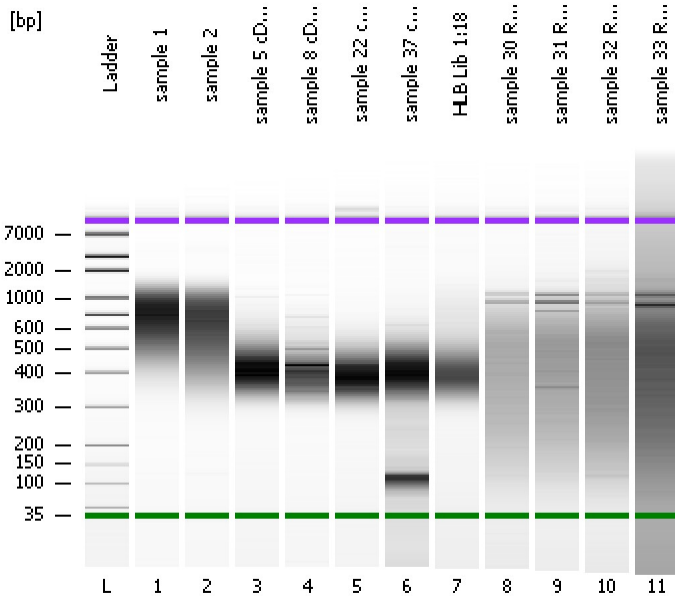


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-11\2013-04-11_003.xad

Created: 4/11/2013 5:25:13 PM
Modified: 4/11/2013 6:07:48 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

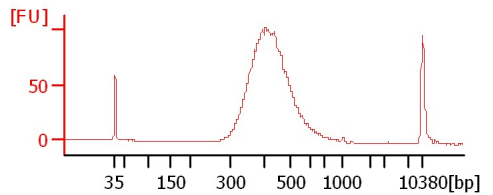
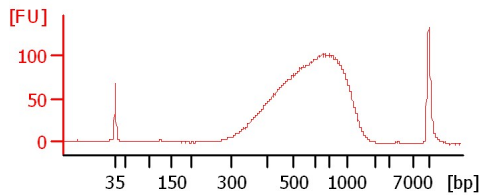
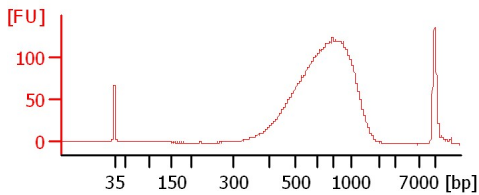
Chip Information:

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

sample 1

sample 2

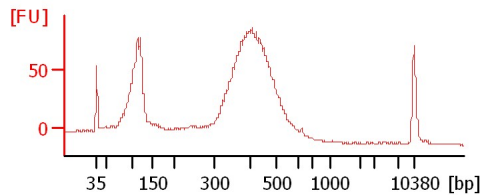
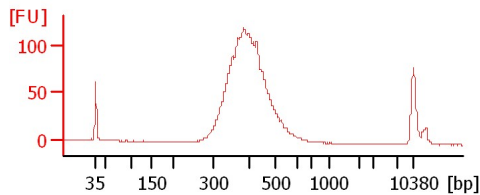
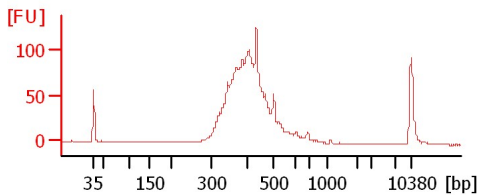
sample 5 cDNA Lib 1:22



sample 8 cDNA Lib 1:22

sample 22 cDNA Lib 1:7

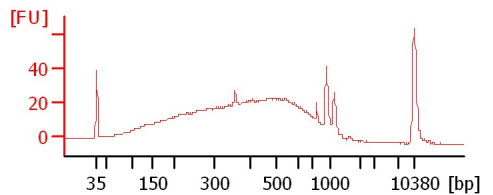
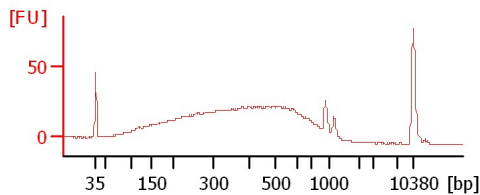
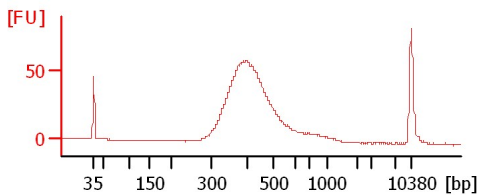
sample 37 cDNA Lib 1:25



HLB Lib 1:18

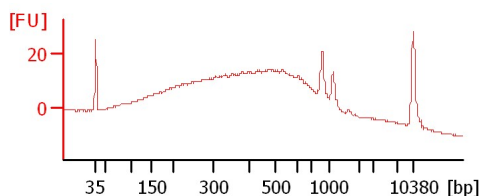
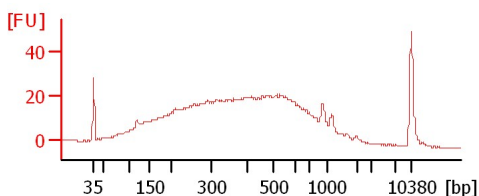
sample 30 Resoni 1:6

sample 31 Resoni 1:6



sample 32 Resoni 1:6

sample 33 Resoni 1:6



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-11\2013-04-11_003.xad

Created: 4/11/2013 5:25:13 PM
Modified: 4/11/2013 6:07:48 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
sample 1		<input type="checkbox"/>	✓			
sample 2		<input type="checkbox"/>	✓			
sample 5 cDNA Lib 1:22		<input type="checkbox"/>	✓			
sample 8 cDNA Lib 1:22		<input type="checkbox"/>	✓			
sample 22 cDNA Lib 1:7		<input type="checkbox"/>	✓			
sample 37 cDNA Lib 1:25		<input type="checkbox"/>	✓			
HLB Lib 1:18		<input type="checkbox"/>	✓			
sample 30 Resoni 1:6		<input type="checkbox"/>	✓			
sample 31 Resoni 1:6		<input type="checkbox"/>	✓			
sample 32 Resoni 1:6		<input type="checkbox"/>	✓			
sample 33 Resoni 1:6		<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\2013-04-11\2013-04-11_003.xad

Created: 4/11/2013 5:25:13 PM
Modified: 4/11/2013 6:07:48 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

