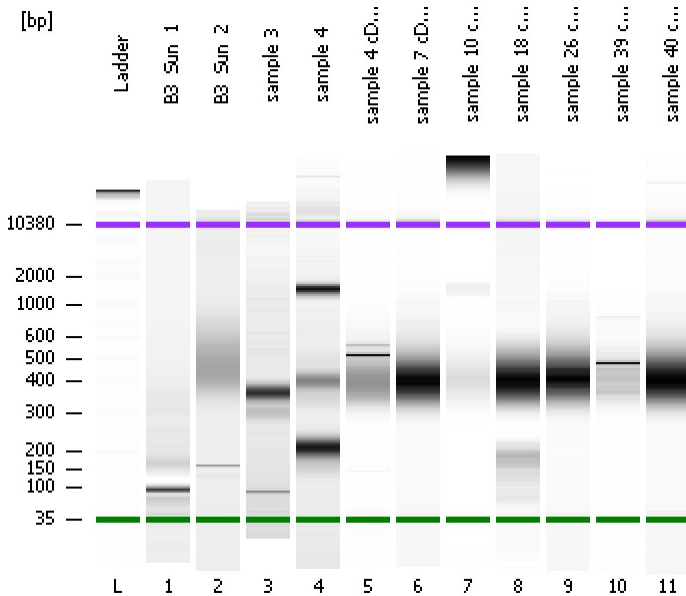


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-15\2013-04-15_004.xad

Created: 4/15/2013 3:20:48 PM
Modified: 4/15/2013 4:08:25 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

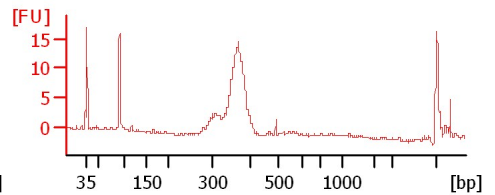
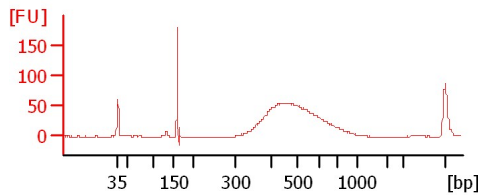
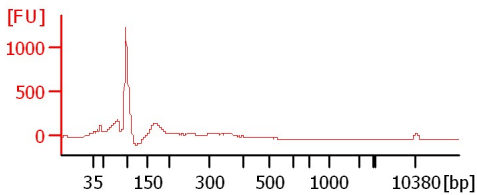
Chip Information:

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

B3_Sun_1

B3_Sun_2

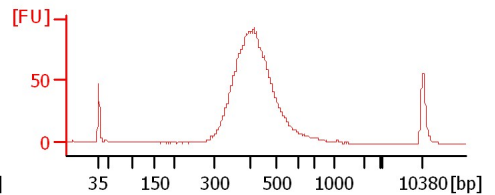
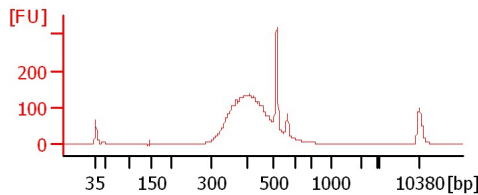
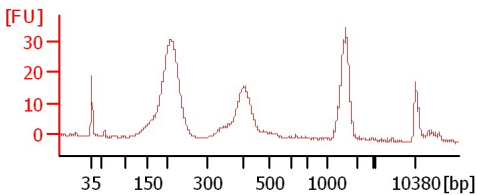
sample 3



sample 4

sample 4 cDNA Lib

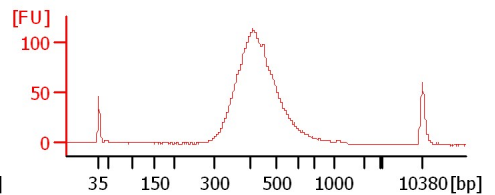
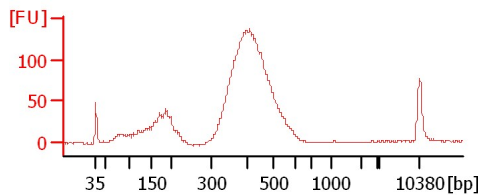
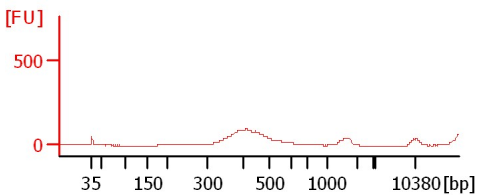
sample 7 cDNA Lib



sample 10 cDNA Lib

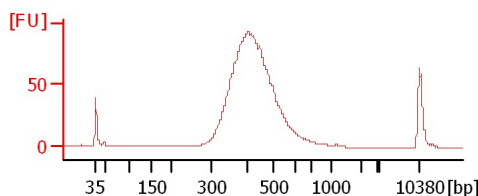
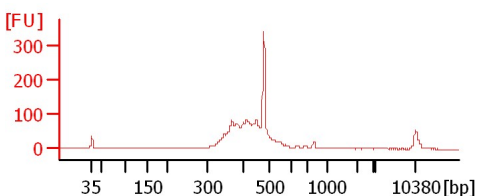
sample 18 cDNA Lib

