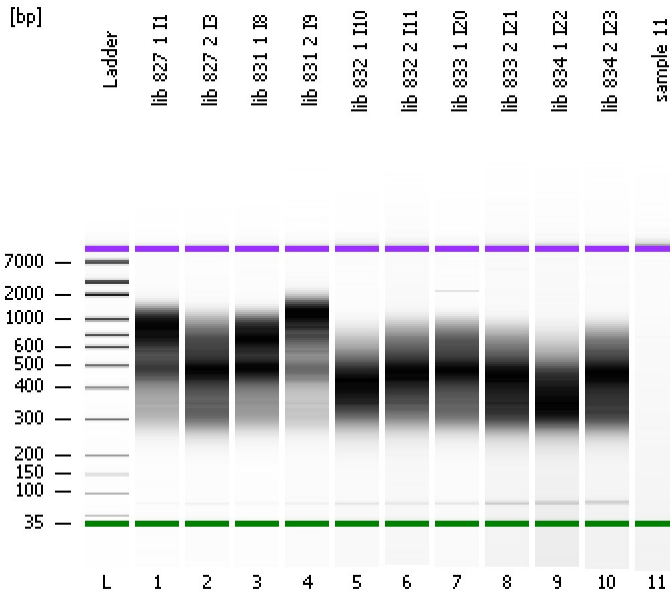


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-23\2014-07-23_006.xad

Created: 7/23/2014 4:10:49 PM
Modified: 7/23/2014 4:52:10 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

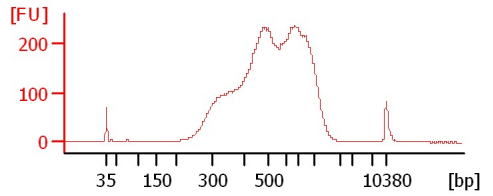
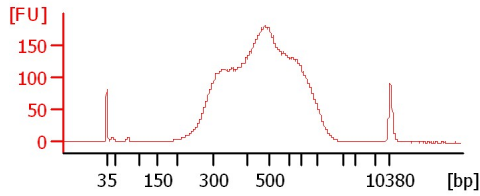
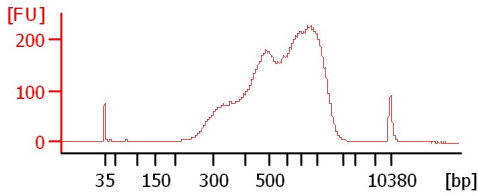
Chip Information:

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

lib 827 1 I1

lib 827 2 I3

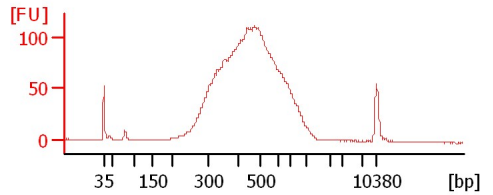
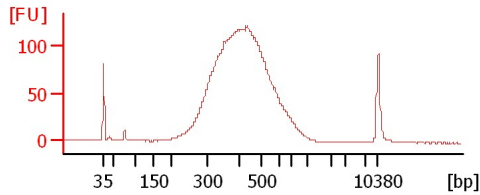
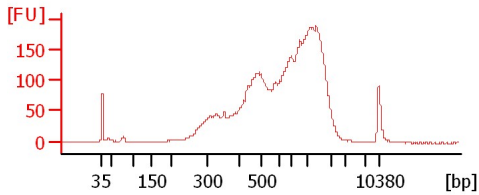
lib 831 1 I8



lib 831 2 I9

lib 832 1 I10

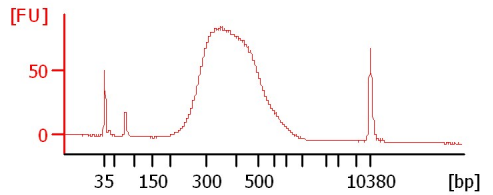
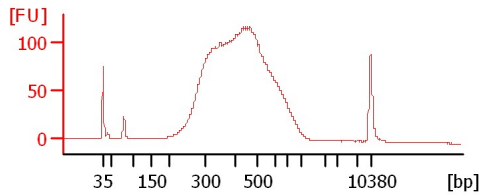
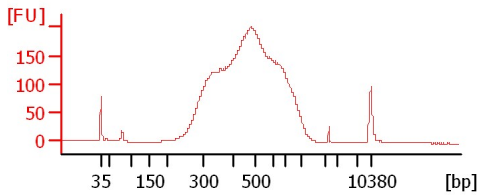
lib 832 2 I11



lib 833 1 I20

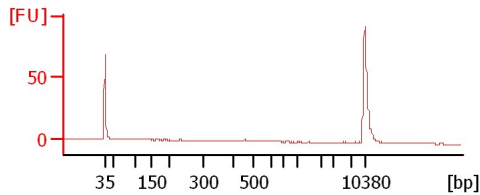
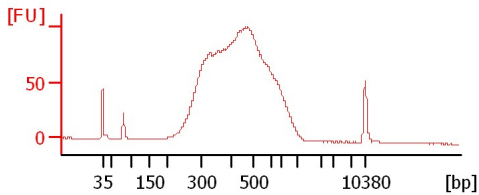
lib 833 2 I21

lib 834 1 I22



lib 834 2 I23

sample 11



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-23\2014-07-23_006.xad

Created: 7/23/2014 4:10:49 PM
 Modified: 7/23/2014 4:52:10 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
lib 827 1 I1		<input type="checkbox"/>	✓			
lib 827 2 I3		<input type="checkbox"/>	✓			
lib 831 1 I8		<input type="checkbox"/>	✓			
lib 831 2 I9		<input type="checkbox"/>	✓			
lib 832 1 I10		<input type="checkbox"/>	✓			
lib 832 2 I11		<input type="checkbox"/>	✓			
lib 833 1 I20		<input type="checkbox"/>	✓			
lib 833 2 I21		<input type="checkbox"/>	✓			
lib 834 1 I22		<input type="checkbox"/>	✓			
lib 834 2 I23		<input type="checkbox"/>	✓			
sample 11		<input type="checkbox"/>	✓			
Ladder		<input type="checkbox"/>	✓			

Chip Lot #

Reagent Kit Lot #

Chip Comments :

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-23\2014-07-23_006.xad

Created: 7/23/2014 4:10:49 PM
 Modified: 7/23/2014 4:52:10 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