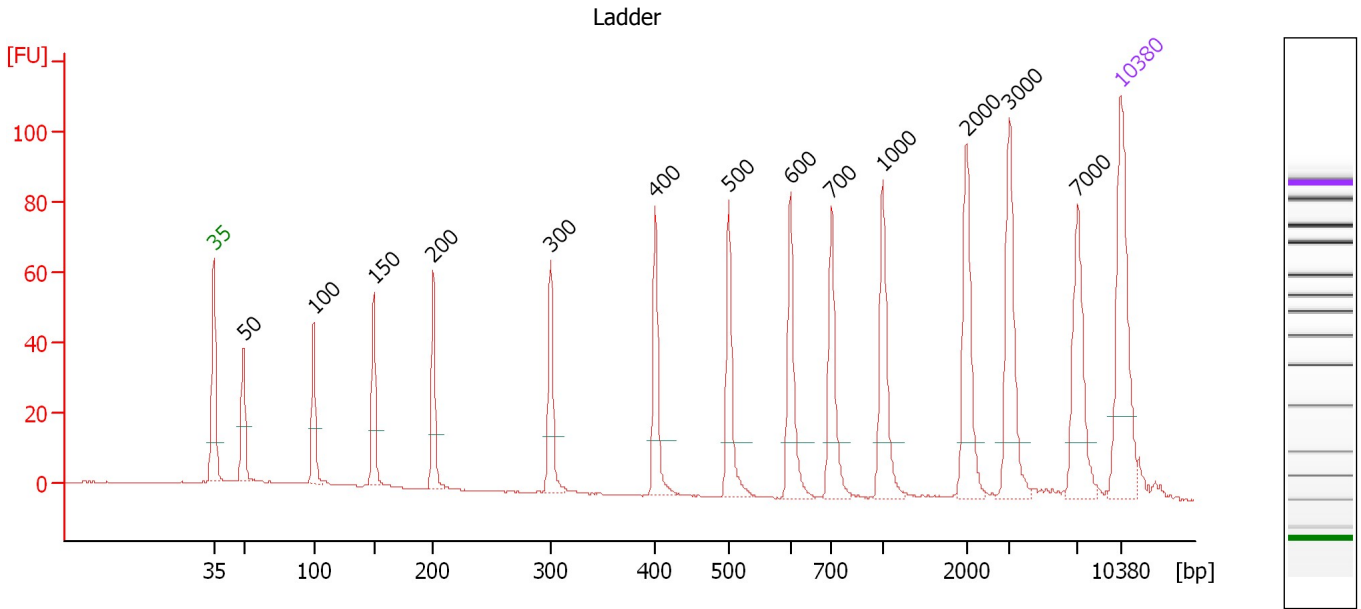
Ladder

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\2013-04-11\2013-04-11_003.xad

Created: 4/11/2013 5:25:13 PM
 Modified: 4/11/2013 6:07:48 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

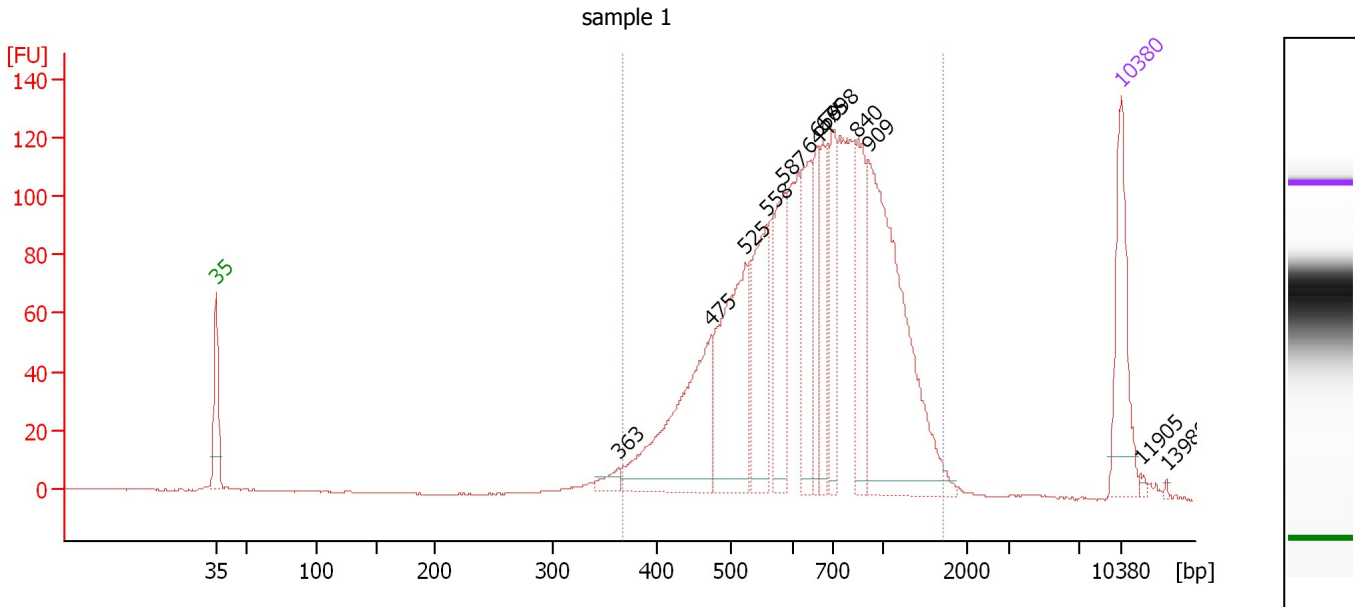
Peak table for Ladder

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\2013-04-11\2013-04-11_003.xad

Created: 4/11/2013 5:25:13 PM
 Modified: 4/11/2013 6:07:48 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : sample 1

Number of peaks found: 13 Corr. Area 1: 2,085.8
 Noise: 0.2

Peak table for sample 1 : sample 1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	363	13.16	54.9	
3	475	202.32	645.7	
4	525	184.91	533.3	
5	558	107.96	293.1	
6	587	92.67	239.3	
7	644	94.02	221.3	
8	659	62.55	143.7	
9	675	72.81	163.5	
10	698	79.65	172.8	
11	840	83.33	150.3	
12	909	310.61	517.7	
13	10,380	75.00	10.9	Upper Marker
14	11,905	0.00	0.0	
15	13,980	0.00	0.0	