sample 26 cDNA Lib



sample 39 cDNA Lib

sample 40 cDNA Lib



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-15\2013-04-15_004.xad

Created: 4/15/2013 3:20:48 PM
Modified: 4/15/2013 4:08:25 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
B3_Sun_1		<input type="checkbox"/>	✓			
B3_Sun_2		<input type="checkbox"/>	✓			
sample 3		<input type="checkbox"/>	✓			
sample 4		<input type="checkbox"/>	✓			
sample 4 cDNA Lib		<input type="checkbox"/>	✓			
sample 7 cDNA Lib		<input type="checkbox"/>	✓			
sample 10 cDNA Lib		<input type="checkbox"/>	✓			
sample 18 cDNA Lib		<input type="checkbox"/>	✓			
sample 26 cDNA Lib		<input type="checkbox"/>	✓			
sample 39 cDNA Lib		<input type="checkbox"/>	✓			
sample 40 cDNA 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\2013-04-15\2013-04-15_004.xad

Created: 4/15/2013 3:20:48 PM
Modified: 4/15/2013 4:08:25 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

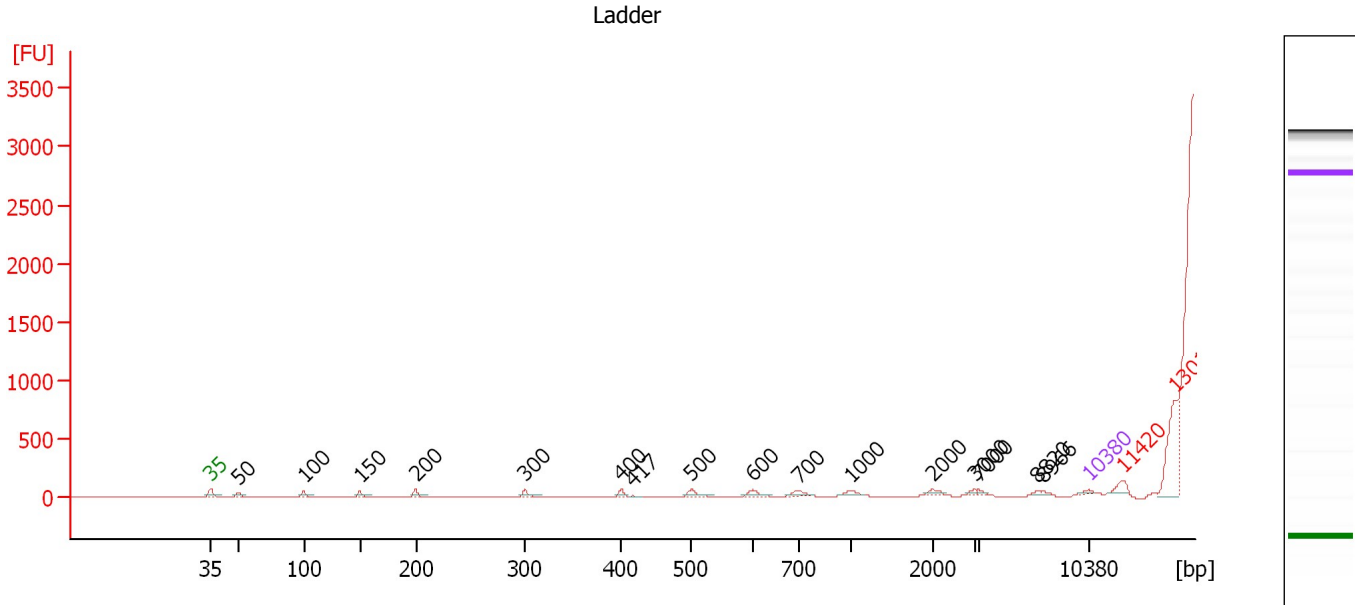
Ladder

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\2013-04-15\2013-04-15_004.xad

Created: 4/15/2013 3:20:48 PM
 Modified: 4/15/2013 4:08:25 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