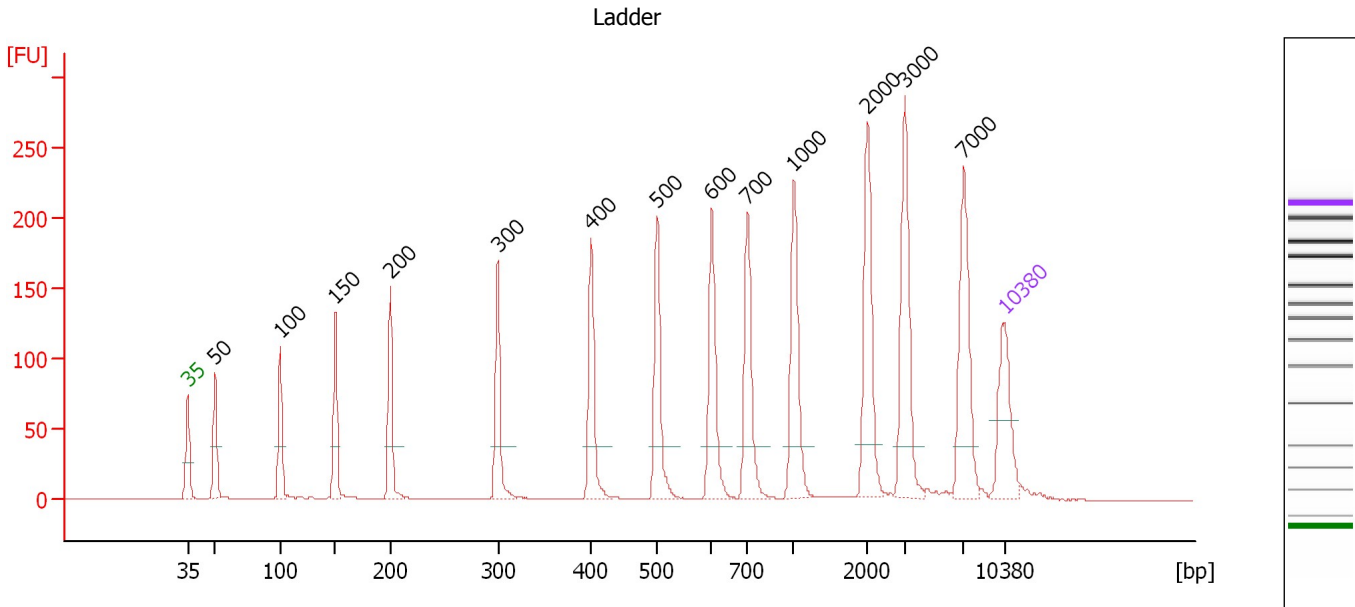
Ladder

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:\... bioanalyzer\2100 expert\Data\2014-07-23\2014-07-23_006.xad

Created: 7/23/2014 4:10:49 PM
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Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

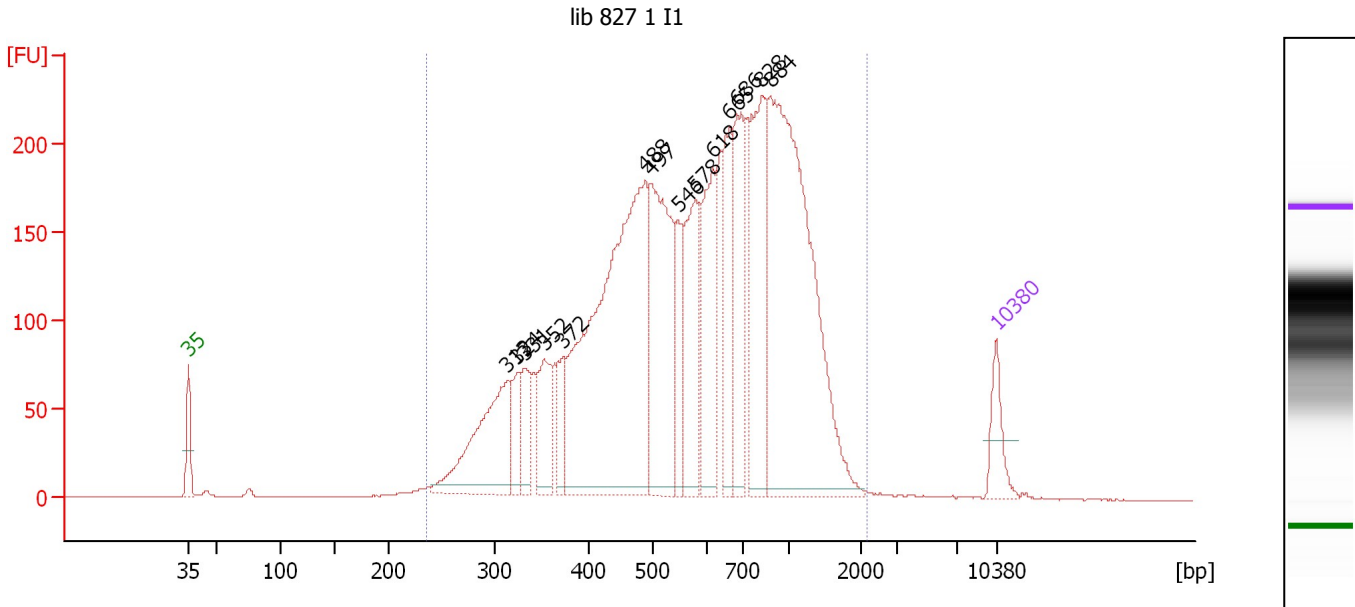
Peak table for Ladder

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:\... bioanalyzer\2100 expert\Data\2014-07-23\2014-07-23_006.xad

Created: 7/23/2014 4:10:49 PM
 Modified: 7/23/2014 4:52:10 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : lib 827 1 I1

Number of peaks found: 14 Corr. Area 1: 5,375.9
 Noise: 0.2

Peak table for sample 1 : lib 827 1 I1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	313	443.96	2,149.2	
3	324	115.38	539.6	
4	331	118.85	544.2	
5	352	179.72	773.0	
6	372	110.94	451.2	
7	488	1,391.46	4,316.7	
8	497	584.00	1,779.0	
9	546	131.87	365.7	
10	578	312.59	819.3	
11	618	318.59	781.1	
12	665	223.22	508.8	
13	686	312.98	691.4	
14	828	386.64	707.7	
15	884	1,166.78	2,000.7	
16	10,380	75.00	10.9	Upper Marker

