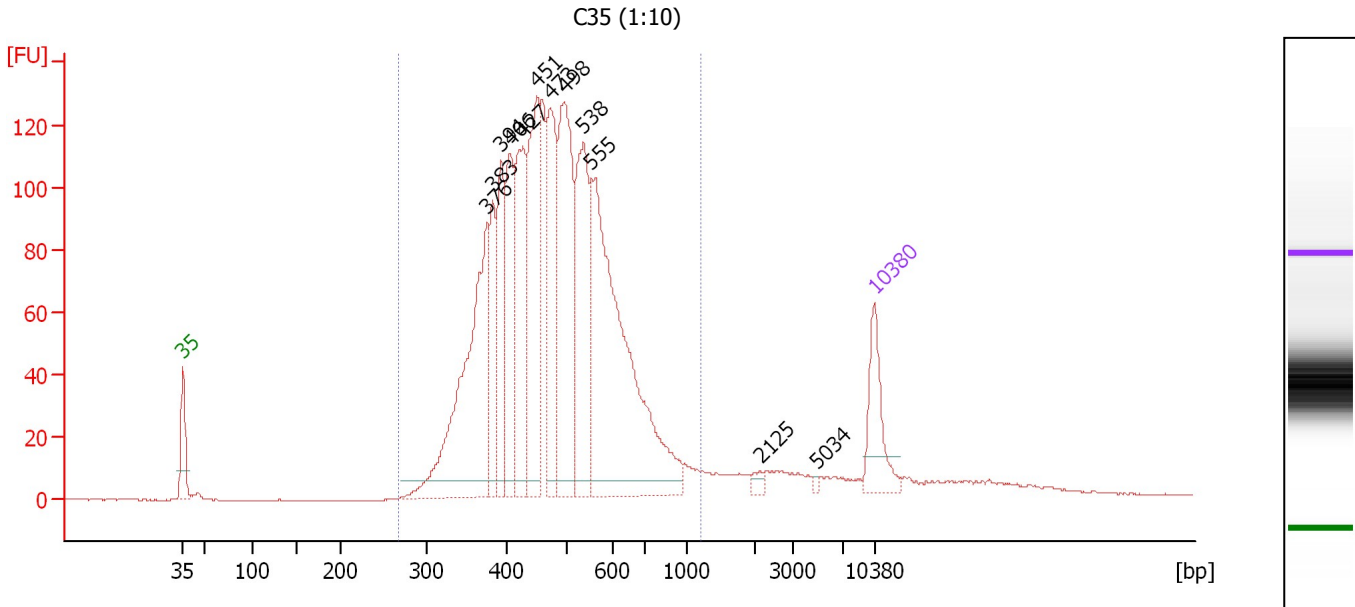
From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	0.2	528	0.07	1,000	0.0	1	0.2	Blue



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-05\2012-03-05\_003.xad

Created: 3/5/2012 11:42:21 AM  
 Modified: 3/5/2012 12:32:21 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : C35 (1:10)**

Number of peaks found: 12                      Corr. Area 1: 2,192.2  
 Noise: 0.1

**Peak table for sample 5 : C35 (1:10)**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	376	443.81	1,789.9	
3	383	123.84	490.0	
4	394	152.98	589.0	
5	406	178.19	665.6	
6	427	231.54	820.9	
7	451	270.25	908.2	
8	473	213.88	684.4	
9	498	328.00	998.1	
10	538	253.81	714.3	
11	555	613.14	1,672.6	
12	2,125	9.22	6.6	
13	5,034	3.81	1.1	
14	10,380	75.00	10.9	Upper Marker