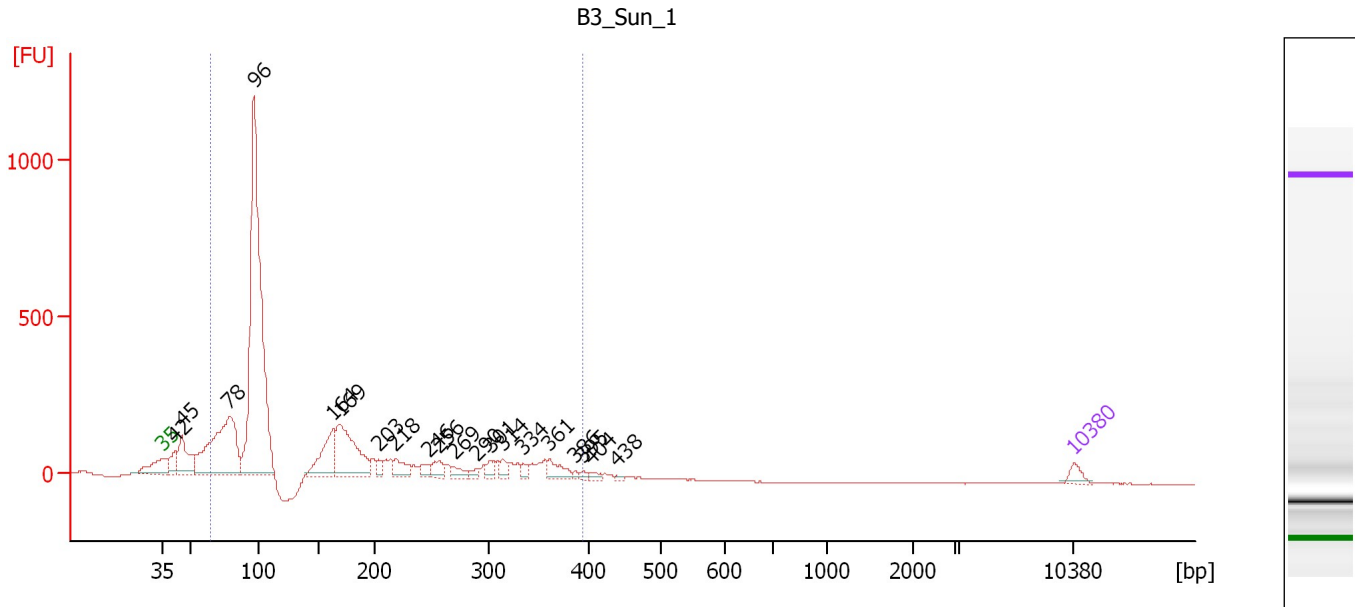
Peak table for Ladder

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	417	0.00	0.0	
9	500	150.00	454.5	Ladder Peak
10	600	150.00	378.8	Ladder Peak
11	700	150.00	324.7	Ladder Peak
12	1,000	150.00	227.3	Ladder Peak
13	2,000	150.00	113.6	Ladder Peak
14	3,000	150.00	75.8	Ladder Peak
15	7,000	150.00	32.5	Ladder Peak
16	8,820	0.00	0.0	
17	8,966	0.00	0.0	
18	10,380	75.00	10.9	Upper Marker
19	11,420	0.00	0.0	excluded peak
20	13,012	0.00	0.0	excluded peak

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-15\2013-04-15_004.xad

Created: 4/15/2013 3:20:48 PM
 Modified: 4/15/2013 4:08:25 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 1 : B3 Sun 1

Height Threshold [FU] : 10

Overall Results for sample 1 : B3 Sun 1

Number of peaks found: 20 Corr. Area 1: 5,227.6
 Noise: 0.4

Peak table for sample 1 : B3 Sun 1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	42	270.76	9,873.5	
3	45	635.68	21,345.5	
4	78	2,295.76	44,591.6	
5	96	5,831.28	92,067.2	
6	164	701.54	6,493.7	
7	169	1,257.23	11,272.3	
8	203	109.56	818.6	
9	218	225.74	1,572.4	
10	246	108.15	666.0	
11	256	165.96	982.8	
12	269	110.85	624.1	
13	290	69.42	363.0	
14	301	100.35	504.8	
15	314	114.75	554.6	
16	334	78.56	356.2	
17	361	194.66	816.9	
18	386	30.89	121.2	
19	395	37.51	143.8	
20	404	52.19	195.7	
21	438	21.11	73.0	
22	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-15\2013-04-15_004.xad

Created: 4/15/2013 3:20:48 PM
Modified: 4/15/2013 4:08:25 PM

Electropherogram Summary Continued ...

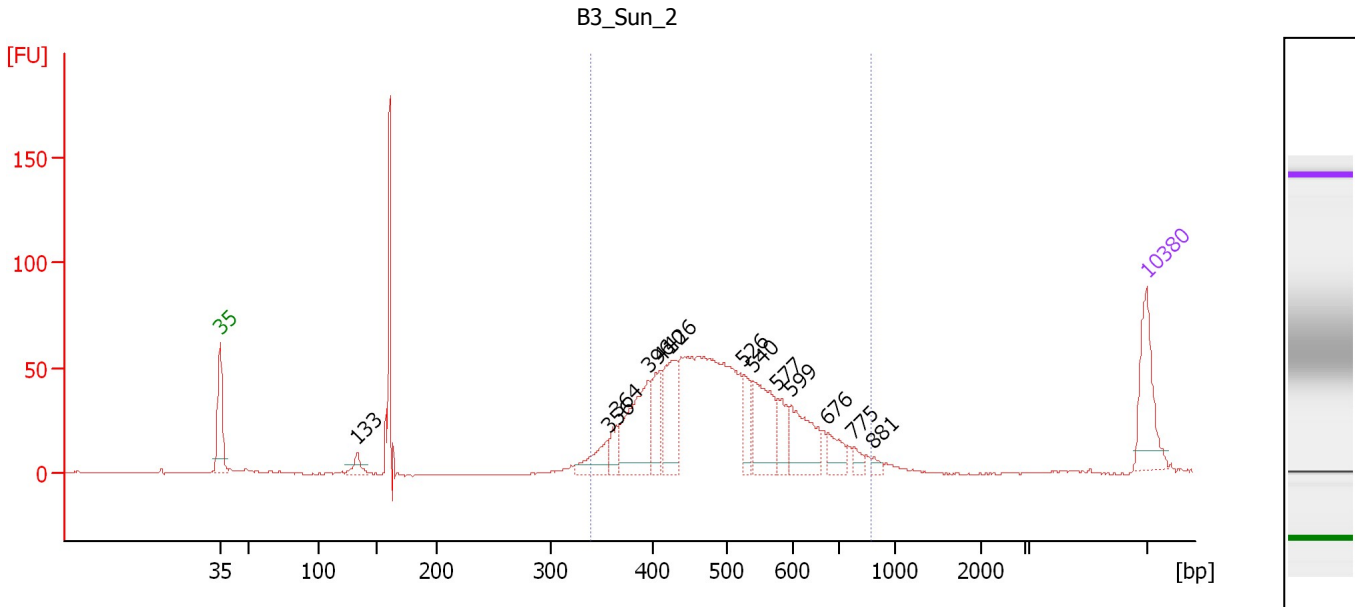
... Region table for sample 1 : B3_Sun_1