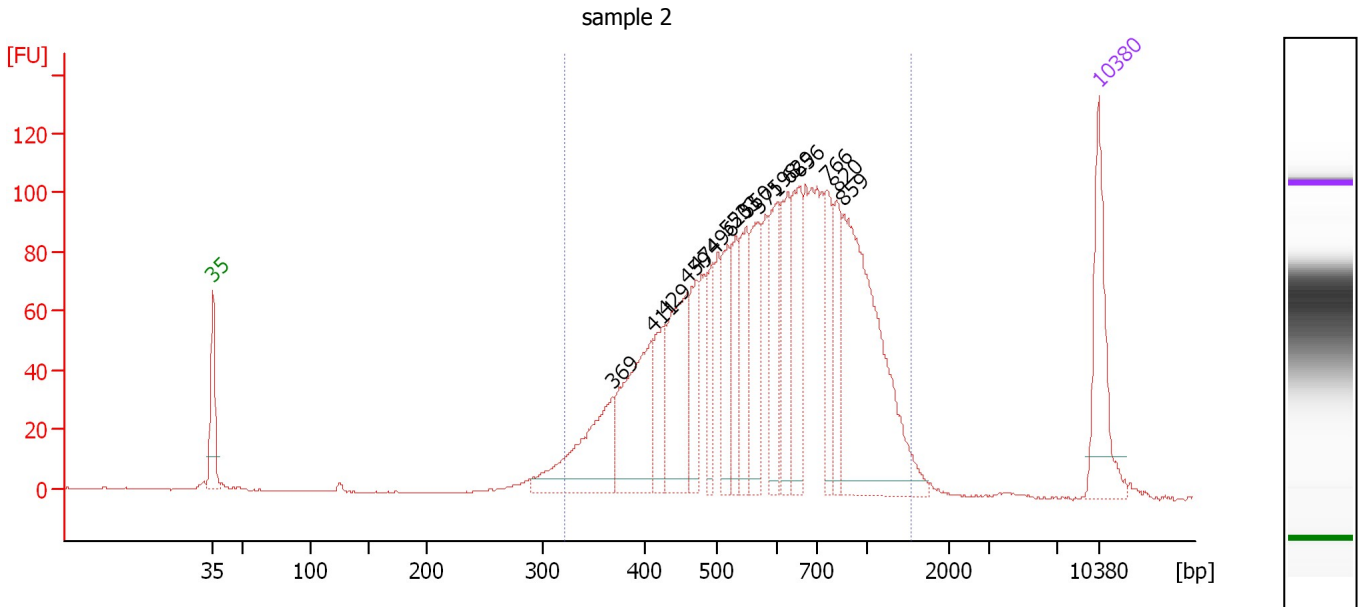
Region table for sample 1 : sample 1

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
367	1,701	726	3,852.3	1,615.59	2,085.8	97	35.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-11\2013-04-11_003.xad

Created: 4/11/2013 5:25:13 PM
 Modified: 4/11/2013 6:07:48 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : sample 2

Number of peaks found: 16 Corr. Area 1: 2,223.8
 Noise: 0.2

Peak table for sample 2 : sample 2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	369	128.17	526.0	
3	411	139.89	515.6	
4	429	58.73	207.5	
5	459	123.14	406.2	
6	474	59.97	191.6	
7	496	43.97	134.2	
8	520	63.52	185.2	
9	533	61.05	173.6	
10	550	68.64	188.9	
11	571	82.76	219.7	
12	598	69.93	177.2	
13	629	72.25	174.0	
14	656	86.07	198.9	
15	766	63.22	125.1	
16	820	55.57	102.7	
17	859	275.80	486.7	
18	10,380	75.00	10.9	Upper Marker

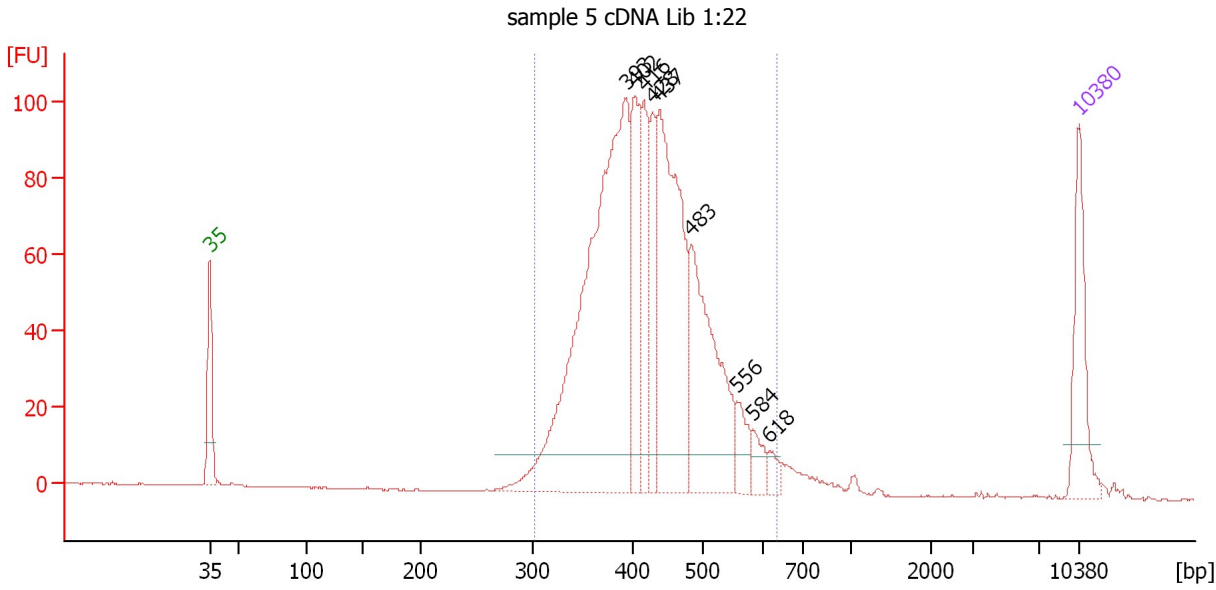
Region table for sample 2 : sample 2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
322	1,551	646	4,708.9	1,733.80	2,223.8	96	36.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-11\2013-04-11_003.xad

Created: 4/11/2013 5:25:13 PM
 Modified: 4/11/2013 6:07:48 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 3 : sample 5 cDNA Lib 1:22

Height Threshold [FU] : 10

Overall Results for sample 3 : sample 5 cDNA Lib 1:22

Number of peaks found: 9 Corr. Area 1: 1,420.1
 Noise: 0.2

Peak table for sample 3 : sample 5 cDNA Lib 1:22

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	393	691.31	2,666.3	
3	402	127.08	479.0	
4	416	103.15	376.1	
5	428	86.85	307.1	
6	437	343.69	1,190.3	
7	483	240.18	753.7	
8	556	35.28	96.1	
9	584	22.78	59.1	
10	618	13.30	32.6	
11	10,380	75.00	10.9	Upper Marker

