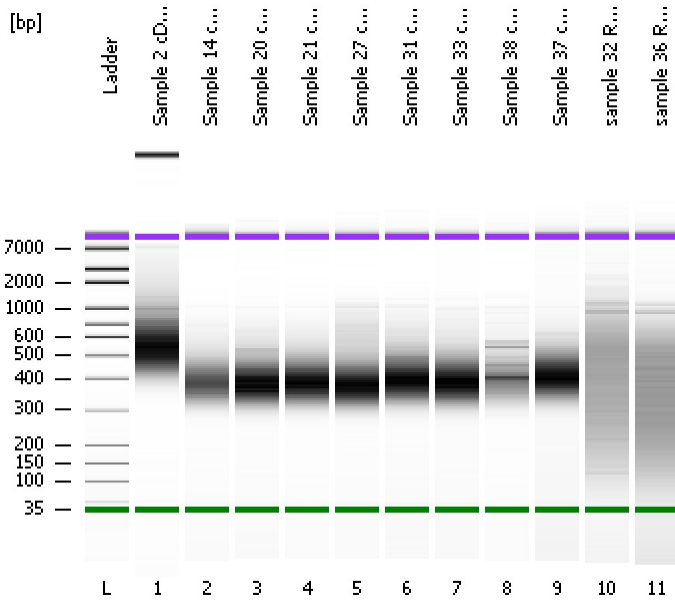


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-17\2013-04-17_002.xad

Created: 4/17/2013 12:40:58 PM
Modified: 4/17/2013 1:25:33 PM

Electrophoresis File Run Summary



Instrument Information:

Instrument Name: DE13701086 Firmware: C.01.069
Serial#: DE13701086 Type: G2938B

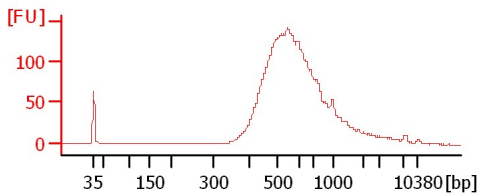
Assay Information:

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

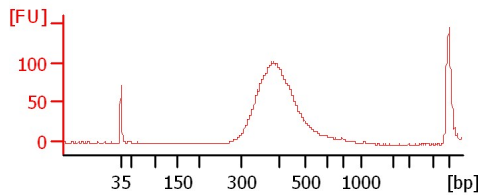
Chip Information:

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

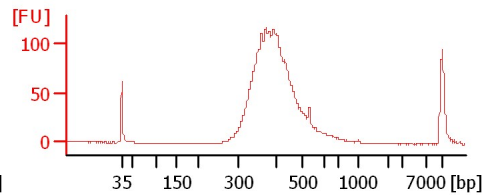
Sample 2 cDNA Lib 1:11



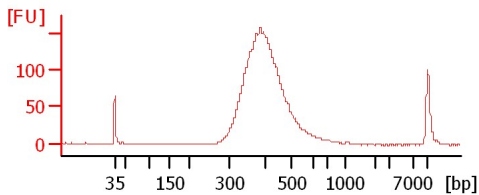
Sample 14 cDNA Lib 1:16



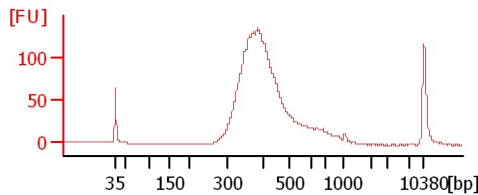
Sample 20 cDNA Lib 1:3



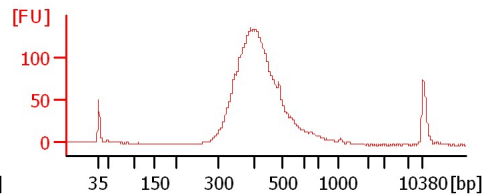
Sample 21 cDNA Lib 1:6



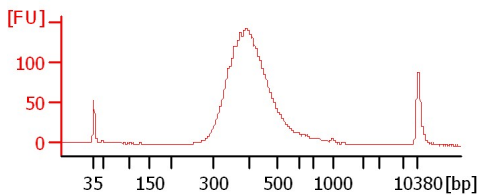
Sample 27 cDNA Lib 1:5



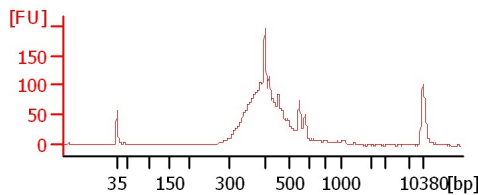
Sample 31 cDNA Lib 1:3



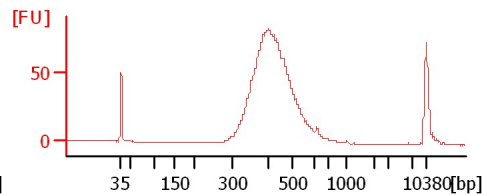
Sample 33 cDNA Lib 1:3



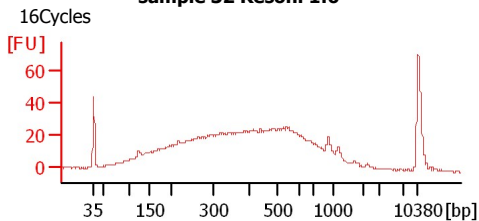
Sample 38 cDNA Lib 1:8



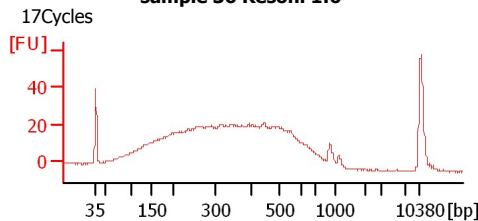
Sample 37 cDNA Lib 1:26



sample 32 Resoni 1:6



sample 36 Resoni 1:6



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-17\2013-04-17_002.xad

Created: 4/17/2013 12:40:58 PM
Modified: 4/17/2013 1:25:33 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
Sample 2 cDNA Lib 1:11		<input type="checkbox"/>	✓			
Sample 14 cDNA Lib 1:16		<input type="checkbox"/>	✓			
Sample 20 cDNA Lib 1:3		<input type="checkbox"/>	✓			
Sample 21 cDNA Lib 1:6		<input type="checkbox"/>	✓			
Sample 27 cDNA Lib 1:5		<input type="checkbox"/>	✓			
Sample 31 cDNA Lib 1:3		<input type="checkbox"/>	✓			
Sample 33 cDNA Lib 1:3		<input type="checkbox"/>	✓			
Sample 38 cDNA Lib 1:8		<input type="checkbox"/>	✓			
Sample 37 cDNA Lib 1:26		<input type="checkbox"/>	✓			
sample 32 Resoni 1:6	16Cycles	<input type="checkbox"/>	✓			
sample 36 Resoni 1:6	17Cycles	<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\2013-04-17\2013-04-17_002.xad