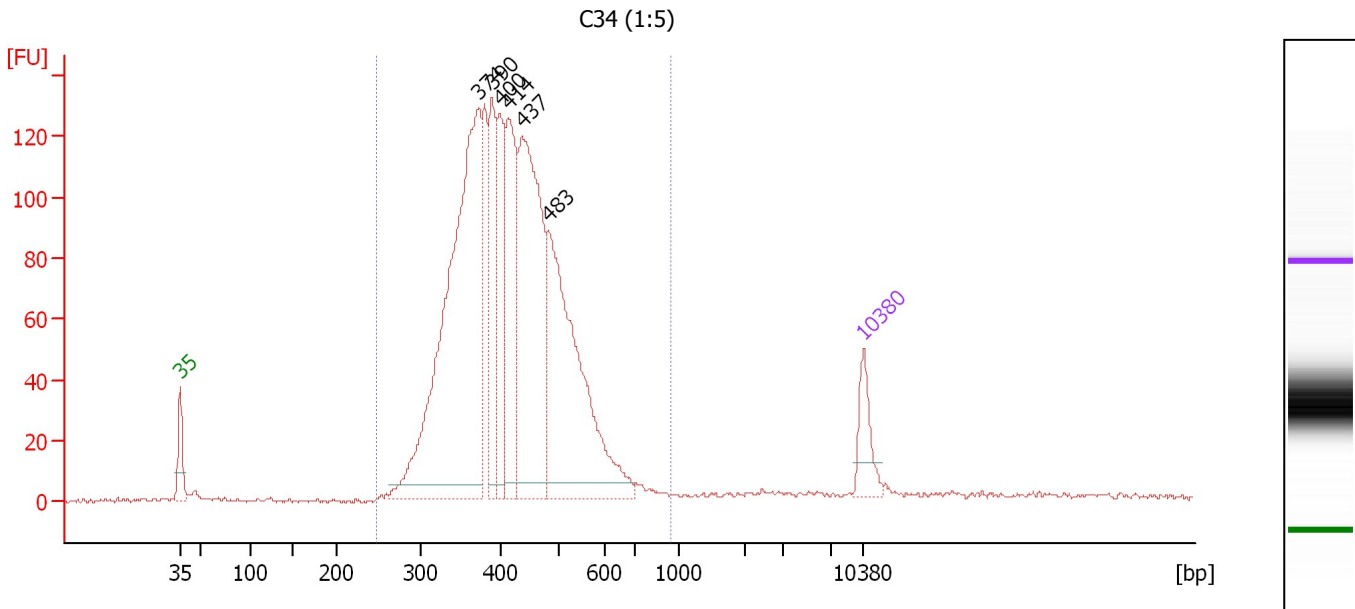
**Region table for sample 5 : C35 (1:10)**

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
268	9,826.2	492	2,983.38	1,184	2,192.2	93	24.6	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-05\2012-03-05\_003.xad

Created: 3/5/2012 11:42:21 AM  
 Modified: 3/5/2012 12:32:21 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : C34 (1:5)**

Number of peaks found: 6                      Corr. Area 1: 2,055.4  
 Noise: 0.7

**Peak table for sample 6 : C34 (1:5)**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	374	1,303.44	5,284.8	
3	390	272.99	1,061.2	
4	400	261.14	989.7	
5	414	359.34	1,313.9	
6	437	736.52	2,551.9	
7	483	749.24	2,349.8	
8	10,380	75.00	10.9	Upper Marker