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
64	395	156	151,186.9	11,395.06	5,227.6	88	55.8	■

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-15\2013-04-15_004.xad

Created: 4/15/2013 3:20:48 PM
 Modified: 4/15/2013 4:08:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : B3_Sun_2

Number of peaks found: 13 Corr. Area 1: 934.5
 Noise: 0.2

Peak table for sample 2 : B3_Sun_2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	133	24.62	280.6	
3	356	47.36	201.5	
4	364	29.81	124.1	
5	396	146.07	559.4	
6	410	63.10	233.3	
7	426	108.43	386.0	
8	526	39.74	114.6	
9	540	110.44	310.2	
10	577	43.08	113.1	
11	599	87.69	221.9	
12	676	32.85	73.7	
13	775	11.74	23.0	
14	881	7.04	12.1	
15	10,380	75.00	10.9	Upper Marker

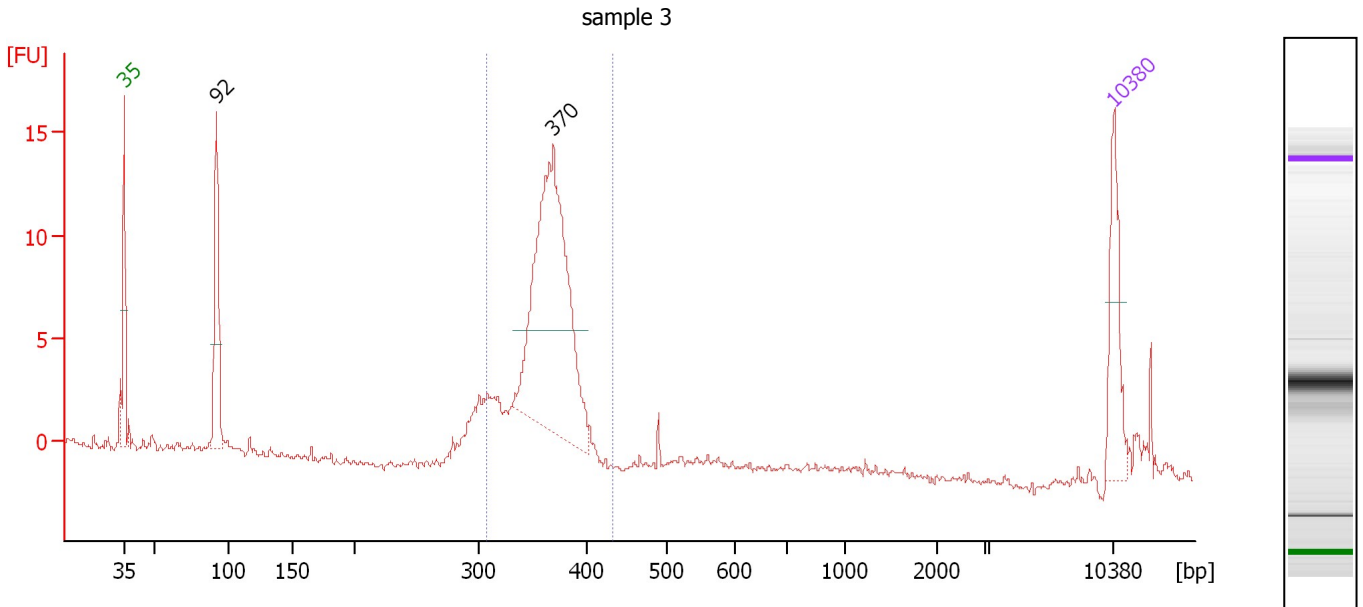
Region table for sample 2 : B3_Sun_2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
339	866	497	3,577.7	1,118.10	934.5	90	19.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-15\2013-04-15_004.xad

Created: 4/15/2013 3:20:48 PM
 Modified: 4/15/2013 4:08:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : sample 3