Created: 4/17/2013 12:40:58 PM
 Modified: 4/17/2013 1:25:33 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

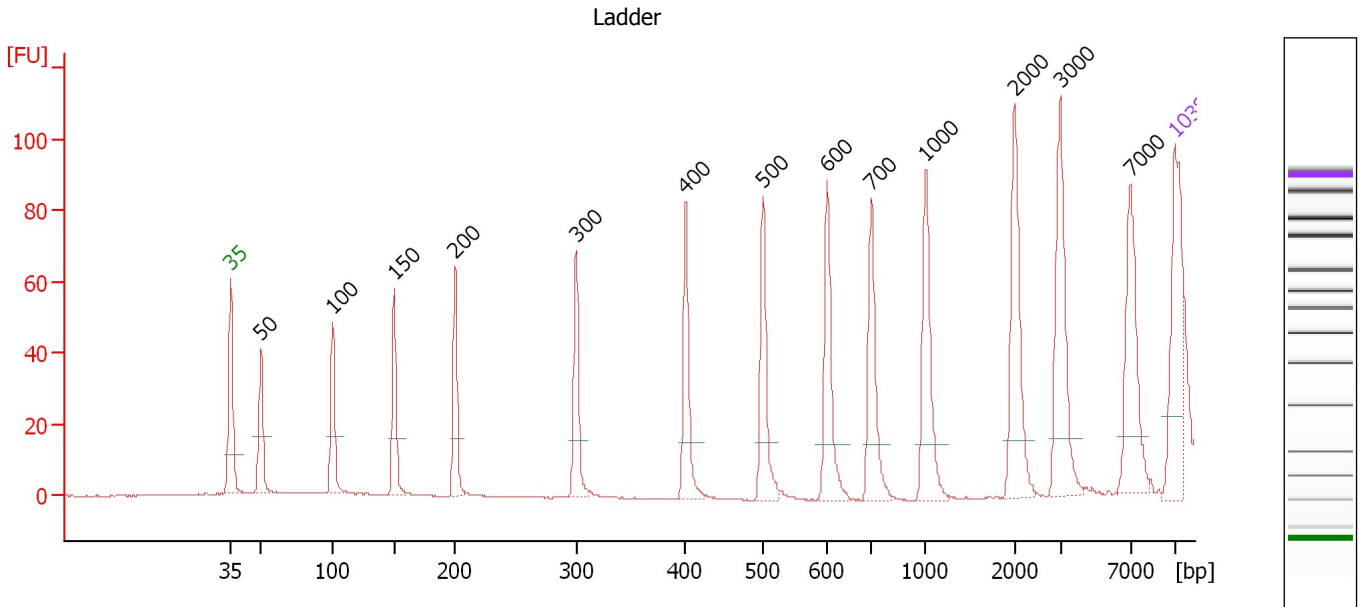
Ladder

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\2013-04-17\2013-04-17_002.xad

Created: 4/17/2013 12:40:58 PM
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Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

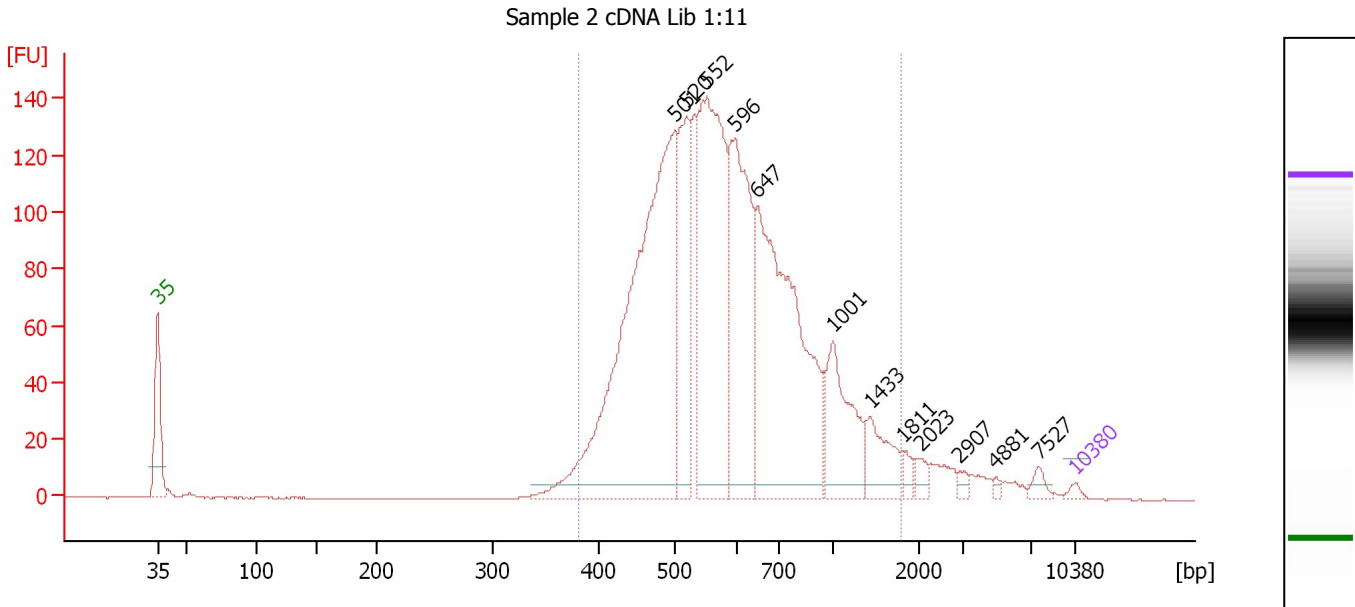
Peak table for Ladder

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:\...ents and Settings\Bioanalyzer\2013-04-17\2013-04-17_002.xad

Created: 4/17/2013 12:40:58 PM
 Modified: 4/17/2013 1:25:33 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : Sample 2 cDNA Lib 1:11

Number of peaks found: 12 Corr. Area 1: 984.2
 Noise: 0.2

Peak table for sample 1 : Sample 2 cDNA Lib 1:11

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	501	13,555.33	41,013.9	
3	520	3,302.67	9,624.3	
4	552	7,227.22	19,841.2	
5	596	5,225.35	13,293.4	
6	647	8,348.58	19,553.5	
7	1,001	2,198.52	3,328.8	
8	1,433	1,013.79	1,072.0	
9	1,811	191.36	160.1	
10	2,023	222.47	166.6	
11	2,907	126.64	66.0	
12	4,881	73.00	22.7	
13	7,527	182.88	36.8	
14	10,380	75.00	10.9	Upper Marker