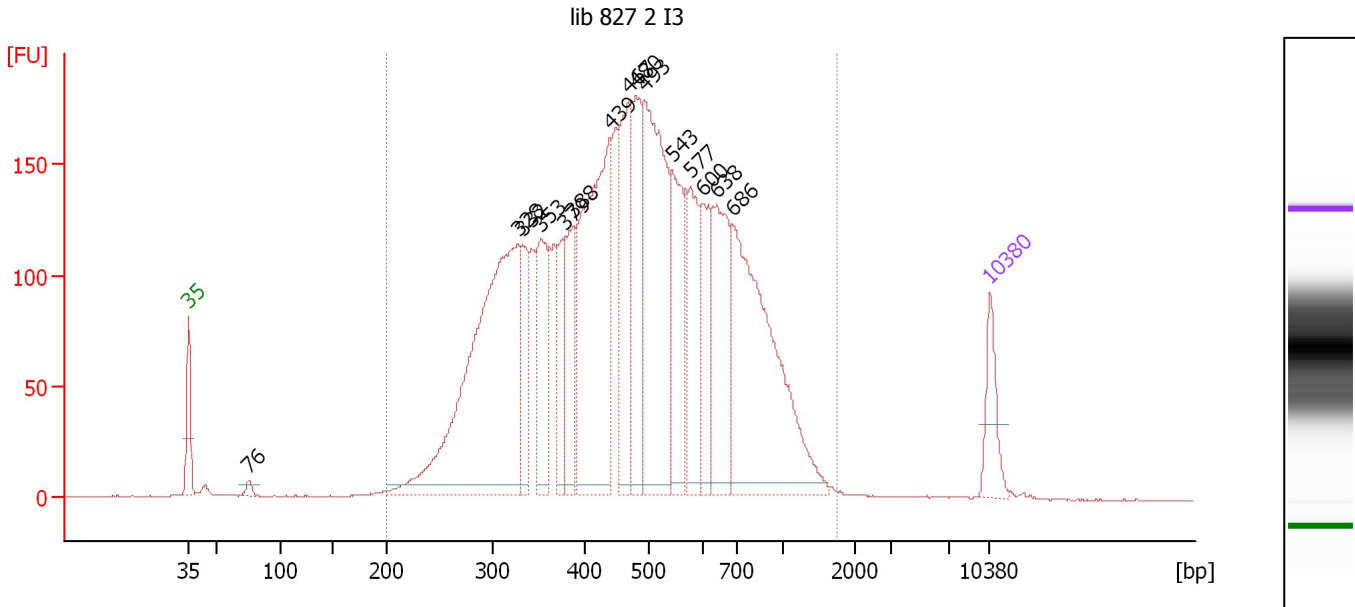
Region table for sample 1 : lib 827 1 I1

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
235	2,171	670	18,395.7	6,324.50	5,375.9	98	46.5

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-23\2014-07-23_006.xad

Created: 7/23/2014 4:10:49 PM
 Modified: 7/23/2014 4:52:10 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : lib 827 2 I3

Number of peaks found: 15 Corr. Area 1: 4,738.6
 Noise: 0.2

Peak table for sample 2 : lib 827 2 I3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	76	17.58	350.8	
3	328	1,114.80	5,155.6	
4	332	140.19	639.2	
5	353	213.18	915.8	
6	379	147.84	591.1	
7	388	178.80	698.8	
8	439	684.83	2,361.8	
9	467	312.73	1,014.0	
10	480	270.29	853.8	
11	493	605.61	1,862.0	
12	543	235.33	656.3	
13	577	204.94	537.9	
14	600	175.56	443.0	
15	638	273.83	649.8	
16	686	685.08	1,513.9	
17	10,380	75.00	10.9	Upper Marker

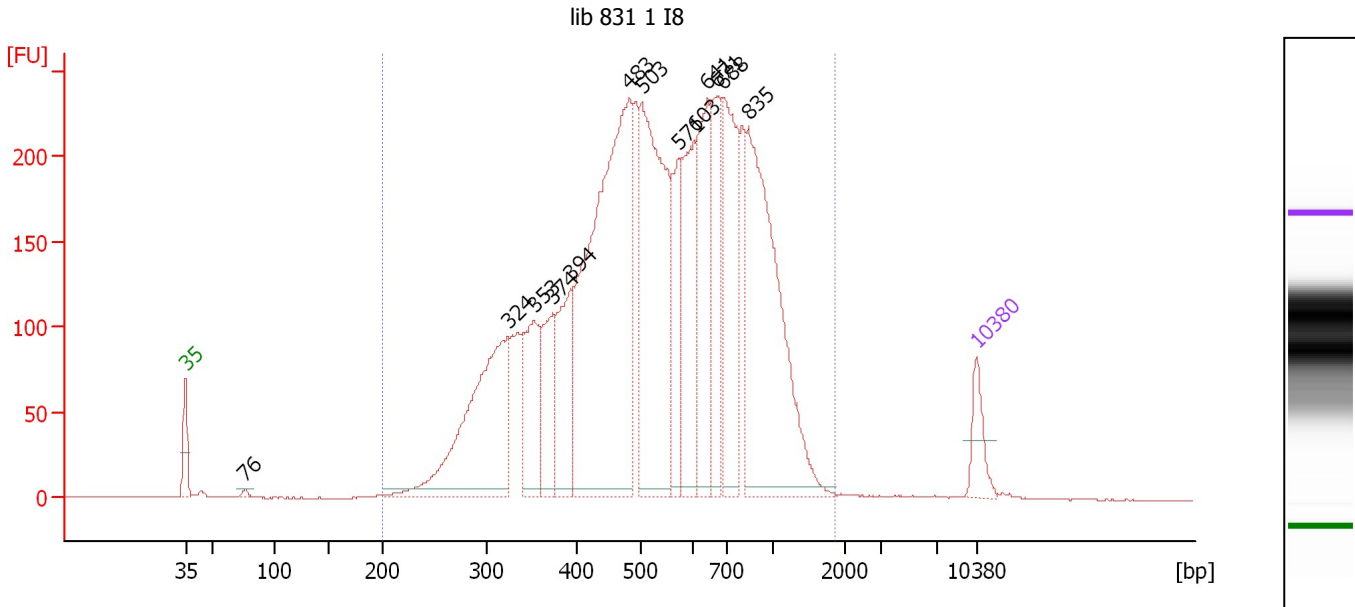
Region table for sample 2 : lib 827 2 I3

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
200	1,747	511	20,885.8	5,898.79	4,738.6	98	40.1

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-23\2014-07-23_006.xad

Created: 7/23/2014 4:10:49 PM
 Modified: 7/23/2014 4:52:10 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : lib 831 1 I8