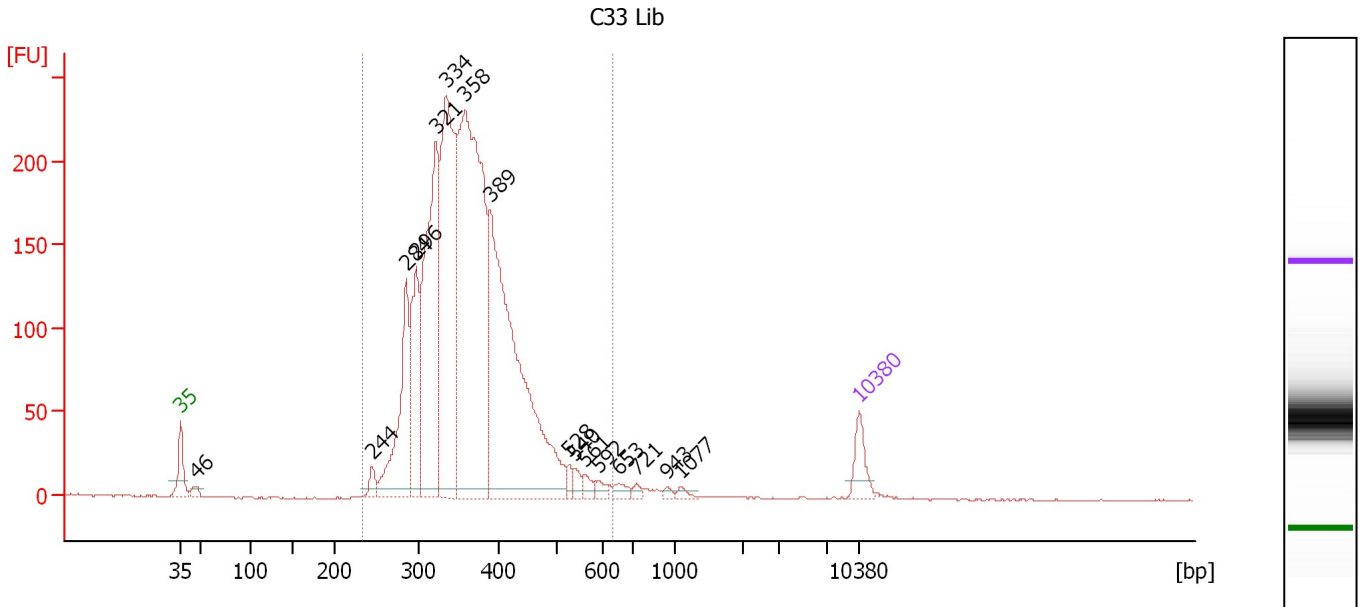
**Region table for sample 6 : C34 (1:5)**

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
248	14,872.8	424	3,983.86	948	2,055.4	96	19.1	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-05\2012-03-05\_003.xad

Created: 3/5/2012 11:42:21 AM  
 Modified: 3/5/2012 12:32:21 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : C33 Lib**

Number of peaks found: 16      Corr. Area 1: 3,120.5  
 Noise: 0.5

**Peak table for sample 7 : C33 Lib**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	46	32.31	1,055.2	
3	244	45.80	284.9	
4	284	488.53	2,603.8	
5	296	391.47	2,001.4	
6	321	963.44	4,546.4	
7	334	1,085.29	4,925.0	
8	358	1,761.50	7,451.9	
9	389	1,510.97	5,882.8	
10	528	28.68	82.2	
11	540	29.30	82.2	
12	561	30.91	83.5	
13	592	23.68	60.6	
14	653	27.83	64.6	
15	721	17.41	36.6	
16	943	12.29	19.8	
17	1,077	14.72	20.7	
18	10,380	75.00	10.9	Upper Marker