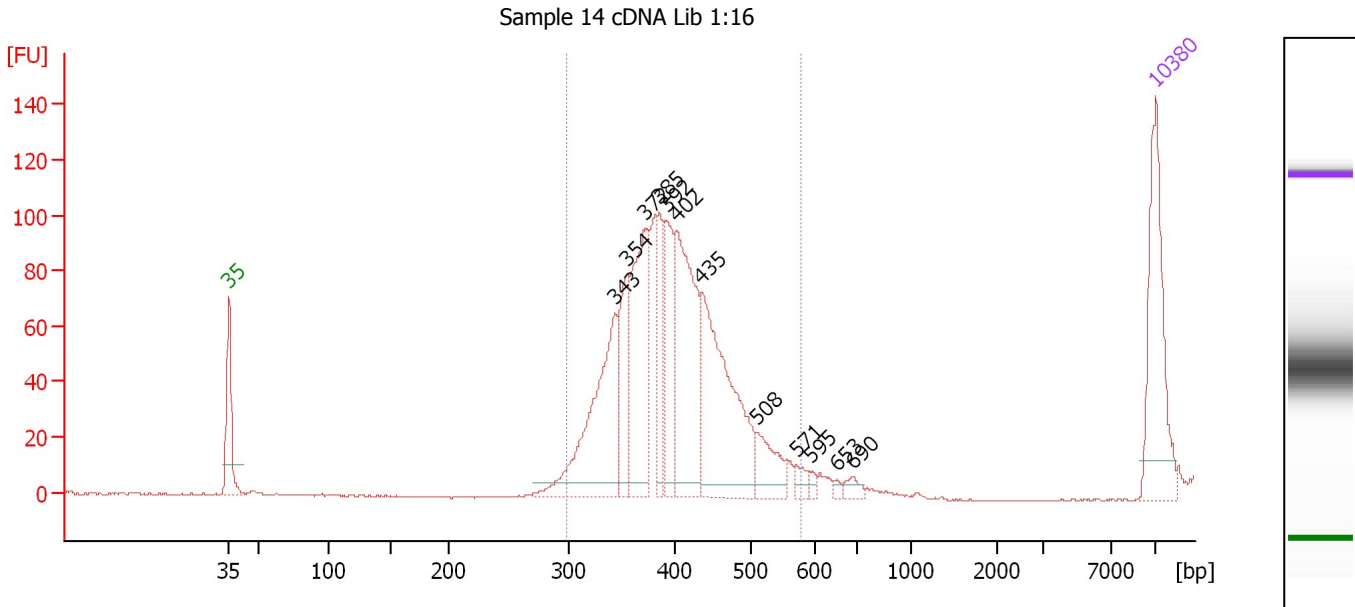
Region table for sample 1 : Sample 2 cDNA Lib 1:11

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
380	1,790	557	59,118.1	21,209.47	984.2	98	14.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-17\2013-04-17_002.xad

Created: 4/17/2013 12:40:58 PM
 Modified: 4/17/2013 1:25:33 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : Sample 14 cDNA Lib 1:16

Number of peaks found: 12 Corr. Area 1: 1,239.7
 Noise: 0.2

Peak table for sample 2 : Sample 14 cDNA Lib 1:16

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	343	149.82	660.9	
3	354	66.30	283.4	
4	372	127.01	516.9	
5	385	49.34	194.3	
6	392	61.39	237.5	
7	402	147.59	556.7	
8	435	168.34	586.7	
9	508	35.56	106.1	
10	571	9.29	24.6	
11	595	3.72	9.5	
12	653	2.88	6.7	
13	690	7.23	15.9	
14	10,380	75.00	10.9	Upper Marker

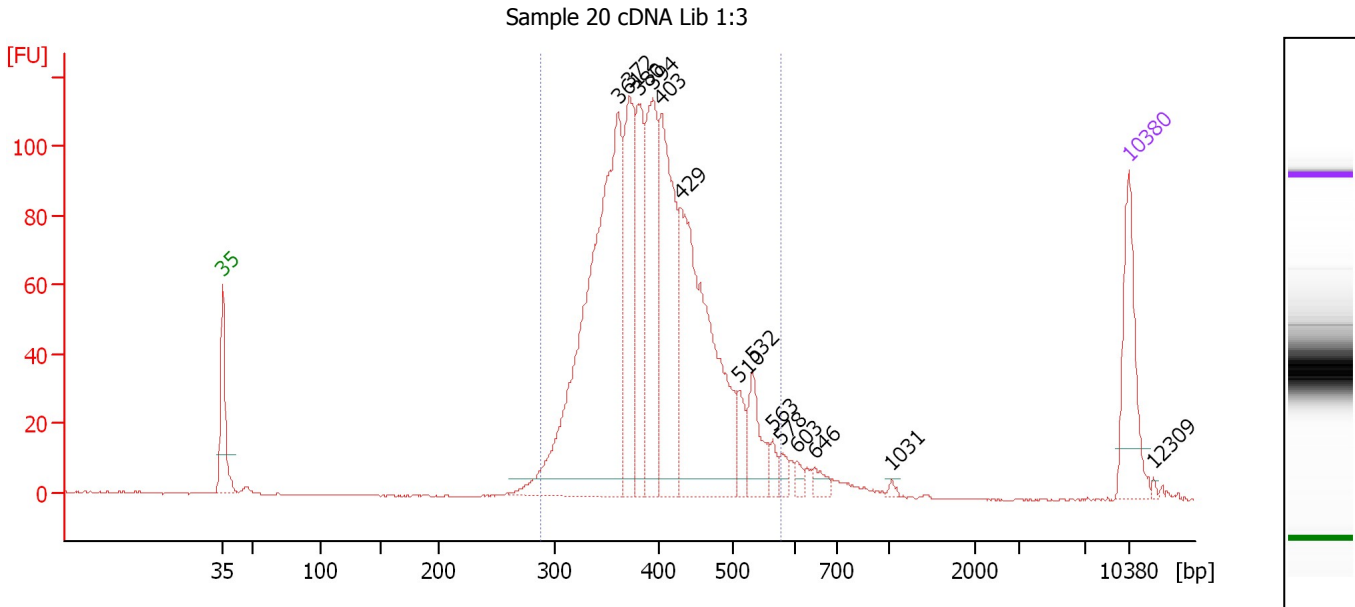
Region table for sample 2 : Sample 14 cDNA Lib 1:16

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
298	578	401	3,161.8	820.21	1,239.7	97	13.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-17\2013-04-17_002.xad

Created: 4/17/2013 12:40:58 PM
 Modified: 4/17/2013 1:25:33 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : Sample 20 cDNA Lib 1:3