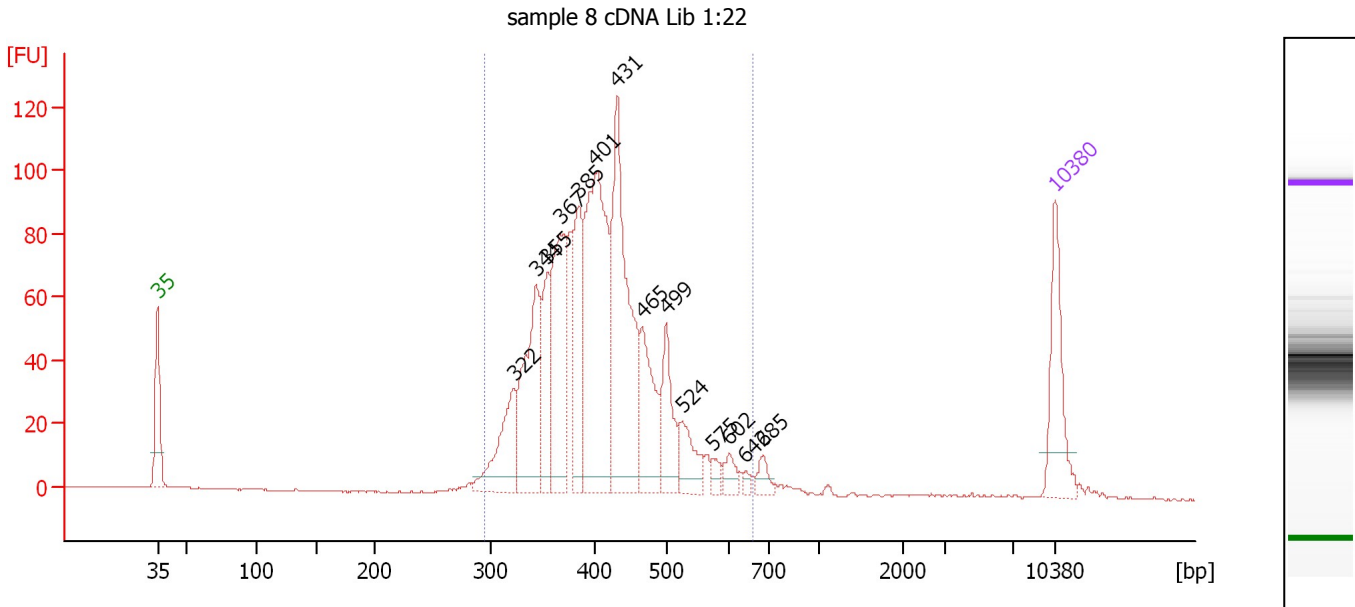
Region table for sample 3 : sample 5 cDNA Lib 1:22

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
302	637	427	6,189.9	1,695.05	1,420.1	96	15.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-11\2013-04-11_003.xad

Created: 4/11/2013 5:25:13 PM
 Modified: 4/11/2013 6:07:48 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : sample 8 cDNA Lib 1:22

Number of peaks found: 14 Corr. Area 1: 1,299.3
 Noise: 0.2

Peak table for sample 4 : sample 8 cDNA Lib 1:22

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	322	102.42	482.0	
3	344	177.77	783.6	
4	355	80.23	342.8	
5	367	189.50	782.0	
6	385	124.26	488.9	
7	401	328.68	1,241.2	
8	431	287.42	1,009.5	
9	465	101.34	329.9	
10	499	75.24	228.6	
11	524	47.74	138.0	
12	575	10.82	28.5	
13	602	17.33	43.6	
14	642	6.09	14.4	
15	685	16.11	35.6	
16	10,380	75.00	10.9	Upper Marker

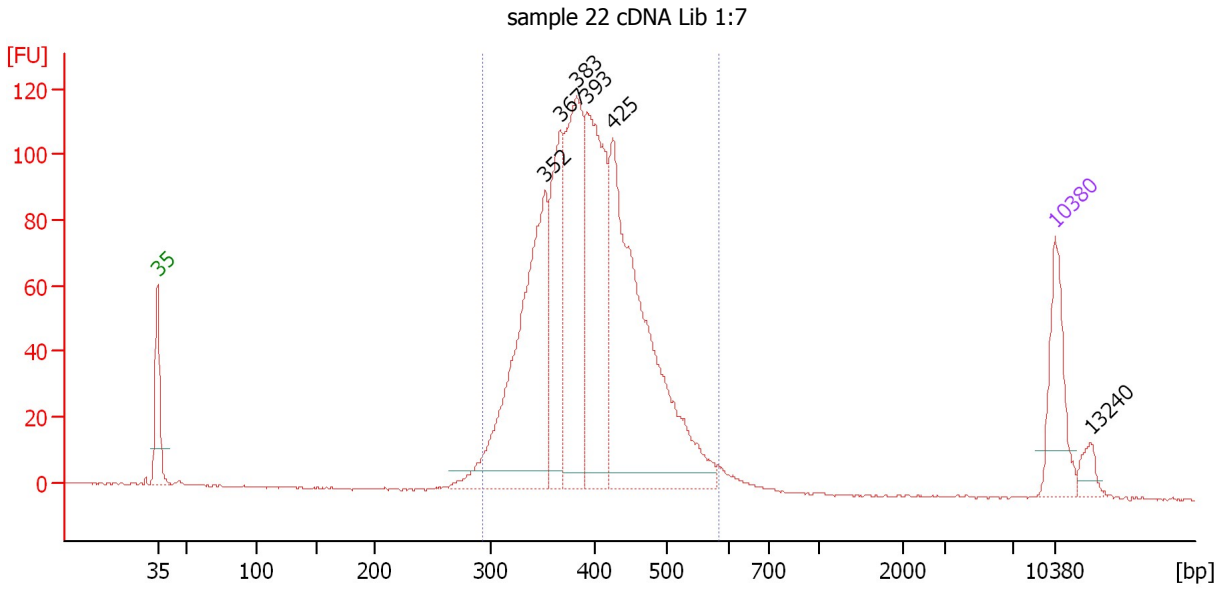
Region table for sample 4 : sample 8 cDNA Lib 1:22

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
294	661	412	6,124.6	1,619.13	1,299.3	96	16.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-11\2013-04-11_003.xad

Created: 4/11/2013 5:25:13 PM
 Modified: 4/11/2013 6:07:48 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : sample 22 cDNA Lib 1:7

Number of peaks found: 6 Corr. Area 1: 1,524.3
 Noise: 0.3

Peak table for sample 5 : sample 22 cDNA Lib 1:7

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	352	433.31	1,865.1	
3	367	192.44	793.7	
4	383	299.74	1,186.7	
5	393	307.38	1,184.7	
6	425	528.41	1,882.7	
7	10,380	75.00	10.9	Upper Marker
8	13,240	0.00	0.0	