Number of peaks found: 13 Corr. Area 1: 5,950.3
 Noise: 0.2

Peak table for sample 3 : lib 831 1 I8

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	76	13.56	270.1	
3	324	795.39	3,715.8	
4	353	320.11	1,373.1	
5	374	229.64	930.6	
6	394	315.26	1,212.6	
7	483	1,531.49	4,804.0	
8	503	907.47	2,735.5	
9	571	245.49	650.9	
10	603	364.76	916.9	
11	641	386.73	913.7	
12	671	286.69	647.8	
13	688	464.69	1,024.1	
14	835	905.43	1,643.1	
15	10,380	75.00	10.9	Upper Marker

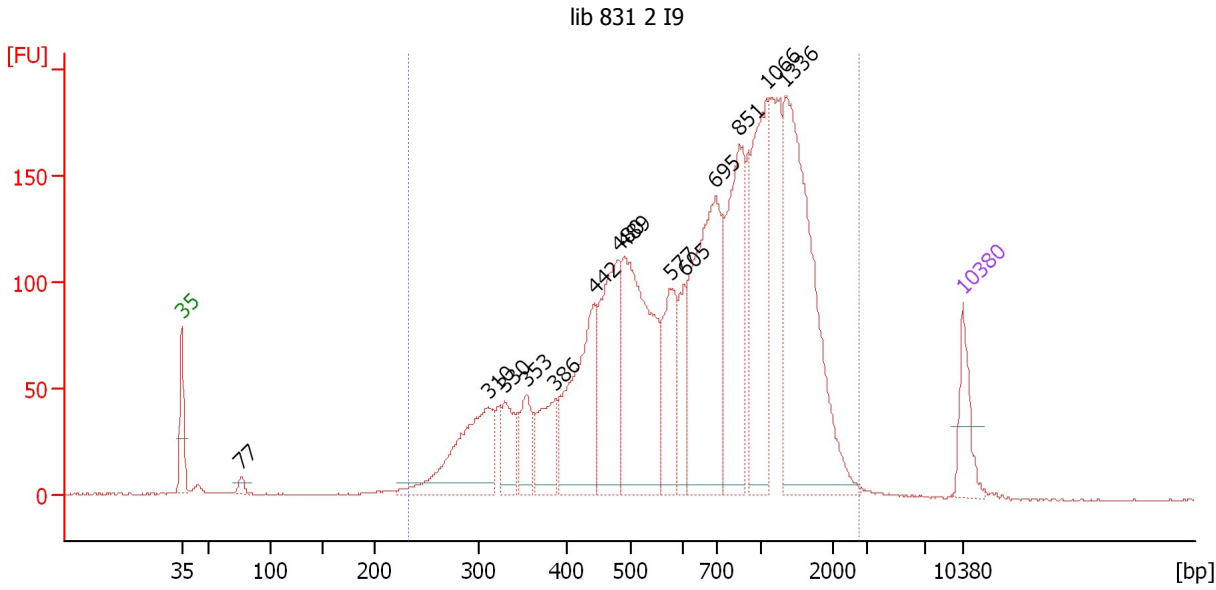
Region table for sample 3 : lib 831 1 I8

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
200	1,860	584	23,554.9	7,488.80	5,950.3	99	40.3

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-23\2014-07-23_006.xad

Created: 7/23/2014 4:10:49 PM
 Modified: 7/23/2014 4:52:10 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : lib 831 2 I9

Number of peaks found: 14 Corr. Area 1: 3,874.2
 Noise: 0.3

Peak table for sample 4 : lib 831 2 I9

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	77	19.19	379.2	
3	310	329.78	1,609.6	
4	330	101.55	466.9	
5	353	106.34	455.9	
6	386	141.45	554.8	
7	442	362.00	1,240.2	
8	480	331.26	1,045.2	
9	489	516.24	1,598.0	
10	577	195.36	512.6	
11	605	102.69	257.3	
12	695	532.95	1,161.6	
13	851	363.66	647.4	
14	1,066	341.40	485.4	
15	1,336	632.82	717.4	
16	10,380	75.00	10.9	Upper Marker

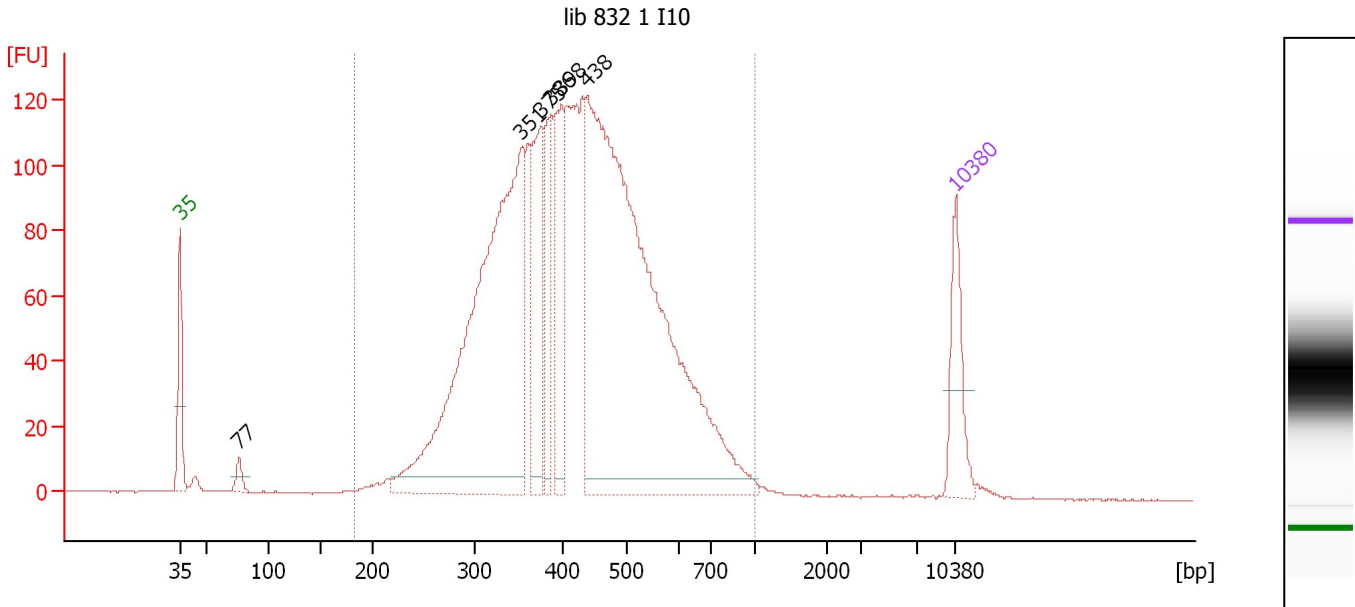
Region table for sample 4 : lib 831 2 I9