Number of peaks found: 14 Corr. Area 1: 1,556.7
 Noise: 0.1

Peak table for sample 3 : Sample 20 cDNA Lib 1:3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	361	597.87	2,508.0	
3	372	175.81	716.3	
4	380	127.41	508.0	
5	394	189.29	727.5	
6	403	229.51	863.6	
7	429	367.41	1,296.9	
8	510	29.64	88.1	
9	532	53.28	151.9	
10	563	12.32	33.1	
11	578	11.76	30.8	
12	603	8.56	21.5	
13	646	12.24	28.7	
14	1,031	3.09	4.5	
15	10,380	75.00	10.9	Upper Marker
16	12,309	0.00	0.0	

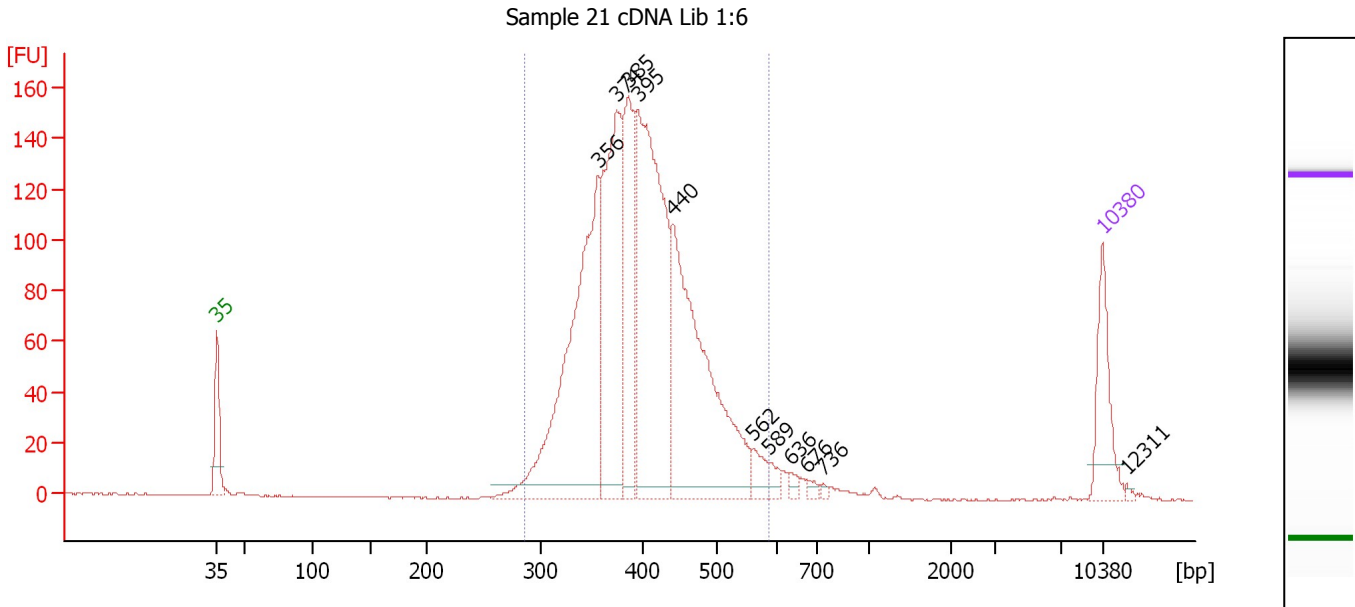
Region table for sample 3 : Sample 20 cDNA Lib 1:3

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
288	576	400	6,998.1	1,803.14	1,556.7	95	14.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-17\2013-04-17_002.xad

Created: 4/17/2013 12:40:58 PM
 Modified: 4/17/2013 1:25:33 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : Sample 21 cDNA Lib 1:6

Number of peaks found: 11 Corr. Area 1: 2,033.6
 Noise: 0.2

Peak table for sample 4 : Sample 21 cDNA Lib 1:6

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	356	550.23	2,343.2	
3	374	373.20	1,512.0	
4	385	234.71	922.7	
5	395	538.00	2,064.8	
6	440	483.79	1,664.3	
7	562	29.05	78.4	
8	589	14.50	37.3	
9	636	9.27	22.1	
10	676	6.94	15.5	
11	736	3.69	7.6	
12	10,380	75.00	10.9	Upper Marker
13	12,311	0.00	0.0	

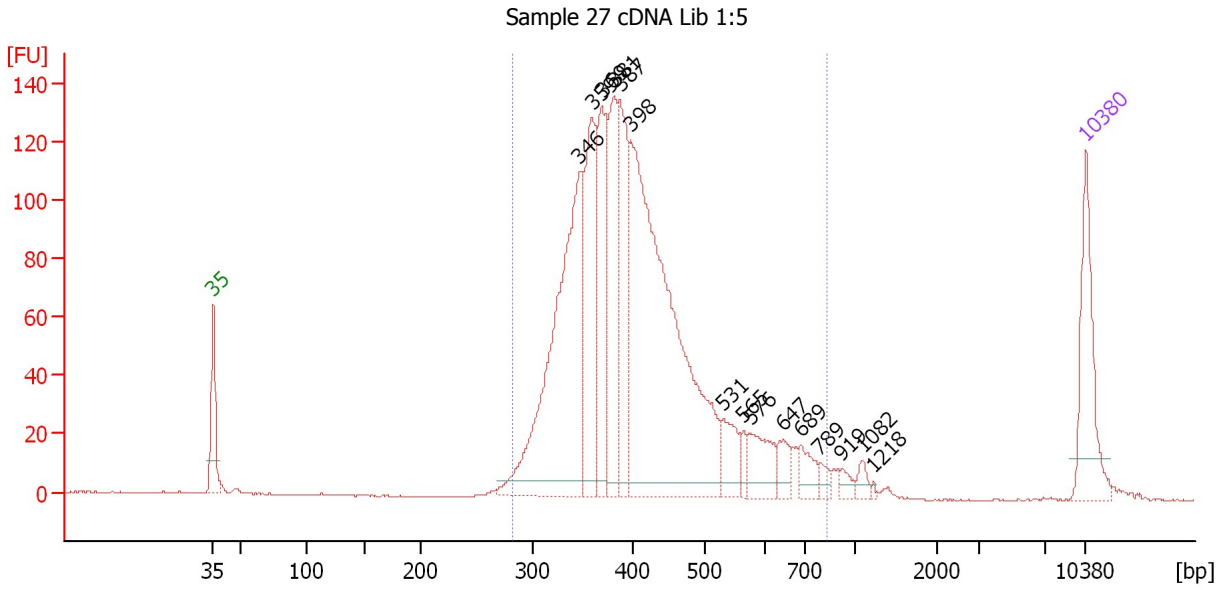
Region table for sample 4 : Sample 21 cDNA Lib 1:6