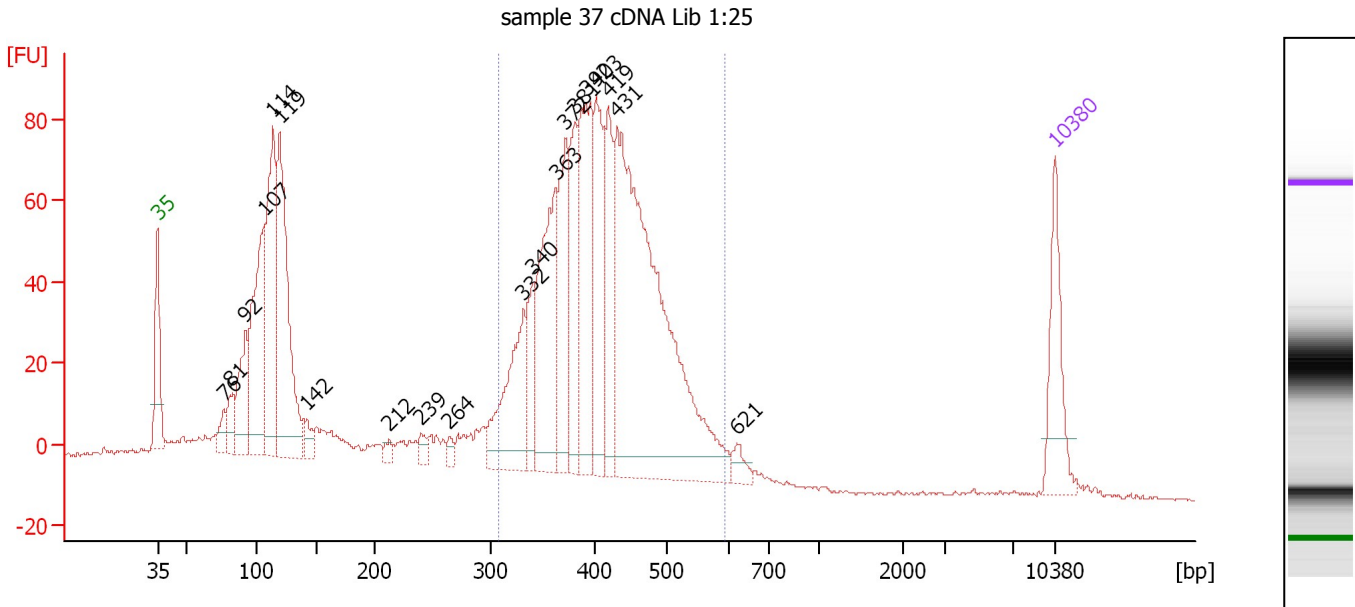
Region table for sample 5 : sample 22 cDNA Lib 1:7

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
292	583	401	6,898.6	1,783.42	1,524.3	96	14.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-11\2013-04-11_003.xad

Created: 4/11/2013 5:25:13 PM
 Modified: 4/11/2013 6:07:48 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : sample 37 cDNA Lib 1:25

Number of peaks found: 20 Corr. Area 1: 1,224.3
 Noise: 0.3

Peak table for sample 6 : sample 37 cDNA Lib 1:25

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	76	26.96	536.7	
3	81	39.02	732.7	
4	92	103.29	1,703.0	
5	107	256.60	3,647.5	
6	114	262.55	3,491.7	
7	119	330.34	4,195.0	
8	142	24.02	256.6	
9	212	11.71	83.5	
10	239	15.14	95.8	
11	264	10.29	59.0	
12	332	159.88	730.7	
13	340	69.93	311.2	
14	363	213.77	892.7	
15	372	149.08	607.6	
16	381	115.55	459.9	
17	392	206.81	799.5	
18	403	155.92	586.5	
19	419	118.70	429.6	
20	431	683.44	2,400.4	
21	621	16.86	41.1	
22	10,380	75.00	10.9	Upper Marker

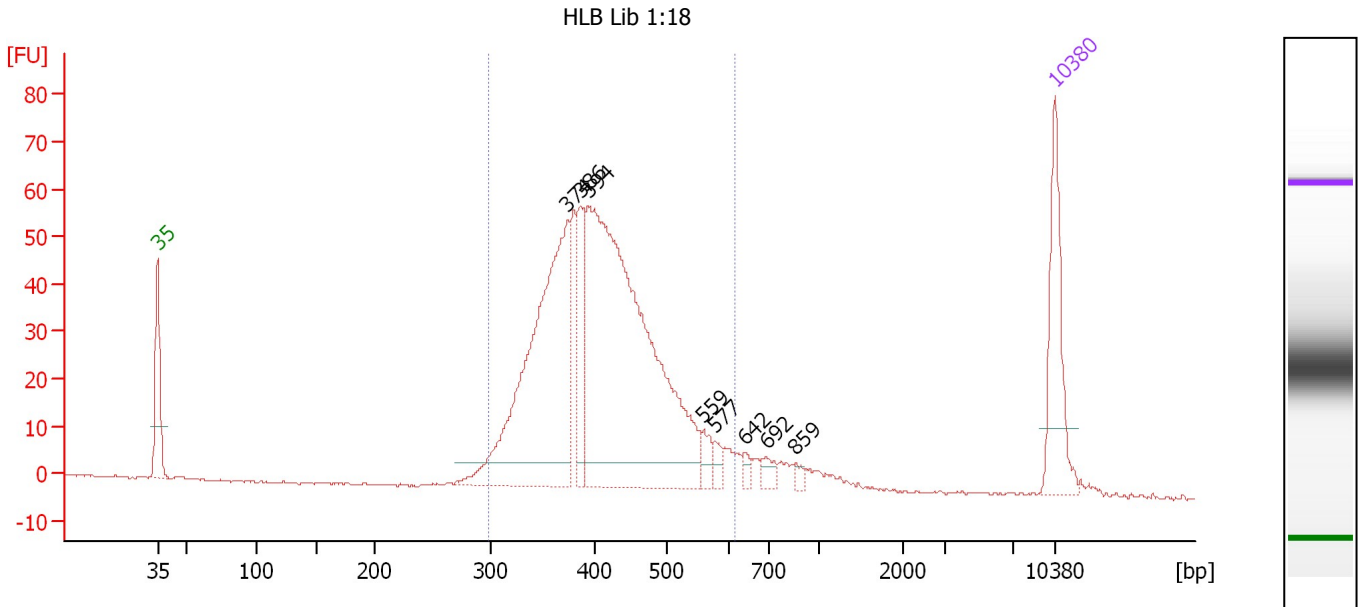
Region table for sample 6 : sample 37 cDNA Lib 1:25

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
307	593	415	6,746.5	1,802.26	1,224.3	63	14.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-11\2013-04-11_003.xad