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
232	2,747	832	11,801.4	4,481.88	3,874.2	98	54.5

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-23\2014-07-23_006.xad

Created: 7/23/2014 4:10:49 PM
 Modified: 7/23/2014 4:52:10 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : lib 832 1 I10

Number of peaks found: 6 Corr. Area 1: 2,718.9
 Noise: 0.2

Peak table for sample 5 : lib 832 1 I10

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	77	23.83	471.4	
3	351	921.05	3,972.6	
4	375	189.58	766.5	
5	386	109.12	428.8	
6	398	167.96	640.0	
7	438	1,231.71	4,258.4	
8	10,380	75.00	10.9	Upper Marker

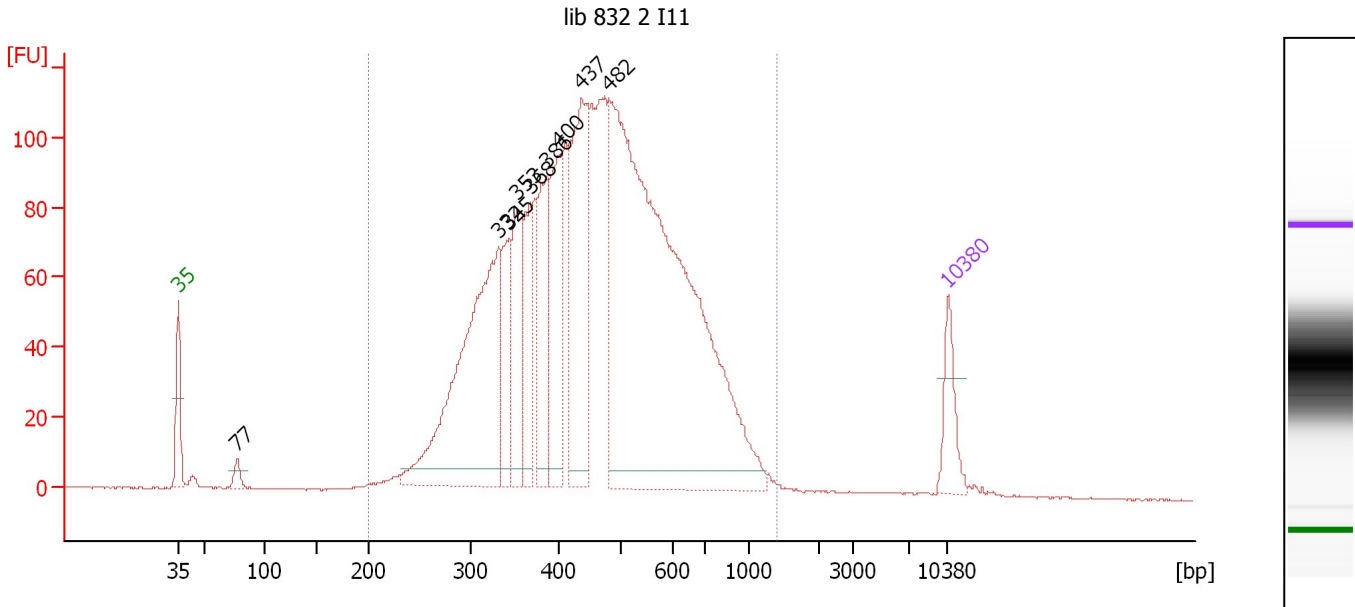
Region table for sample 5 : lib 832 1 I10

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
183	1,000	430	12,063.1	3,124.39	2,718.9	98	26.6

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-23\2014-07-23_006.xad

Created: 7/23/2014 4:10:49 PM
 Modified: 7/23/2014 4:52:10 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : lib 832 2 I11

Number of peaks found: 9 Corr. Area 1: 2,665.9
 Noise: 0.2

Peak table for sample 6 : lib 832 2 I11

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	77	31.24	615.2	
3	332	798.43	3,646.1	
4	345	146.26	643.2	
5	353	245.87	1,055.3	
6	368	157.59	648.6	
7	386	227.37	891.7	
8	400	256.70	971.4	
9	437	463.41	1,606.0	
10	482	1,874.08	5,894.8	
11	10,380	75.00	10.9	Upper Marker

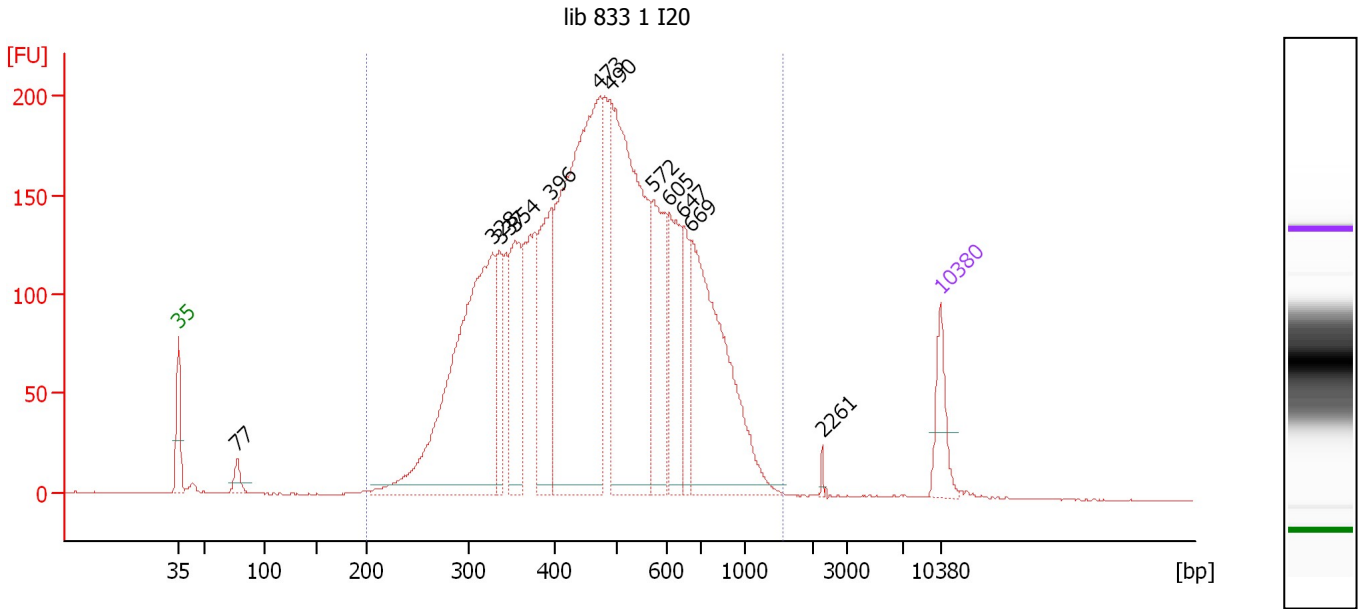
Region table for sample 6 : lib 832 2 I11