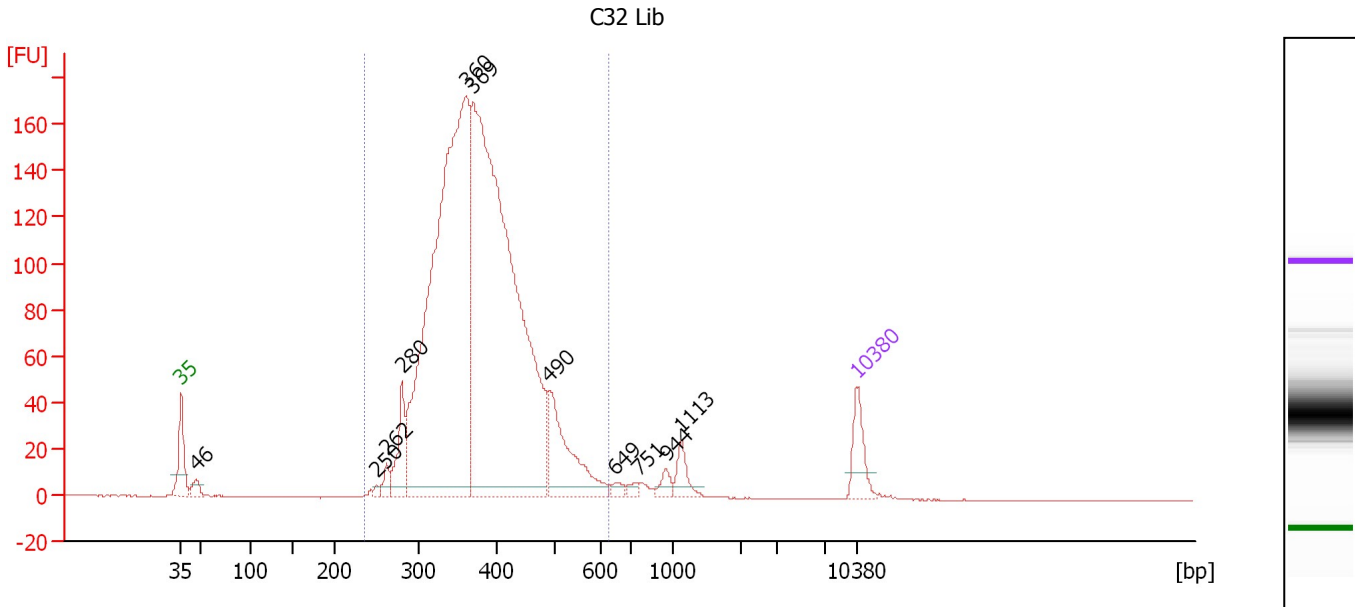
**Region table for sample 7 : C33 Lib**

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
231	27,017.4	364	6,285.26	636	3,120.5	98	16.6	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-05\2012-03-05\_003.xad

Created: 3/5/2012 11:42:21 AM  
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**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : C32 Lib**

Number of peaks found: 11      Corr. Area 1: 2,291.5  
 Noise: 0.1

**Peak table for sample 8 : C32 Lib**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	46	37.17	1,223.1	
3	250	11.44	69.4	
4	262	36.21	209.5	
5	280	142.96	774.1	
6	360	2,046.84	8,618.0	
7	369	2,277.68	9,343.8	
8	490	272.51	843.2	
9	649	16.35	38.2	
10	751	14.37	29.0	
11	944	24.68	39.6	
12	1,113	48.18	65.6	
13	10,380	75.00	10.9	Upper Marker