Number of peaks found: 2 Corr. Area 1: 81.5
 Noise: 0.2

Peak table for sample 3 : sample 3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	92	179.22	2,963.3	
3	370	499.99	2,050.2	
4	10,380	75.00	10.9	Upper Marker

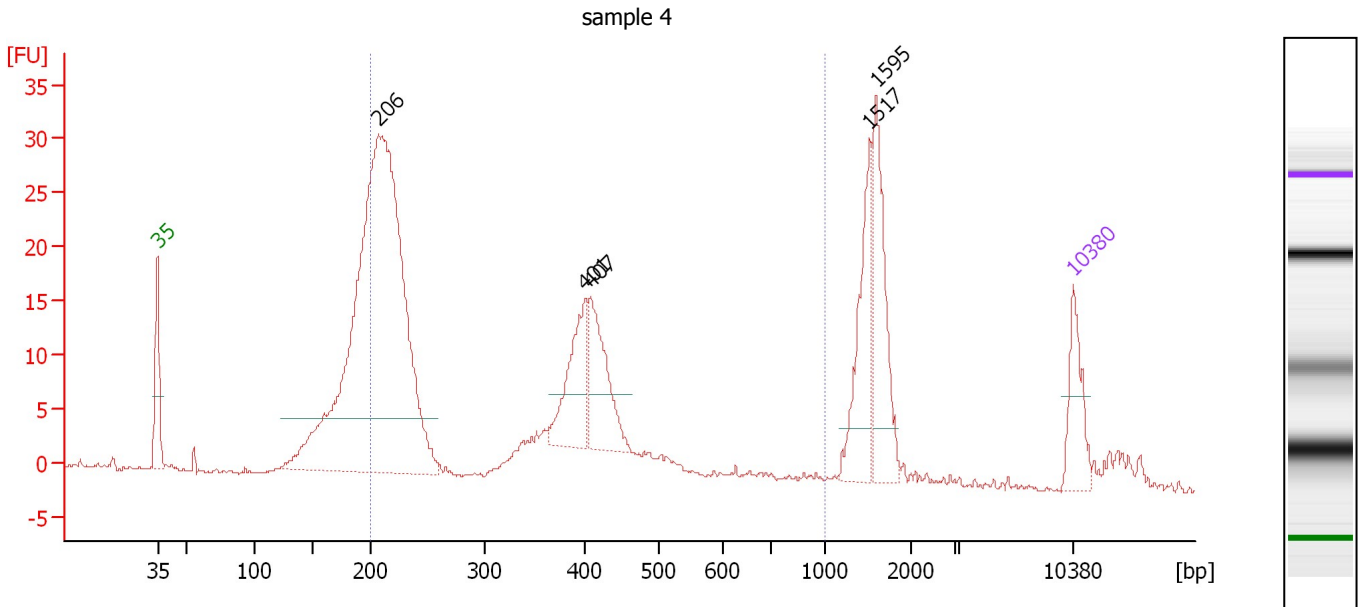
Region table for sample 3 : sample 3

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
308	432	363	2,734.9	654.46	81.5	76	5.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-15\2013-04-15_004.xad

Created: 4/15/2013 3:20:48 PM
 Modified: 4/15/2013 4:08:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : sample 4

Number of peaks found: 5 Corr. Area 1: 273.1
 Noise: 0.1

Peak table for sample 4 : sample 4

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	206	1,673.87	12,298.4	
3	401	161.91	612.5	
4	407	167.54	623.6	
5	1,517	157.89	157.7	
6	1,595	168.35	160.0	
7	10,380	75.00	10.9	Upper Marker