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
286	587	403	8,495.6	2,204.62	2,033.6	96	14.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-17\2013-04-17_002.xad

Created: 4/17/2013 12:40:58 PM
 Modified: 4/17/2013 1:25:33 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : Sample 27 cDNA Lib 1:5

Number of peaks found: 15 Corr. Area 1: 1,943.4
 Noise: 0.2

Peak table for sample 5 : Sample 27 cDNA Lib 1:5

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	346	411.08	1,797.8	
3	359	167.91	708.4	
4	369	145.18	596.7	
5	381	137.87	547.9	
6	387	145.51	570.3	
7	398	596.31	2,272.1	
8	531	39.58	113.0	
9	565	13.48	36.2	
10	576	46.51	122.2	
11	647	20.29	47.5	
12	689	23.70	52.1	
13	789	9.63	18.5	
14	919	8.82	14.5	
15	1,082	9.10	12.7	
16	1,218	1.86	2.3	
17	10,380	75.00	10.9	Upper Marker

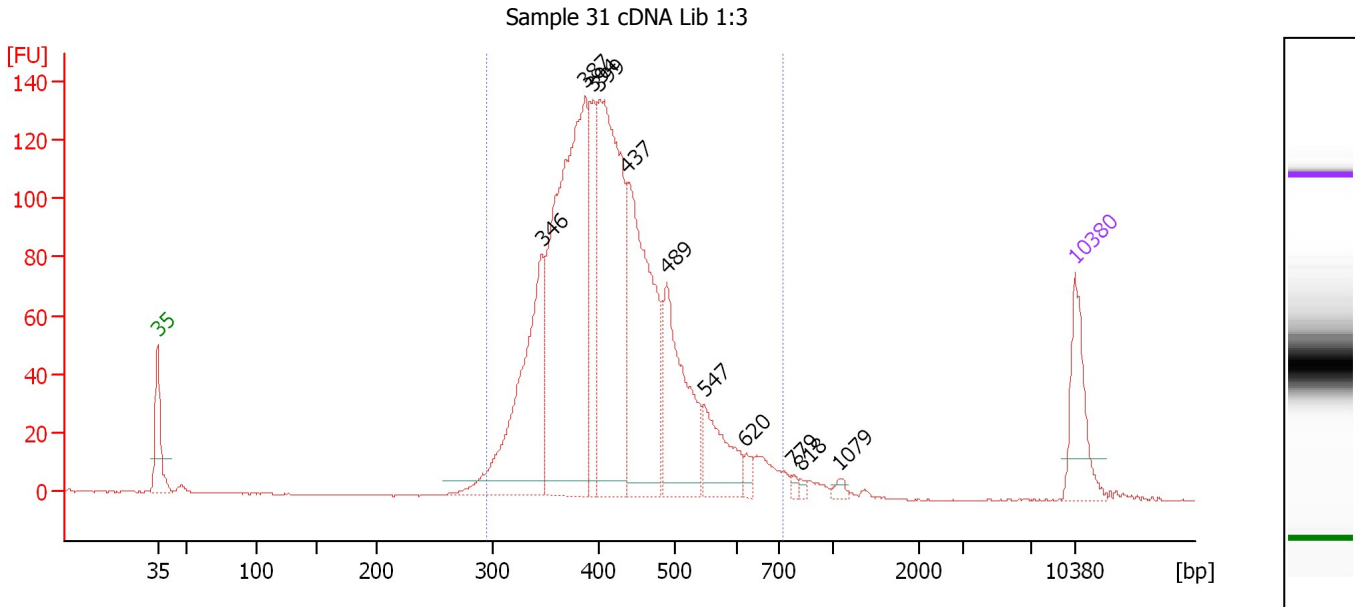
Region table for sample 5 : Sample 27 cDNA Lib 1:5

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
283	829	416	6,751.9	1,760.91	1,943.4	97	22.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-17\2013-04-17_002.xad

Created: 4/17/2013 12:40:58 PM
 Modified: 4/17/2013 1:25:33 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : Sample 31 cDNA Lib 1:3

Number of peaks found: 11 Corr. Area 1: 1,886.5
 Noise: 0.2

Peak table for sample 6 : Sample 31 cDNA Lib 1:3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	346	346.10	1,517.2	
3	387	660.83	2,589.9	
4	394	141.48	544.0	
5	399	472.90	1,794.1	
6	437	388.59	1,348.2	
7	489	229.02	709.1	
8	547	100.45	278.4	
9	620	14.27	34.9	
10	779	5.49	10.7	
11	818	5.26	9.8	
12	1,079	7.57	10.6	
13	10,380	75.00	10.9	Upper Marker

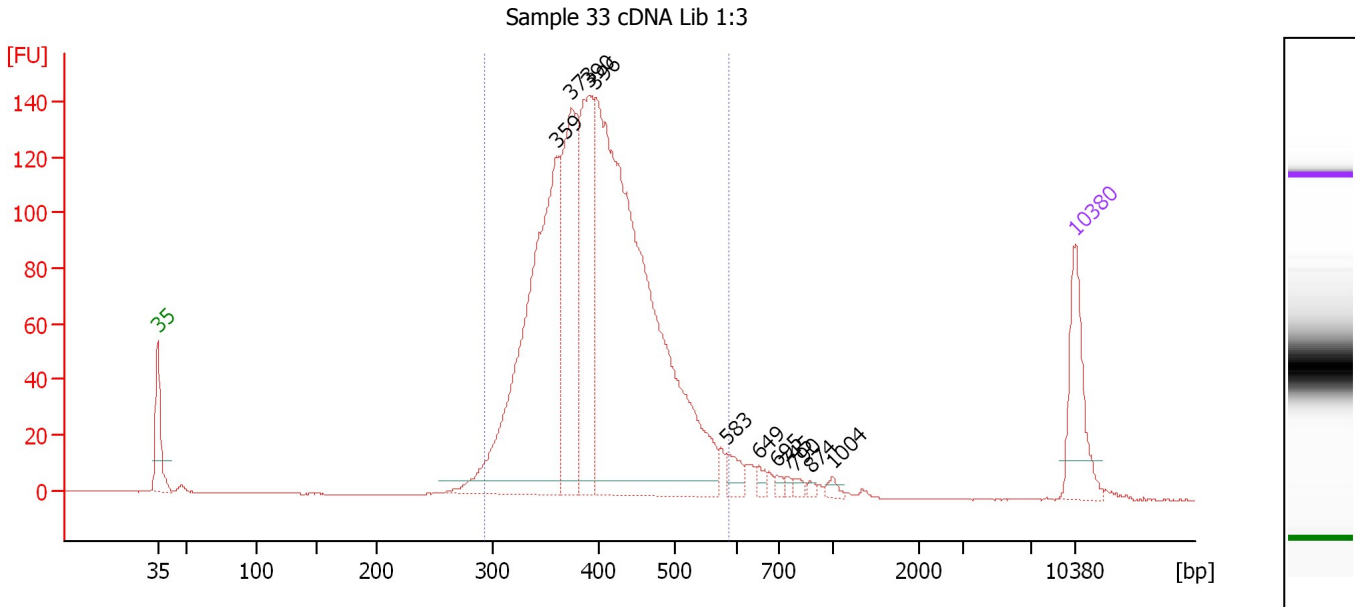
Region table for sample 6 : Sample 31 cDNA Lib 1:3