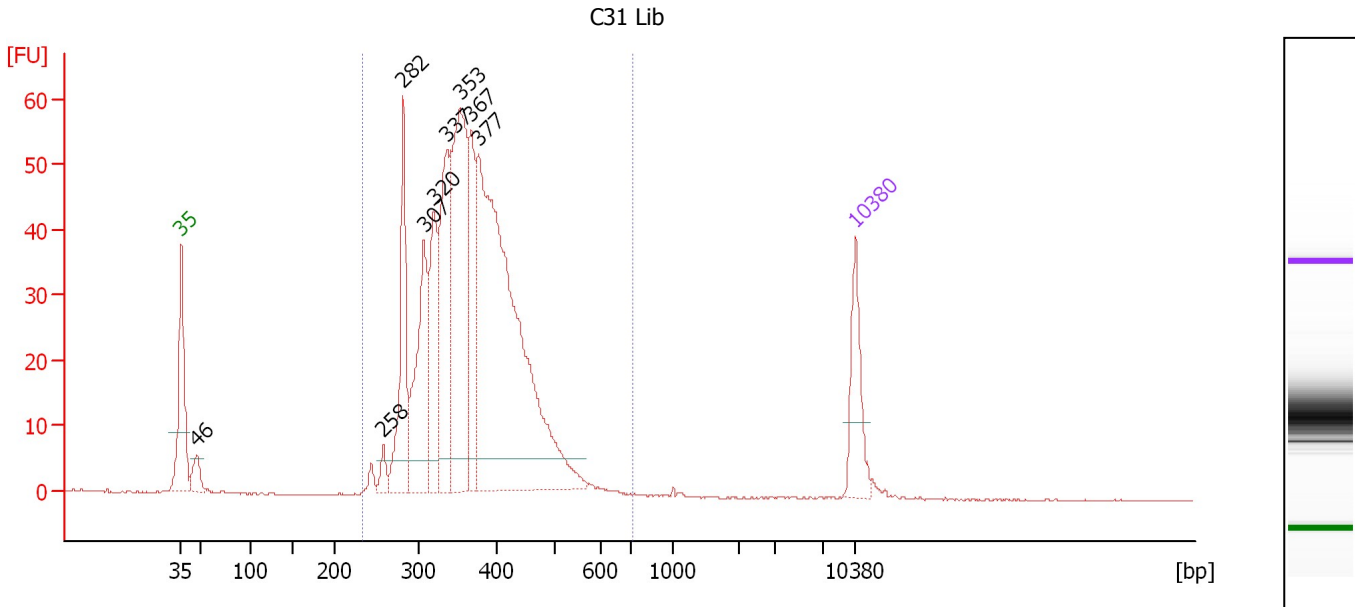
**Region table for sample 8 : C32 Lib**

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
234	19,596.5	381	4,774.84	626	2,291.5	96	16.4	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-05\2012-03-05\_003.xad

Created: 3/5/2012 11:42:21 AM  
 Modified: 3/5/2012 12:32:21 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : C31 Lib**

Number of peaks found: 9      Corr. Area 1: 785.8  
 Noise: 0.1

**Peak table for sample 9 : C31 Lib**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	46	41.32	1,347.6	
3	258	22.94	134.8	
4	282	191.42	1,028.0	
5	307	221.08	1,091.7	
6	320	160.16	759.0	
7	337	238.11	1,071.5	
8	353	393.65	1,689.8	
9	367	150.47	620.8	
10	377	869.70	3,498.0	
11	10,380	75.00	10.9	Upper Marker

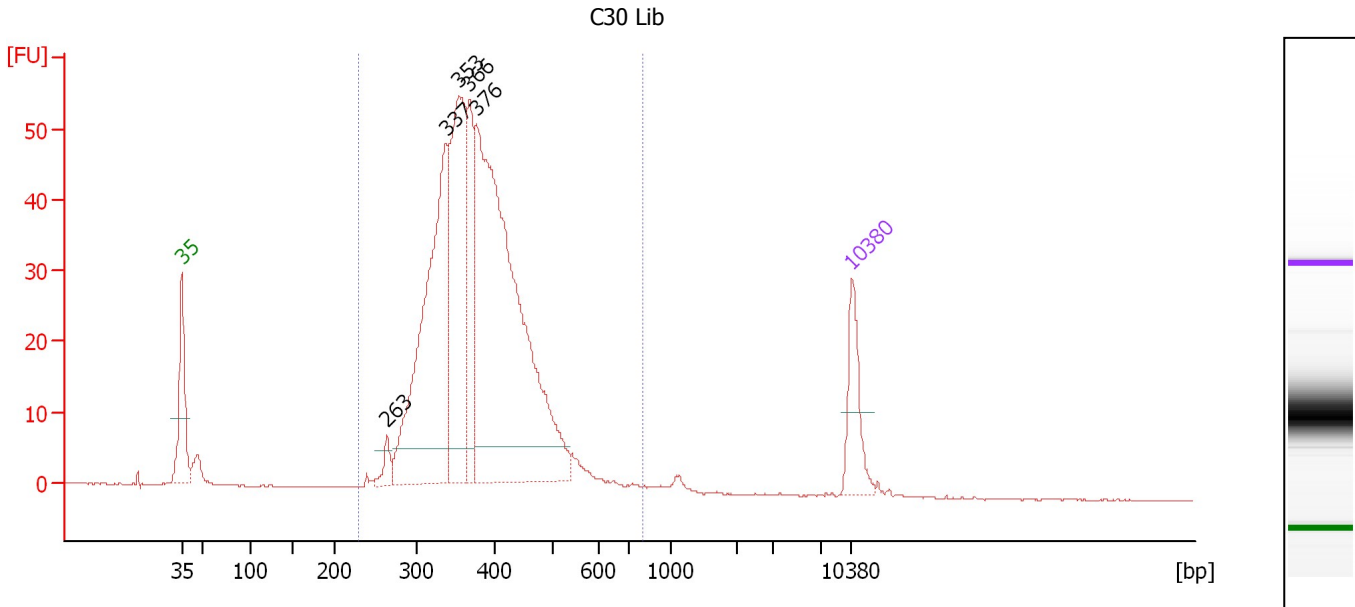
**Region table for sample 9 : C31 Lib**

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
232	9,567.7	369	2,254.06	718	785.8	98	16.5	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-05\2012-03-05\_003.xad