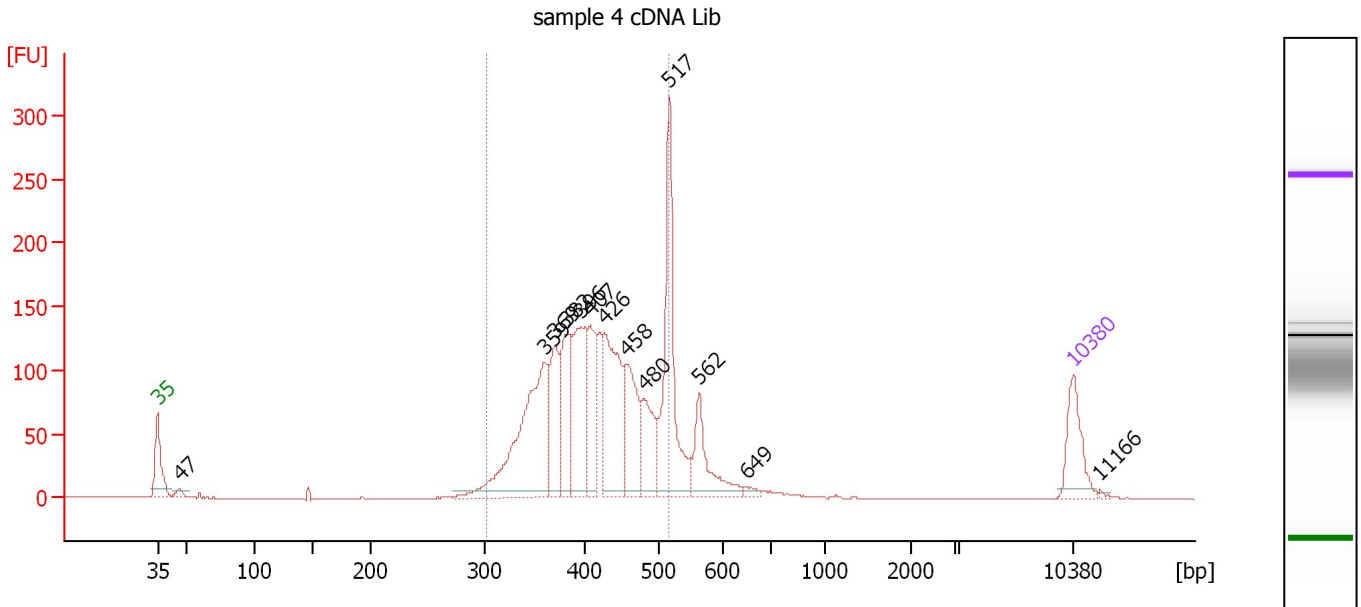
Region table for sample 4 : sample 4

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	324	9,577.6	1,694.53	273.1	58	39.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-15\2013-04-15_004.xad

Created: 4/15/2013 3:20:48 PM
 Modified: 4/15/2013 4:08:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : sample 4 cDNA Lib

Number of peaks found: 13 Corr. Area 1: 1,725.2
 Noise: 0.2

Peak table for sample 5 : sample 4 cDNA Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	47	15.53	504.6	
3	359	383.80	1,619.5	
4	369	138.82	569.4	
5	382	148.59	589.1	
6	396	201.04	770.2	
7	407	126.43	470.6	
8	426	240.02	853.5	
9	458	149.74	495.9	
10	480	102.55	323.8	
11	517	299.74	879.0	
12	562	103.79	279.8	
13	649	8.79	20.5	
14	10,380	75.00	10.9	Upper Marker
15	11,166	0.00	0.0	

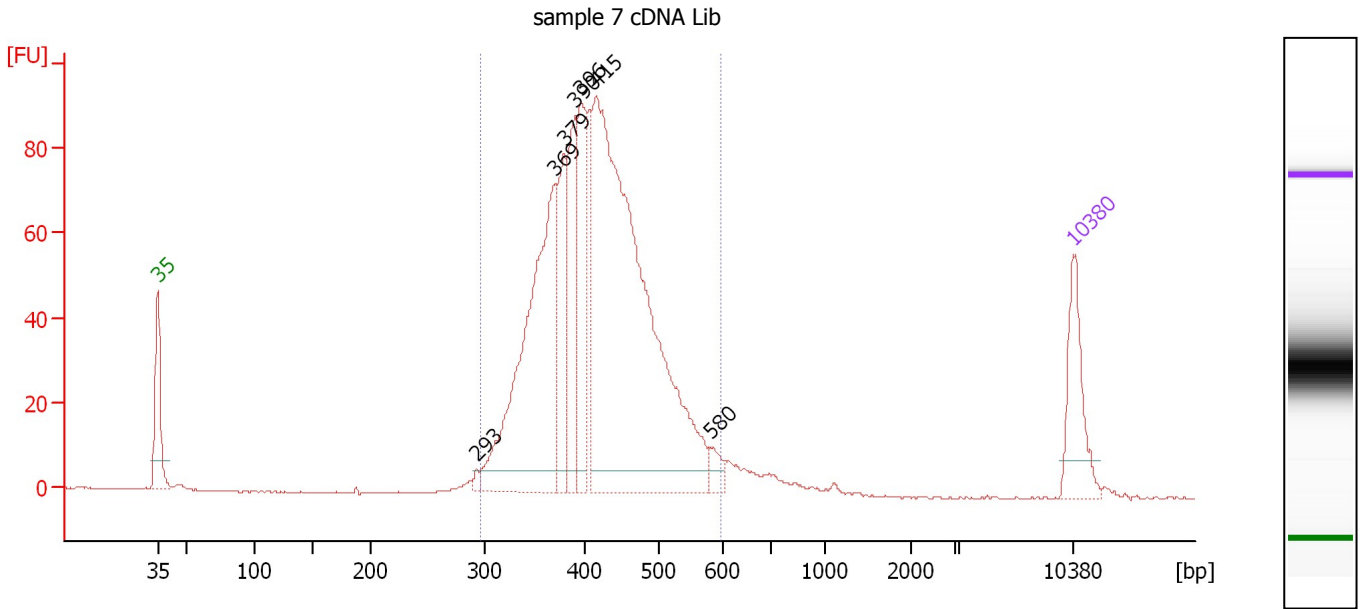
Region table for sample 5 : sample 4 cDNA Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
301	515	411	6,342.3	1,685.45	1,725.2	80	12.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-15\2013-04-15_004.xad

Created: 4/15/2013 3:20:48 PM
 Modified: 4/15/2013 4:08:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : sample 7 cDNA Lib