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
200	1,399	477	17,612.1	4,901.60	2,665.9	98	32.3

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-23\2014-07-23_006.xad

Created: 7/23/2014 4:10:49 PM
 Modified: 7/23/2014 4:52:10 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : lib 833 1 I20

Number of peaks found: 12 Corr. Area 1: 4,814.7
 Noise: 0.2

Peak table for sample 7 : lib 833 1 I20

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	77	41.40	814.5	
3	328	1,005.92	4,643.0	
4	337	138.86	624.6	
5	354	254.67	1,090.1	
6	396	296.99	1,137.3	
7	473	1,183.48	3,794.8	
8	490	944.85	2,922.6	
9	572	256.58	680.0	
10	605	218.27	546.7	
11	647	113.63	266.3	
12	669	613.41	1,389.4	
13	2,261	5.06	3.4	
14	10,380	75.00	10.9	Upper Marker

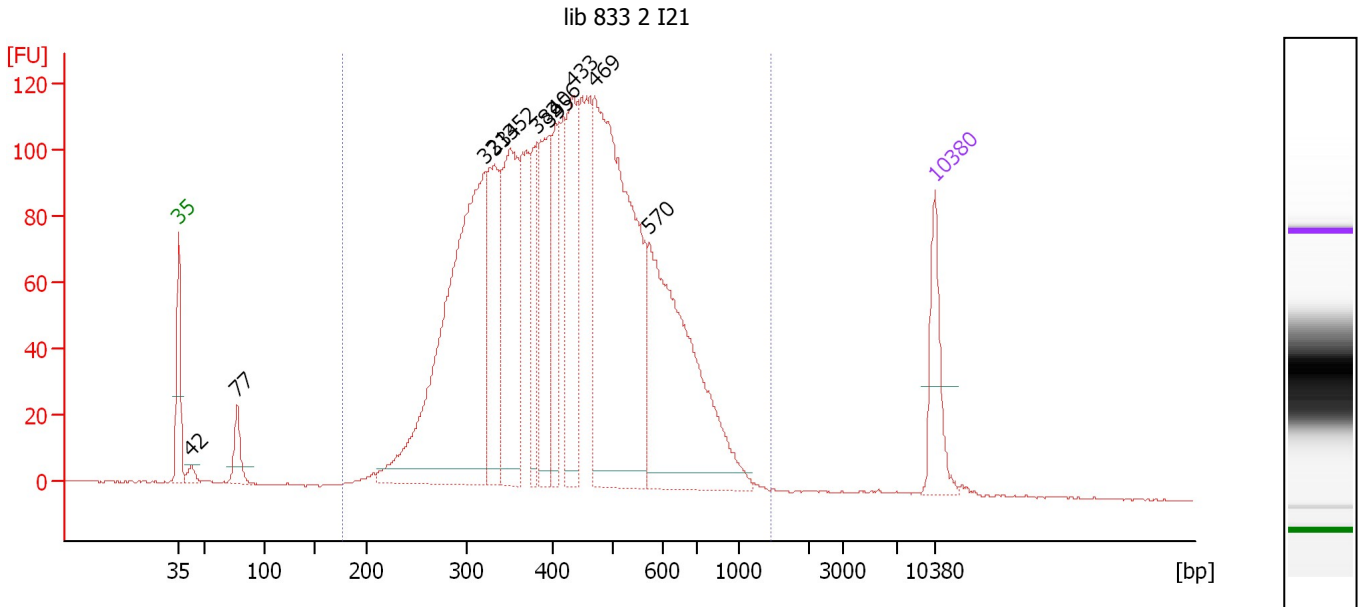
Region table for sample 7 : lib 833 1 I20

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
200	1,568	495	20,248.7	5,736.34	4,814.7	99	34.5

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-23\2014-07-23_006.xad

Created: 7/23/2014 4:10:49 PM
 Modified: 7/23/2014 4:52:10 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : lib 833 2 I21

Number of peaks found: 11 Corr. Area 1: 3,026.5
 Noise: 0.3

Peak table for sample 8 : lib 833 2 I21

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	42	16.85	601.1	
3	77	56.14	1,099.1	
4	321	780.74	3,683.1	
5	334	220.50	1,001.7	
6	352	302.70	1,302.8	
7	382	113.61	450.3	
8	395	186.29	714.1	
9	406	106.94	399.6	
10	433	197.60	692.2	
11	469	710.75	2,295.6	
12	570	454.77	1,207.8	
13	10,380	75.00	10.9	Upper Marker

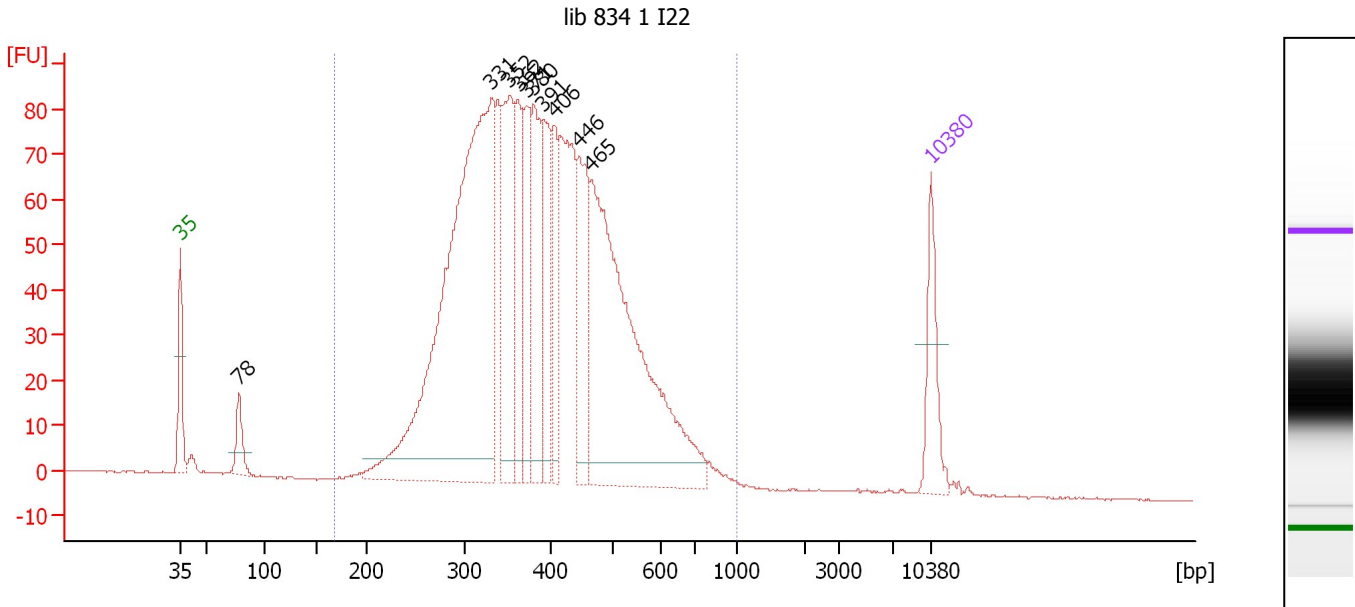
Region table for sample 8 : lib 833 2 I21