Created: 3/5/2012 11:42:21 AM  
 Modified: 3/5/2012 12:32:21 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : C30 Lib**

Number of peaks found: 5                      Corr. Area 1: 728.2  
 Noise: 0.1

**Peak table for sample 10 : C30 Lib**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	263	29.55	170.1	
3	337	595.10	2,677.2	
4	353	403.01	1,728.9	
5	366	178.59	739.0	
6	376	1,011.16	4,077.8	
7	10,380	75.00	10.9	Upper Marker

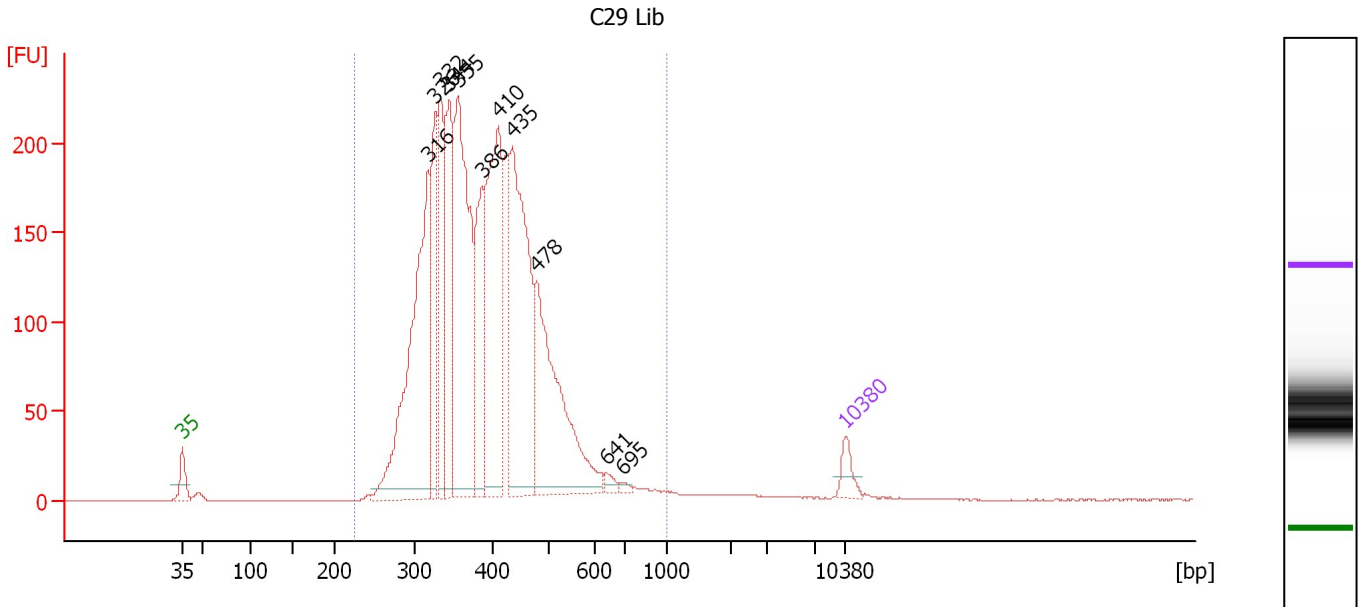
**Region table for sample 10 : C30 Lib**

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
230	9,533.2	382	2,323.54	798	728.2	97	17.3	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-05\2012-03-05\_003.xad

Created: 3/5/2012 11:42:21 AM  
 Modified: 3/5/2012 12:32:21 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : C29 Lib**

Number of peaks found: 11      Corr. Area 1: 3,659.4  
 Noise: 0.1

**Peak table for sample 11 : C29 Lib**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	316	1,724.86	8,265.3	
3	326	599.45	2,787.3	
4	332	635.29	2,898.8	
5	344	797.98	3,517.0	
6	355	1,556.60	6,647.0	
7	386	621.08	2,438.8	
8	410	1,272.75	4,704.4	
9	435	1,446.78	5,034.6	
10	478	1,167.01	3,700.0	
11	641	39.06	92.3	
12	695	18.78	41.0	
13	10,380	75.00	10.9	Upper Marker