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
295	719	422	8,931.9	2,403.20	1,886.5	97	17.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-17\2013-04-17_002.xad

Created: 4/17/2013 12:40:58 PM
 Modified: 4/17/2013 1:25:33 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : Sample 33 cDNA Lib 1:3

Number of peaks found: 11 Corr. Area 1: 1,930.8
 Noise: 0.1

Peak table for sample 7 : Sample 33 cDNA Lib 1:3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	359	571.03	2,407.4	
3	373	291.09	1,181.7	
4	390	238.30	925.1	
5	396	966.07	3,695.0	
6	583	21.79	56.6	
7	649	9.28	21.6	
8	695	5.44	11.9	
9	745	4.39	8.9	
10	790	6.36	12.2	
11	874	3.82	6.6	
12	1,004	6.83	10.3	
13	10,380	75.00	10.9	Upper Marker

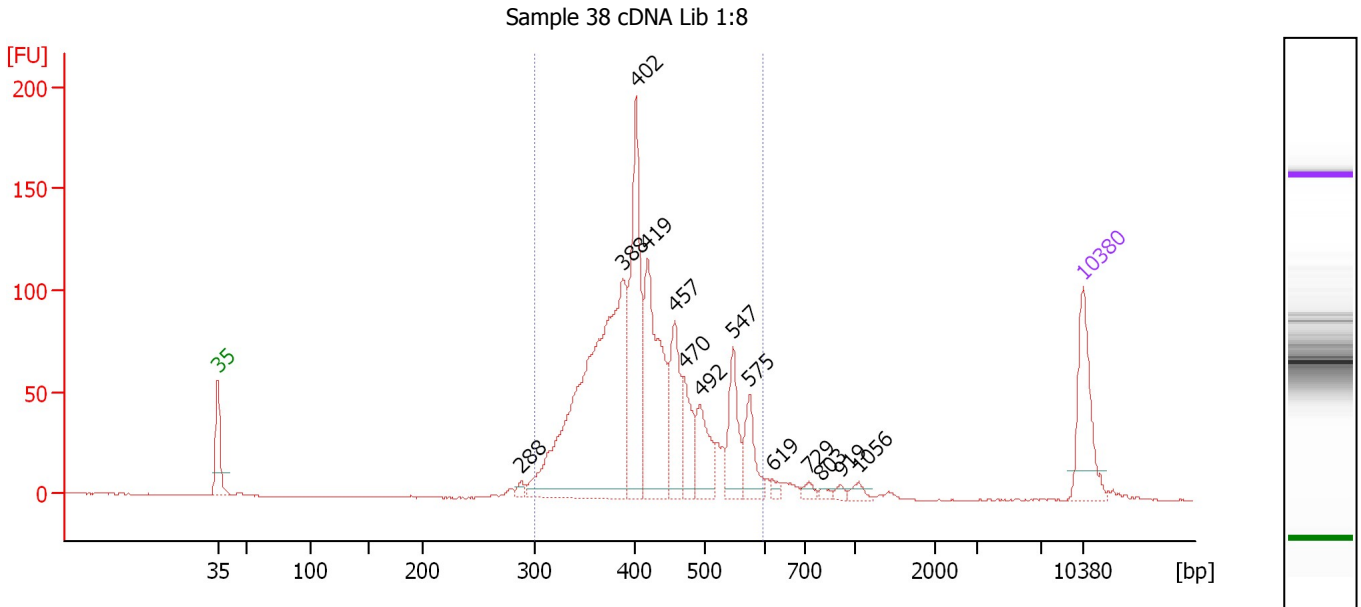
Region table for sample 7 : Sample 33 cDNA Lib 1:3

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
293	588	405	7,844.9	2,046.45	1,930.8	94	14.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-17\2013-04-17_002.xad

Created: 4/17/2013 12:40:58 PM
 Modified: 4/17/2013 1:25:33 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : Sample 38 cDNA Lib 1:8

Number of peaks found: 14 Corr. Area 1: 1,475.8
 Noise: 0.1

Peak table for sample 8 : Sample 38 cDNA Lib 1:8

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	288	8.99	47.2	
3	388	578.95	2,259.9	
4	402	223.61	842.6	
5	419	228.45	826.8	
6	457	94.44	313.1	
7	470	68.42	220.6	
8	492	67.18	206.7	
9	547	71.74	198.7	
10	575	54.27	143.0	
11	619	7.55	18.5	
12	729	8.23	17.1	
13	803	5.46	10.3	
14	919	5.81	9.6	
15	1,056	8.92	12.8	
16	10,380	75.00	10.9	Upper Marker

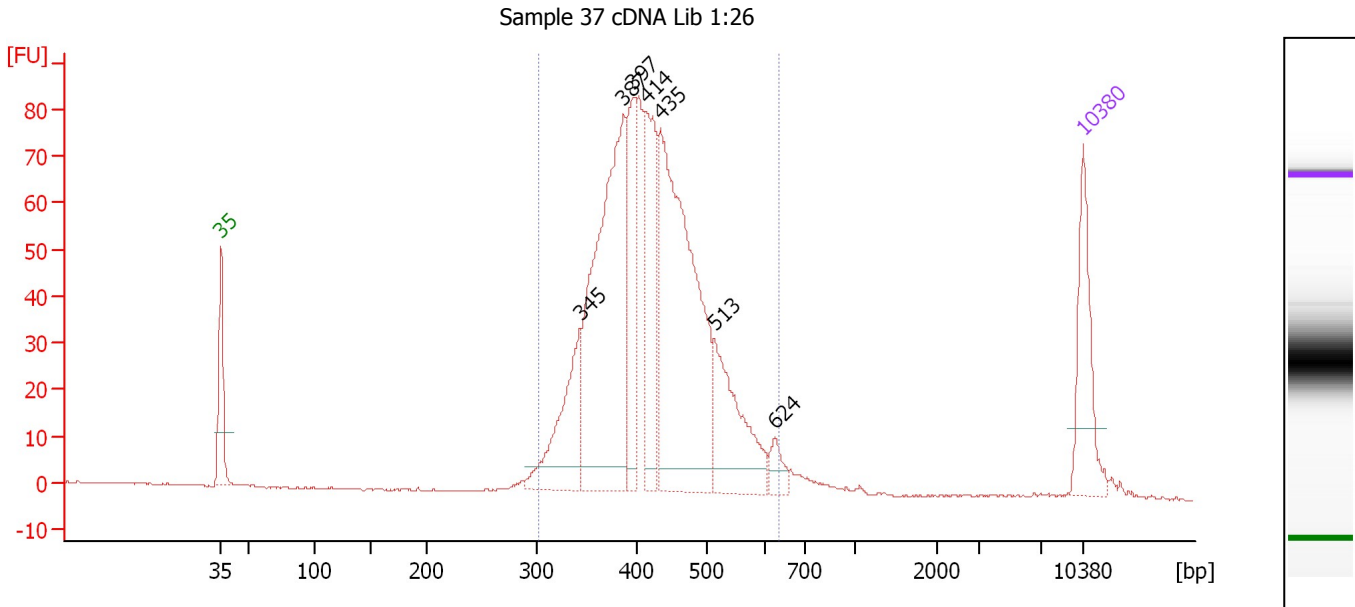
Region table for sample 8 : Sample 38 cDNA Lib 1:8