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
177	1,461	443	14,201.2	3,687.12	3,026.5	98	31.2

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-23\2014-07-23_006.xad

Created: 7/23/2014 4:10:49 PM
 Modified: 7/23/2014 4:52:10 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : lib 834 1 I22

Number of peaks found: 10 Corr. Area 1: 1,960.5
 Noise: 0.2

Peak table for sample 9 : lib 834 1 I22

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	78	62.20	1,212.3	
3	331	1,116.80	5,119.4	
4	352	255.57	1,101.1	
5	362	158.47	664.0	
6	371	134.85	550.8	
7	380	185.76	741.3	
8	391	141.22	547.5	
9	406	110.13	411.5	
10	446	177.94	604.7	
11	465	698.76	2,276.0	
12	10,380	75.00	10.9	Upper Marker

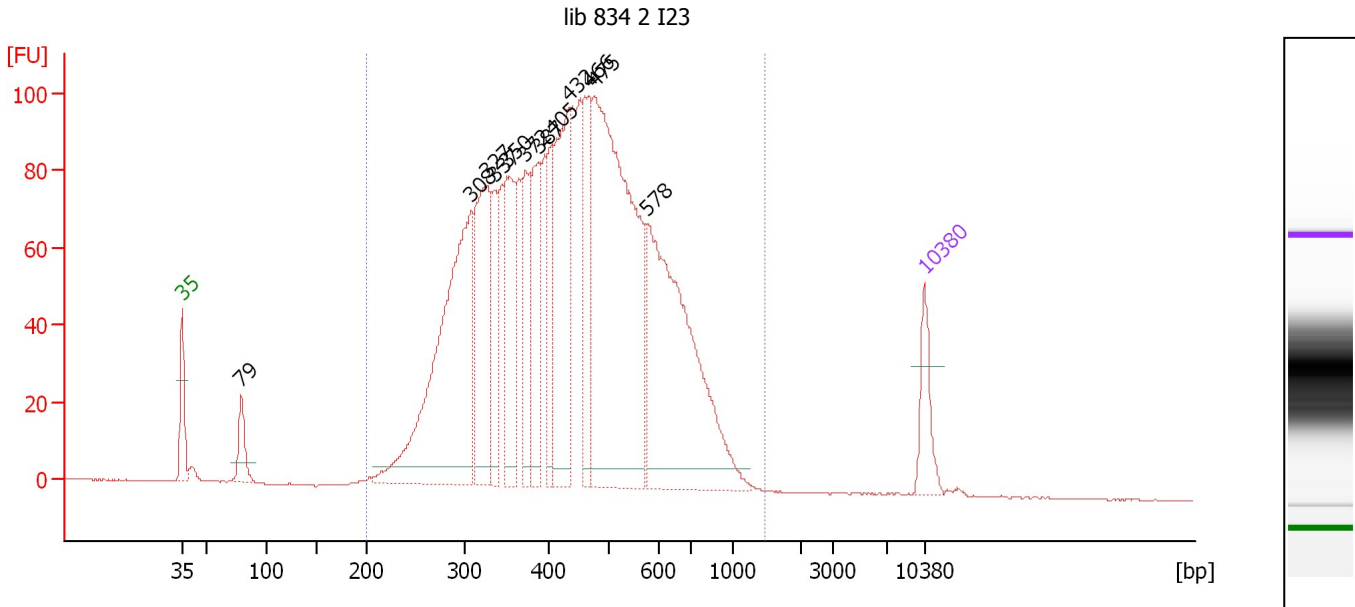
Region table for sample 9 : lib 834 1 I22

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
169	1,000	399	14,310.1	3,466.13	1,960.5	98	26.0

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-23\2014-07-23_006.xad

Created: 7/23/2014 4:10:49 PM
 Modified: 7/23/2014 4:52:10 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : lib 834 2 I23

Number of peaks found: 12 Corr. Area 1: 2,539.6
 Noise: 0.1

Peak table for sample 10 : lib 834 2 I23

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	79	97.78	1,881.2	
3	308	891.95	4,383.7	
4	327	401.03	1,860.8	
5	337	155.85	701.6	
6	350	278.13	1,202.5	
7	372	199.83	814.3	
8	387	221.53	867.5	
9	405	154.89	578.8	
10	432	383.03	1,343.1	
11	466	209.83	682.5	
12	475	1,089.70	3,478.0	
13	578	744.02	1,949.5	
14	10,380	75.00	10.9	Upper Marker