Created: 4/11/2013 5:25:13 PM
 Modified: 4/11/2013 6:07:48 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : HLB Lib 1:18

Number of peaks found: 8 Corr. Area 1: 803.7
 Noise: 0.2

Peak table for sample 7 : HLB Lib 1:18

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	374	383.40	1,552.7	
3	386	71.53	280.8	
4	394	609.19	2,343.0	
5	559	14.48	39.2	
6	577	10.00	26.2	
7	642	7.73	18.2	
8	692	12.23	26.8	
9	859	5.30	9.3	
10	10,380	75.00	10.9	Upper Marker

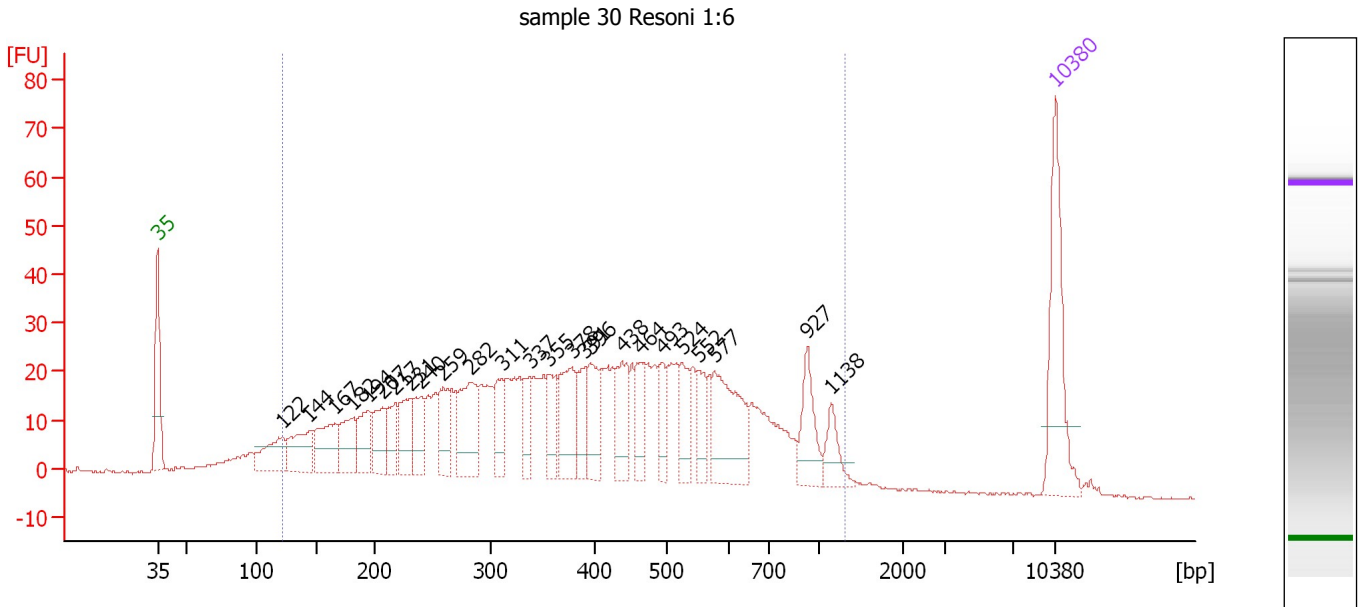
Region table for sample 7 : HLB Lib 1:18

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
299	614	416	4,285.3	1,141.98	803.7	91	15.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-11\2013-04-11_003.xad

Created: 4/11/2013 5:25:13 PM
 Modified: 4/11/2013 6:07:48 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : sample 30 Resoni 1:6

Number of peaks found: 25 Corr. Area 1: 1,078.2
 Noise: 0.3

Peak table for sample 8 : sample 30 Resoni 1:6

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	122	51.33	639.8	
3	144	53.96	567.6	
4	167	55.95	509.0	
5	182	45.71	381.5	
6	194	41.25	322.1	
7	207	38.85	284.9	
8	217	32.98	229.9	
9	231	46.35	303.9	
10	240	37.43	236.6	
11	259	45.94	269.2	
12	282	73.71	396.1	
13	311	39.00	190.2	
14	337	28.02	125.8	
15	355	27.78	118.5	
16	378	58.95	236.3	
17	391	27.37	106.0	
18	396	43.68	167.0	
19	438	46.50	160.9	
20	464	31.17	101.8	
21	493	26.53	81.5	
22	524	32.29	93.3	
23	552	26.16	71.9	
24	577	84.64	222.4	
25	927	40.40	66.0	
26	1,138	22.69	30.2	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-11\2013-04-11_003.xad

Created: 4/11/2013 5:25:13 PM
Modified: 4/11/2013 6:07:48 PM

Electropherogram Summary Continued ...

... Peak table for sample 8 : sample 30 Resoni 1:6

Peak	Size [bp]	Conc. [pg/ μ l]	Molarity [pmol/l]	Observations
27	10,380	75.00	10.9	Upper Marker

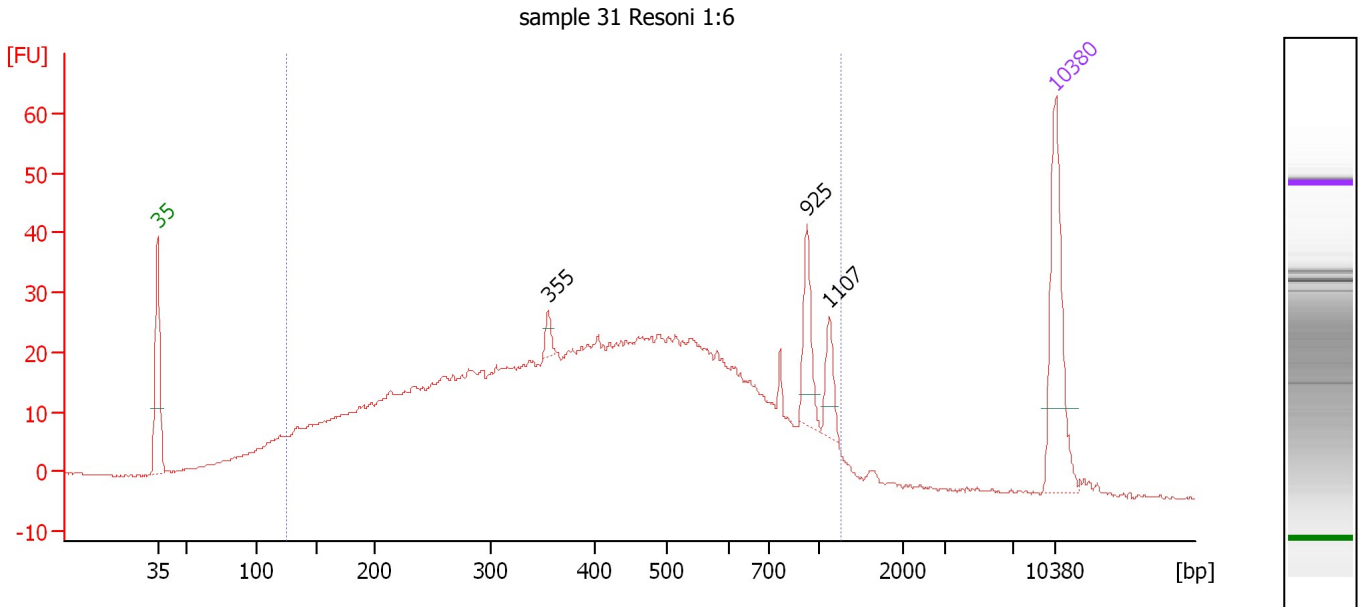
Region table for sample 8 : sample 30 Resoni 1:6