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
300	599	421	5,295.2	1,428.68	1,475.8	94	15.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-17\2013-04-17_002.xad

Created: 4/17/2013 12:40:58 PM
 Modified: 4/17/2013 1:25:33 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : Sample 37 cDNA Lib 1:26

Number of peaks found: 7 Corr. Area 1: 1,110.7
 Noise: 0.1

Peak table for sample 9 : Sample 37 cDNA Lib 1:26

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	345	138.08	606.8	
3	387	416.26	1,629.8	
4	397	120.77	461.4	
5	414	138.99	508.5	
6	435	449.96	1,569.0	
7	513	140.89	416.1	
8	624	21.20	51.5	
9	10,380	75.00	10.9	Upper Marker

Region table for sample 9 : Sample 37 cDNA Lib 1:26

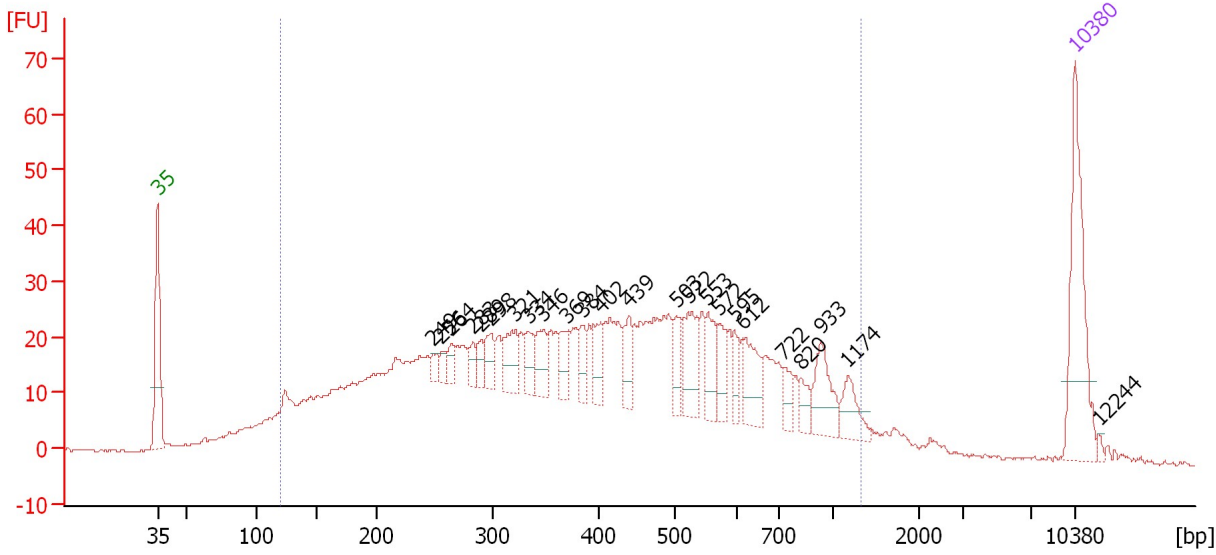
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
302	635	426	5,641.3	1,542.60	1,110.7	96	15.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-17\2013-04-17_002.xad

Created: 4/17/2013 12:40:58 PM
 Modified: 4/17/2013 1:25:33 PM

Electropherogram Summary Continued ...

sample 32 Resoni 1:6 [16Cycles]



Overall Results for sample 10 : sample 32 Resoni 1:6

Number of peaks found: 24 Corr. Area 1: 1,157.5
 Noise: 0.3

Peak table for sample 10 : sample 32 Resoni 1:6

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	249	8.47	51.5	
3	256	9.41	55.7	
4	264	10.57	60.6	
5	283	11.36	60.9	
6	289	12.41	64.9	
7	298	20.18	102.7	
8	321	32.31	152.7	
9	334	18.29	83.1	
10	346	27.83	121.7	
11	369	21.07	86.6	
12	384	17.41	68.7	
13	402	22.92	86.4	
14	439	25.19	86.9	
15	503	20.11	60.6	
16	522	41.77	121.3	
17	553	26.07	71.5	
18	572	20.16	53.4	
19	595	14.72	37.5	
20	612	34.90	86.3	
21	722	12.90	27.0	
22	820	11.78	21.8	
23	933	34.15	55.5	
24	1,174	21.11	27.2	
25	10,380	75.00	10.9	Upper Marker
26	12,244	0.00	0.0	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-17\2013-04-17_002.xad

Created: 4/17/2013 12:40:58 PM
Modified: 4/17/2013 1:25:33 PM

Electropherogram Summary Continued ...