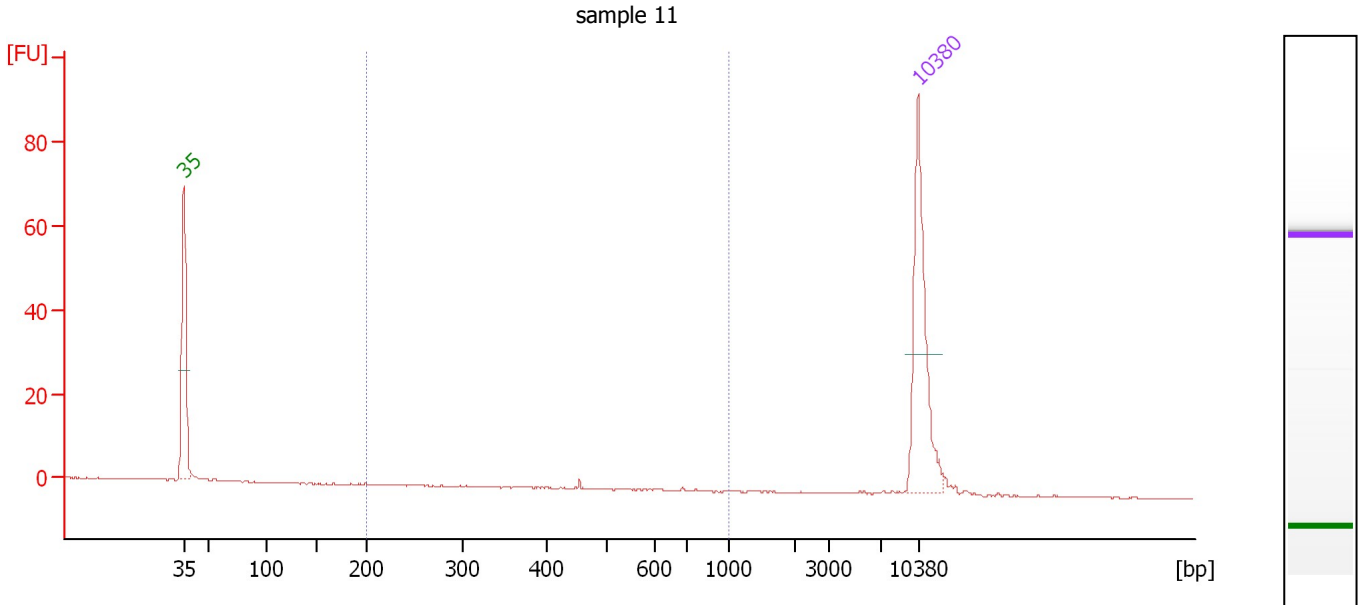
Region table for sample 10 : lib 834 2 I23

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
200	1,472	453	20,733.1	5,486.96	2,539.6	98	31.4

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-23\2014-07-23_006.xad

Created: 7/23/2014 4:10:49 PM
 Modified: 7/23/2014 4:52:10 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : sample 11

Number of peaks found: 0 Corr. Area 1: 0.5
 Noise: 0.1

Peak table for sample 11 : sample 11

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

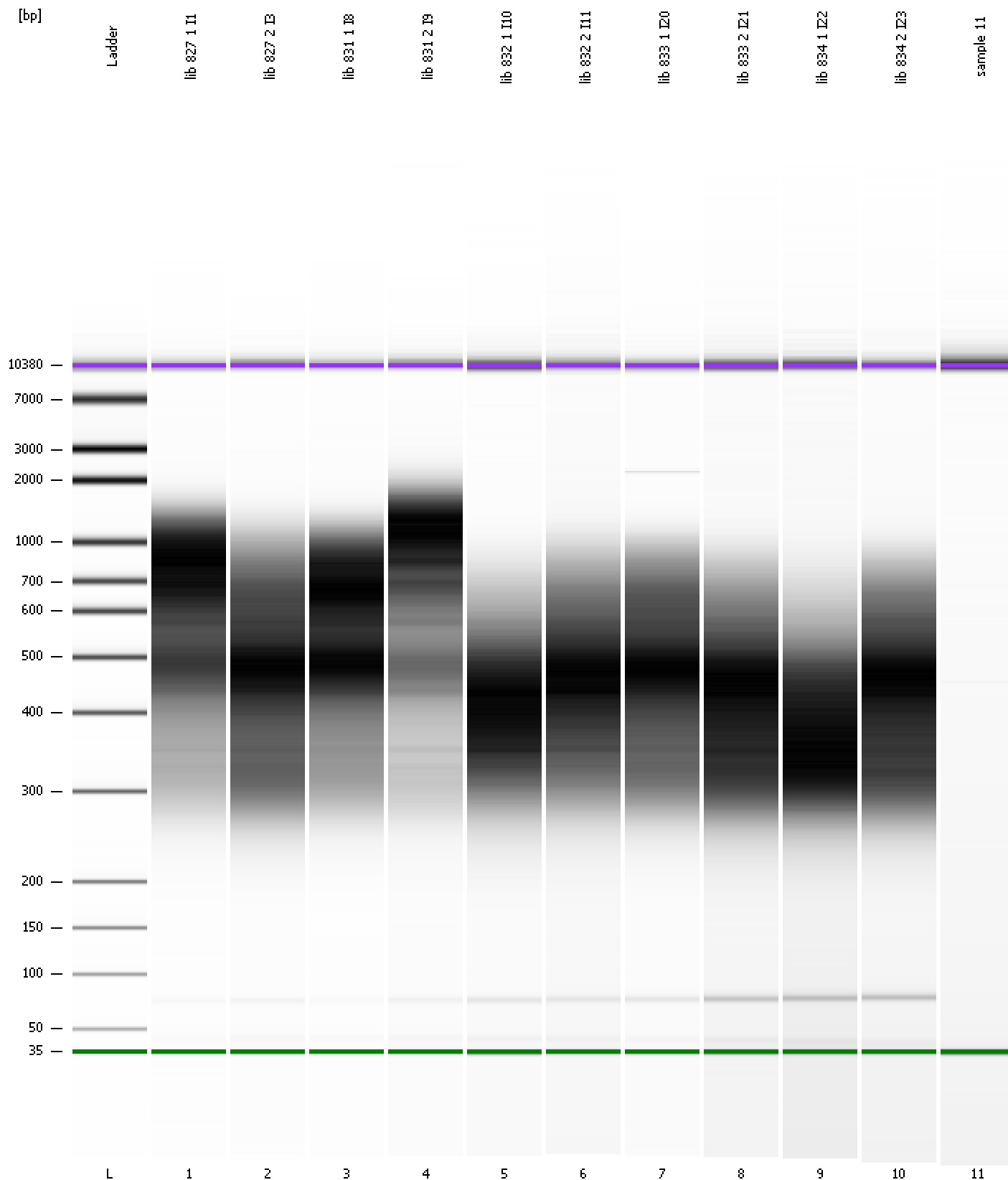
Region table for sample 11 : sample 11

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
200	1,000	511	1.7	0.54	0.5	6	20.2

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-23\2014-07-23_006.xad

Created: 7/23/2014 4:10:49 PM
Modified: 7/23/2014 4:52:10 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-23\2014-07-23_006.xad

Created: 7/23/2014 4:10:49 PM
 Modified: 7/23/2014 4:52:10 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		7/23/2014 4:52:06 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\Data\2014-07-23\2014-07-23_006.xad)		Instrument	Run		7/23/2014 4:10:55 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		7/23/2014 4:10:55 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		7/23/2014 4:10:55 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		7/23/2014 4:10:55 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		7/23/2014 4:10:55 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		7/23/2014 4:10:55 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		7/23/2014 4:10:55 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1