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/ μ l]	Corr. Area	% of Total	Size distribution in CV [%]	Color
122	1,302	438	7,964.3	1,614.58	1,078.2	94	49.7	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-11\2013-04-11_003.xad

Created: 4/11/2013 5:25:13 PM
 Modified: 4/11/2013 6:07:48 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : sample 31 Resoni 1:6

Number of peaks found: 3 Corr. Area 1: 1,071.2
 Noise: 0.2

Peak table for sample 9 : sample 31 Resoni 1:6

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	355	9.66	41.3	
3	925	36.45	59.7	
4	1,107	20.58	28.2	
5	10,380	75.00	10.9	Upper Marker

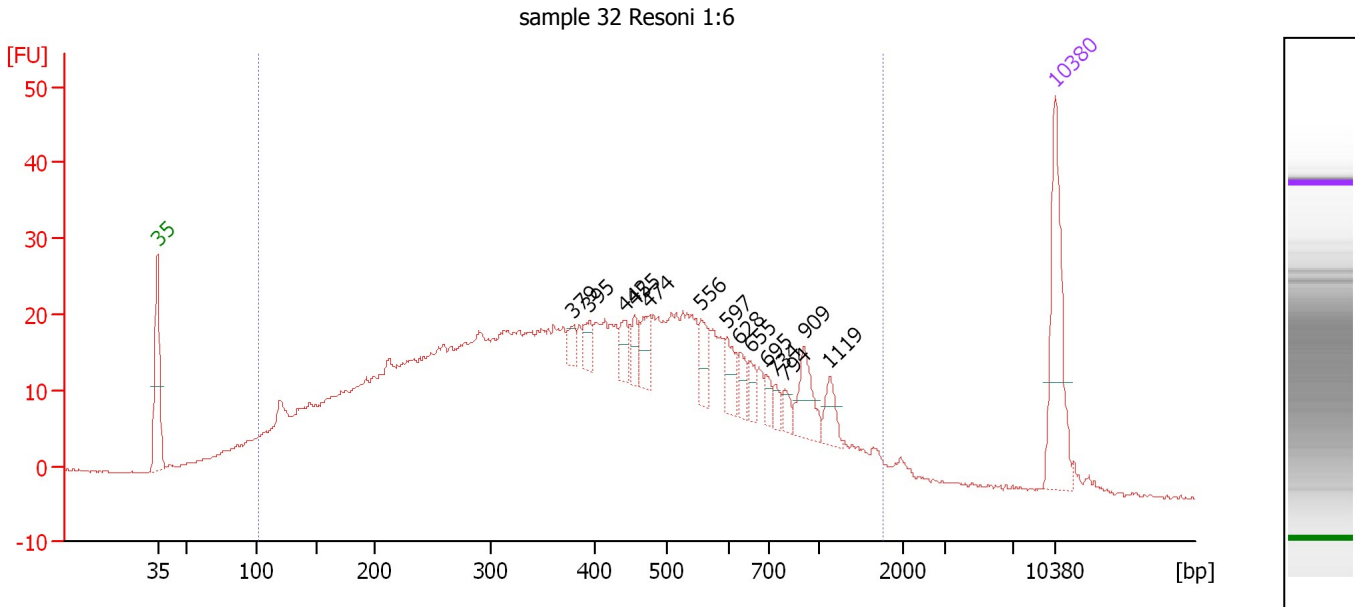
Region table for sample 9 : sample 31 Resoni 1:6

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
125	1,250	457	9,337.9	1,942.53	1,071.2	92	50.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-11\2013-04-11_003.xad

Created: 4/11/2013 5:25:13 PM
 Modified: 4/11/2013 6:07:48 PM

Electropherogram Summary Continued ...



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

Number of peaks found: 14 Corr. Area 1: 1,021.1
 Noise: 0.2

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	379	11.68	46.7	
3	395	15.89	60.9	
4	442	18.22	62.5	
5	455	16.11	53.7	
6	474	21.09	67.4	
7	556	21.31	58.1	
8	597	22.08	56.1	
9	628	13.98	33.7	
10	655	11.18	25.9	
11	695	9.40	20.5	
12	734	7.86	16.2	
13	794	9.44	18.0	
14	909	32.93	54.9	
15	1,119	17.56	23.8	
16	10,380	75.00	10.9	Upper Marker

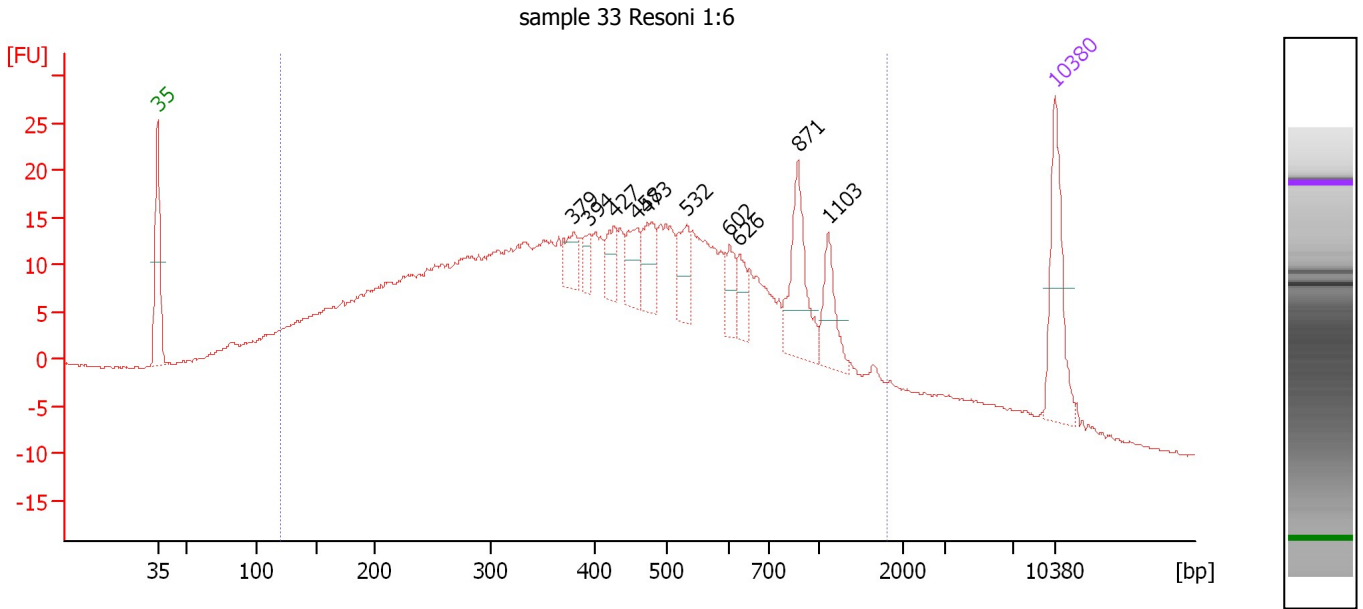
Region table for sample 10 : sample 32 Resoni 1:6