... Region table for sample 10 : sample 32 Resoni 1:6

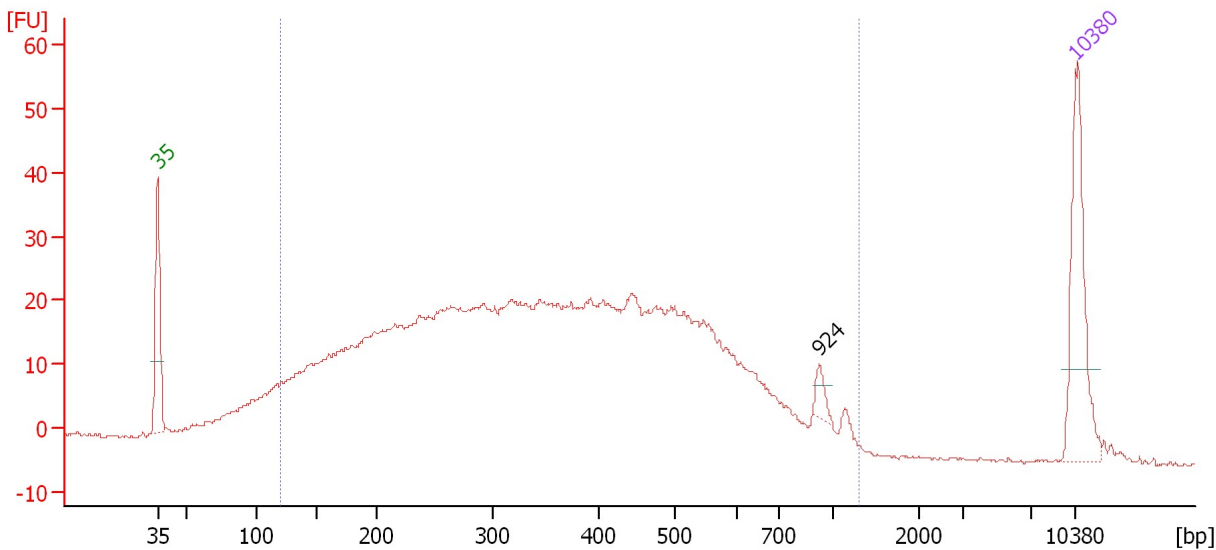
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
119	1,325	444	9,435.0	1,895.89	1,157.5	92	51.0	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-17\2013-04-17_002.xad

Created: 4/17/2013 12:40:58 PM
 Modified: 4/17/2013 1:25:33 PM

Electropherogram Summary Continued ...

sample 36 Resoni 1:6 [17Cycles]



Overall Results for sample 11 : sample 36 Resoni 1:6

Number of peaks found: 1 Corr. Area 1: 1,041.9
 Noise: 0.3

Peak table for sample 11 : sample 36 Resoni 1:6

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	924	10.24	16.8	
3	10,380	75.00	10.9	Upper Marker

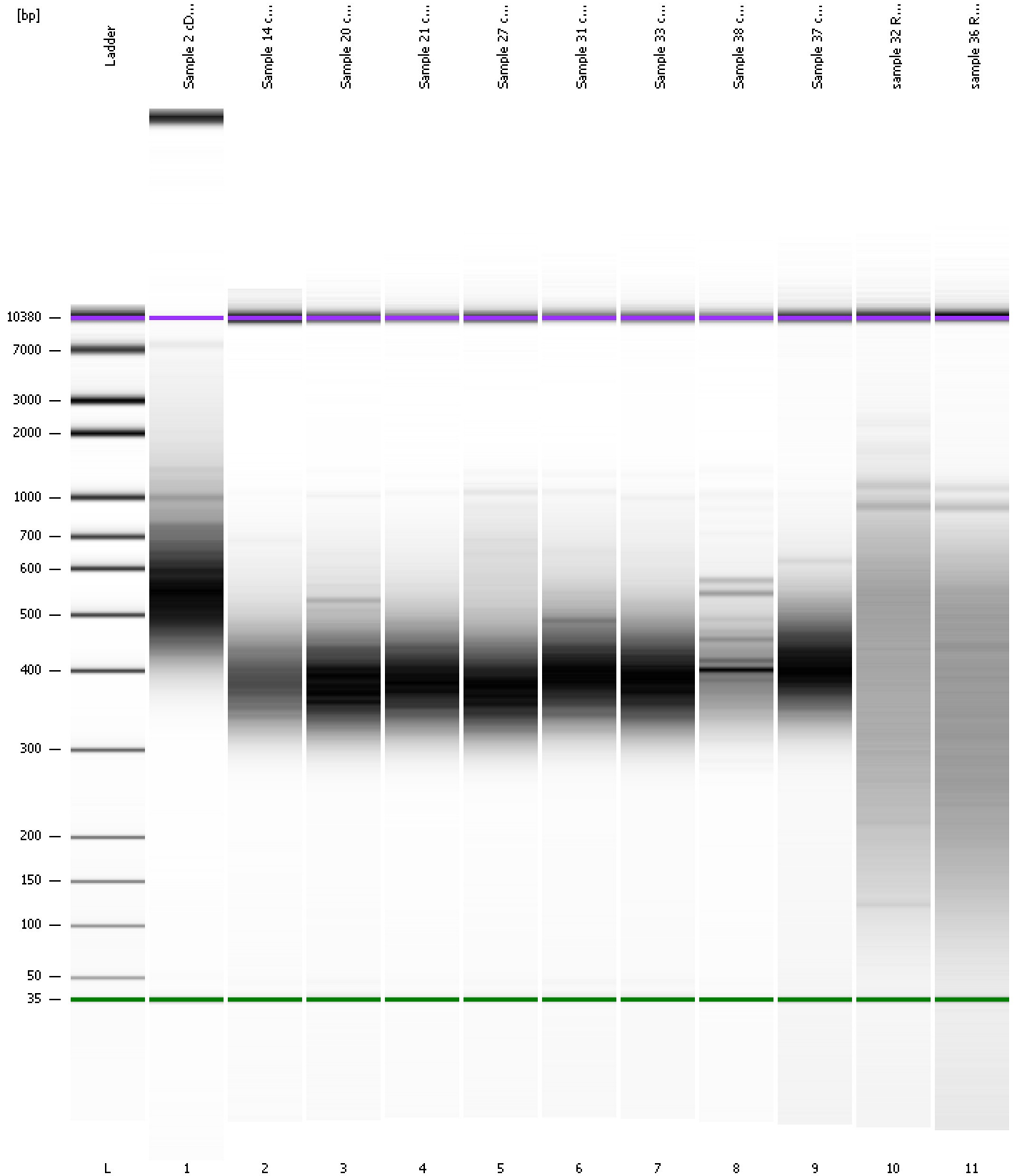
Region table for sample 11 : sample 36 Resoni 1:6

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
120	1,315	388	10,205.0	1,897.56	1,041.9	94	47.8	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-17\2013-04-17_002.xad

Created: 4/17/2013 12:40:58 PM
Modified: 4/17/2013 1:25:33 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-17\2013-04-17_002.xad

Created: 4/17/2013 12:40:58 PM
 Modified: 4/17/2013 1:25:33 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		4/17/2013 1:22:17 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-04-17\2013-04-17_002.xad)		Instrument	Run		4/17/2013 12:41:04 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		4/17/2013 12:41:04 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		4/17/2013 12:41:04 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		4/17/2013 12:41:04 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		4/17/2013 12:41:04 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		4/17/2013 12:41:04 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		4/17/2013 12:41:03 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1