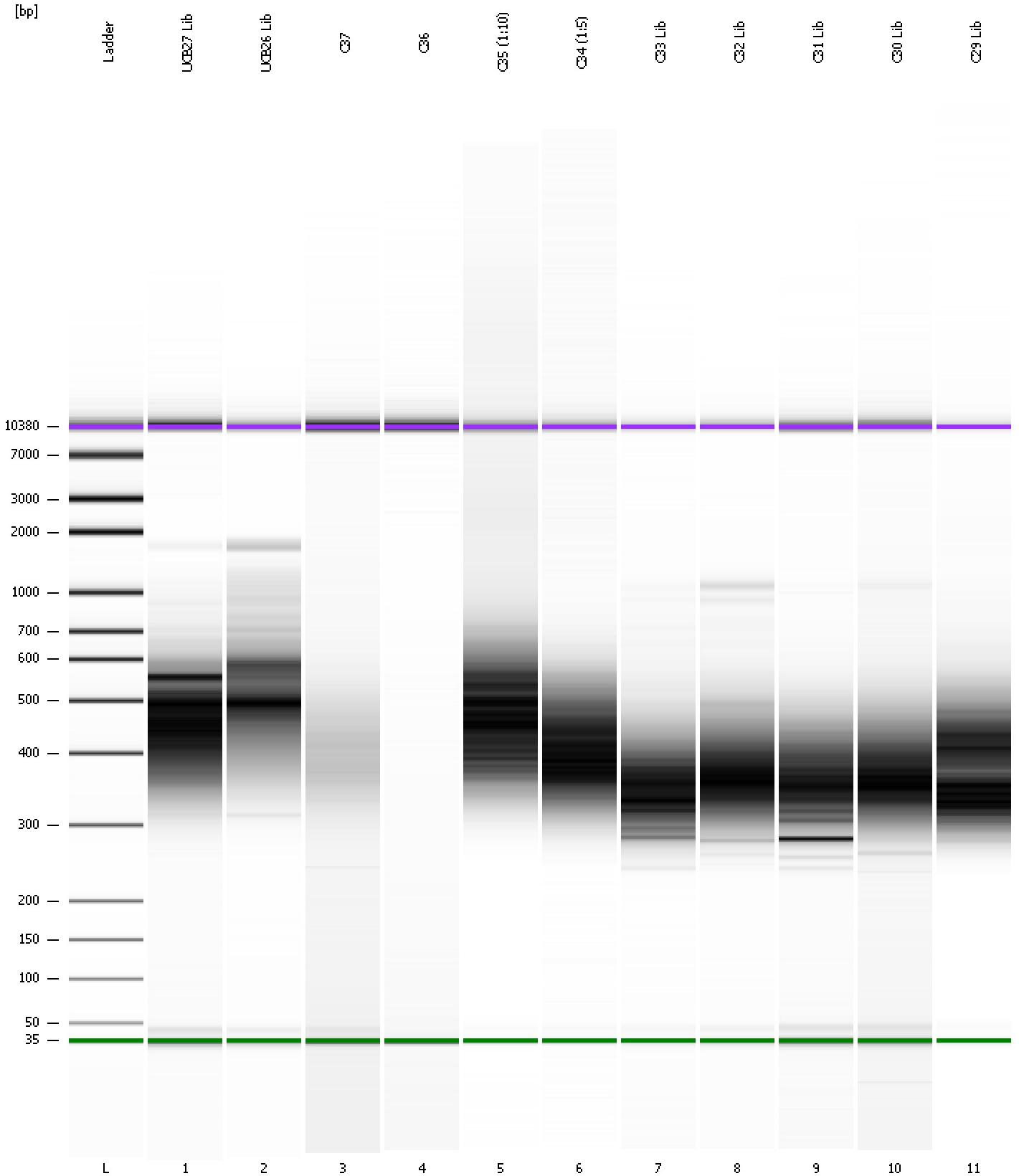
**Region table for sample 11 : C29 Lib**