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
102	1,756	452	13,620.2	2,614.74	1,021.1	94	59.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-11\2013-04-11_003.xad

Created: 4/11/2013 5:25:13 PM
 Modified: 4/11/2013 6:07:48 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : sample 33 Resoni 1:6

Number of peaks found: 10 Corr. Area 1: 975.9
 Noise: 0.1

Peak table for sample 11 : sample 33 Resoni 1:6

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	379	26.93	107.6	
3	394	17.27	66.4	
4	427	27.29	96.8	
5	458	38.52	127.4	
6	473	45.08	144.4	
7	532	40.02	113.9	
8	602	24.56	61.8	
9	626	25.71	62.2	
10	871	85.22	148.3	
11	1,103	43.25	59.4	
12	10,380	75.00	10.9	Upper Marker

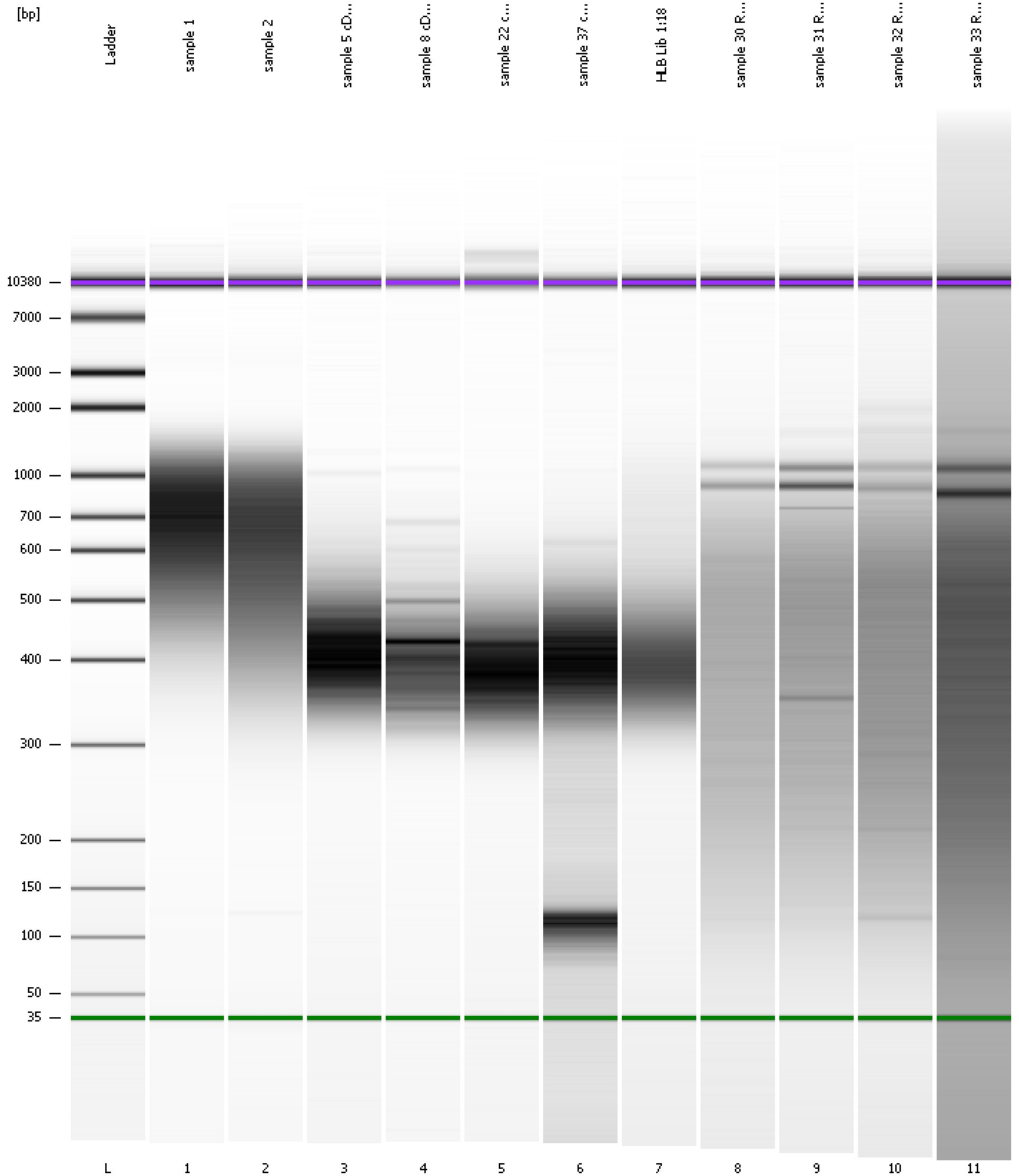
Region table for sample 11 : sample 33 Resoni 1:6

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
120	1,821	507	16,155.5	3,401.57	975.9	84	62.4	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-11\2013-04-11_003.xad

Created: 4/11/2013 5:25:13 PM
Modified: 4/11/2013 6:07:48 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-11\2013-04-11_003.xad

Created: 4/11/2013 5:25:13 PM
 Modified: 4/11/2013 6:07:48 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		4/11/2013 6:06:27 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-04-11\2013-04-11_003.xad)		Instrument	Run		4/11/2013 5:25:13 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		4/11/2013 5:25:13 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		4/11/2013 5:25:13 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		4/11/2013 5:25:13 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		4/11/2013 5:25:13 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		4/11/2013 5:25:13 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		4/11/2013 5:25:13 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1