Number of peaks found: 7 Corr. Area 1: 1,161.3
 Noise: 0.1

Peak table for sample 6 : sample 7 cDNA Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	293	7.18	37.2	
3	369	462.18	1,899.6	
4	379	130.32	520.9	
5	396	140.43	545.5	
6	396	138.75	530.6	
7	415	918.05	3,353.7	
8	580	19.47	50.9	
9	10,380	75.00	10.9	Upper Marker

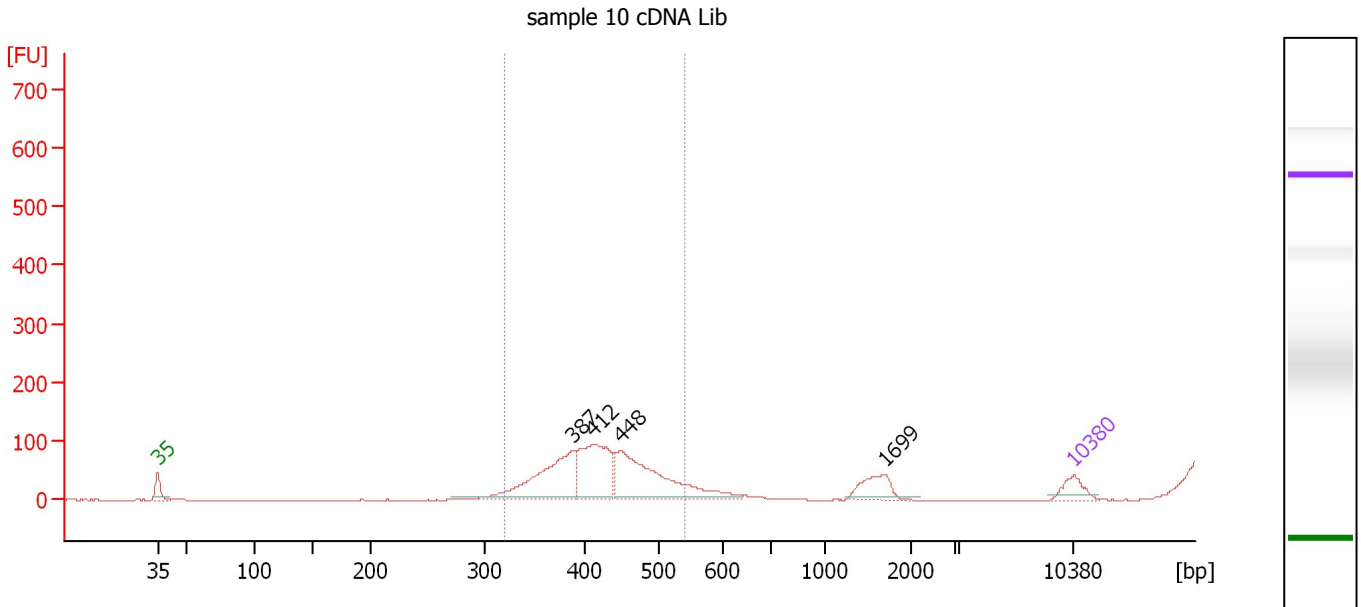
Region table for sample 6 : sample 7 cDNA Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
296	597	419	6,990.9	1,885.00	1,161.3	95	14.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-15\2013-04-15_004.xad

Created: 4/15/2013 3:20:48 PM
 Modified: 4/15/2013 4:08:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : sample 10 cDNA Lib

Number of peaks found: 4 Corr. Area 1: 0.0
 Noise: 0.2

Peak table for sample 7 : sample 10 cDNA Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	387	570.05	2,229.2	
3	412	502.45	1,849.8	
4	448	662.22	2,242.1	
5	1,699	136.75	122.0	
6	10,380	75.00	10.9	Upper Marker

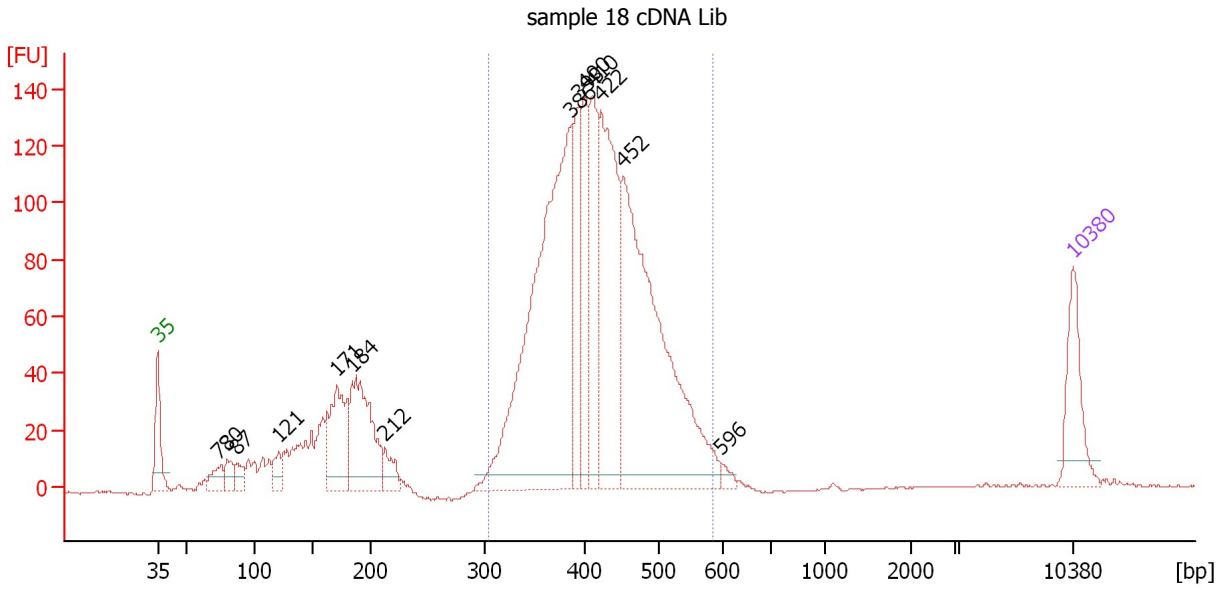
Region table for sample 7 : sample 10 cDNA Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
320	542	0	0.0	0.00	0.0	0	0.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-15\2013-04-15_004.xad