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
226	42,384.9	398	10,570.30	1,000	3,659.4	98	21.8	Blue

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-05\2012-03-05\_003.xad

Created: 3/5/2012 11:42:21 AM  
Modified: 3/5/2012 12:32:21 PM

**Gel Image**



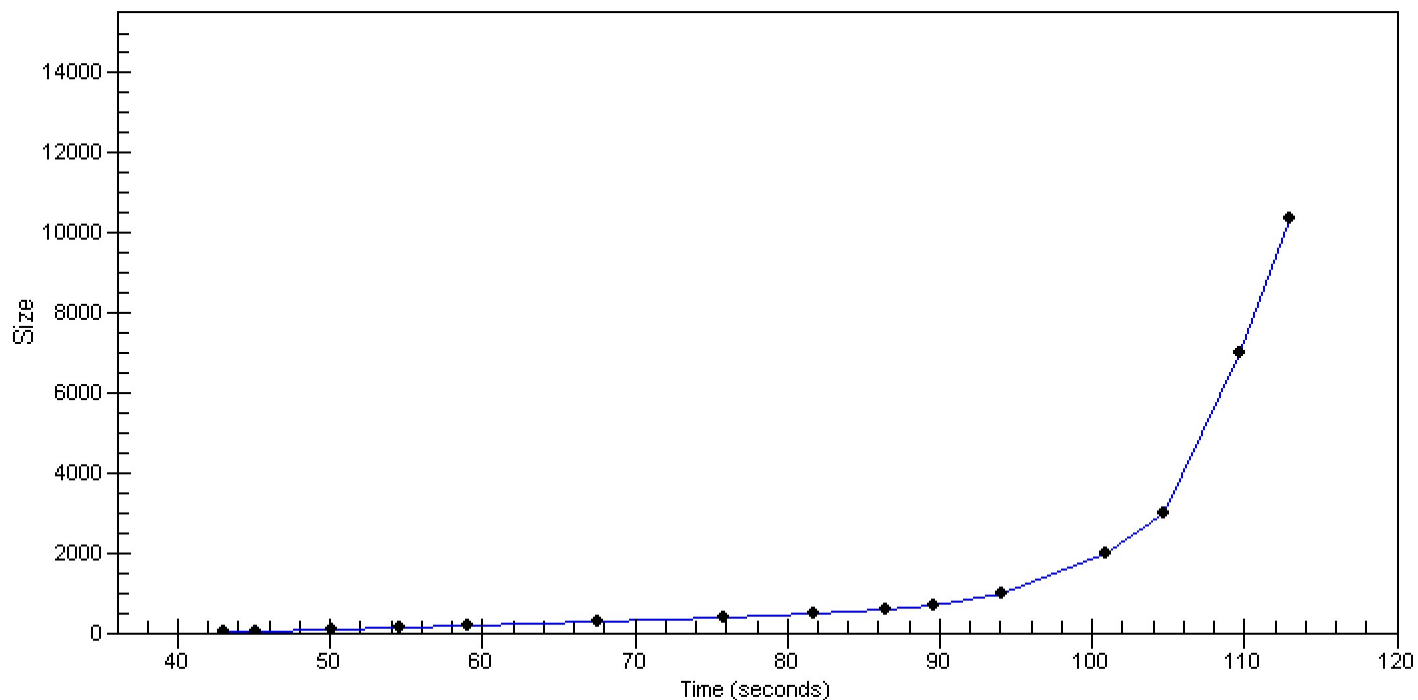


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-05\2012-03-05\_003.xad

Created: 3/5/2012 11:42:21 AM  
Modified: 3/5/2012 12:32:21 PM

**Curves**

**Standard Curve**



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-05\2012-03-05\_003.xad

Created: 3/5/2012 11:42:21 AM  
 Modified: 3/5/2012 12:32:21 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		3/5/2012 12:23:39 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2012-03-05\2012-03-05_003.xad)		Instrument	Run		3/5/2012 11:42:26 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		3/5/2012 11:42:26 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		3/5/2012 11:42:26 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		3/5/2012 11:42:26 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		3/5/2012 11:42:26 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		3/5/2012 11:42:26 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		3/5/2012 11:42:26 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1