Created: 4/15/2013 3:20:48 PM
 Modified: 4/15/2013 4:08:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : sample 18 cDNA Lib

Number of peaks found: 14 Corr. Area 1: 1,752.4
 Noise: 0.2

Peak table for sample 8 : sample 18 cDNA Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	73	37.55	775.2	
3	80	31.59	598.0	
4	87	24.30	424.5	
5	121	31.52	395.2	
6	171	158.33	1,403.9	
7	184	218.01	1,795.4	
8	212	35.72	255.3	
9	386	737.64	2,895.4	
10	393	148.97	573.9	
11	400	140.67	532.8	
12	410	171.30	633.1	
13	422	335.29	1,205.2	
14	452	640.57	2,146.5	
15	596	11.59	29.5	
16	10,380	75.00	10.9	Upper Marker

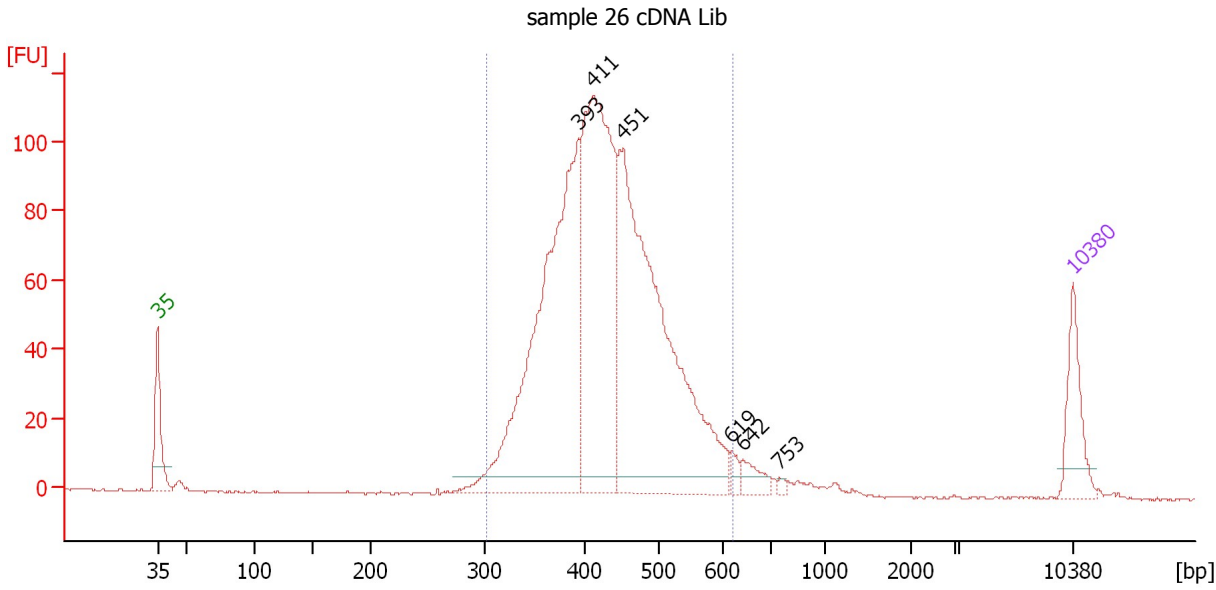
Region table for sample 8 : sample 18 cDNA Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
304	585	420	8,287.0	2,245.70	1,752.4	72	14.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-15\2013-04-15_004.xad

Created: 4/15/2013 3:20:48 PM
 Modified: 4/15/2013 4:08:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : sample 26 cDNA Lib

Number of peaks found: 6 Corr. Area 1: 1,402.5
 Noise: 0.2

Peak table for sample 9 : sample 26 cDNA Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	393	826.53	3,183.3	
3	411	677.25	2,497.7	
4	451	879.52	2,952.8	
5	619	16.10	39.4	
6	642	31.55	74.5	
7	753	6.20	12.5	
8	10,380	75.00	10.9	Upper Marker

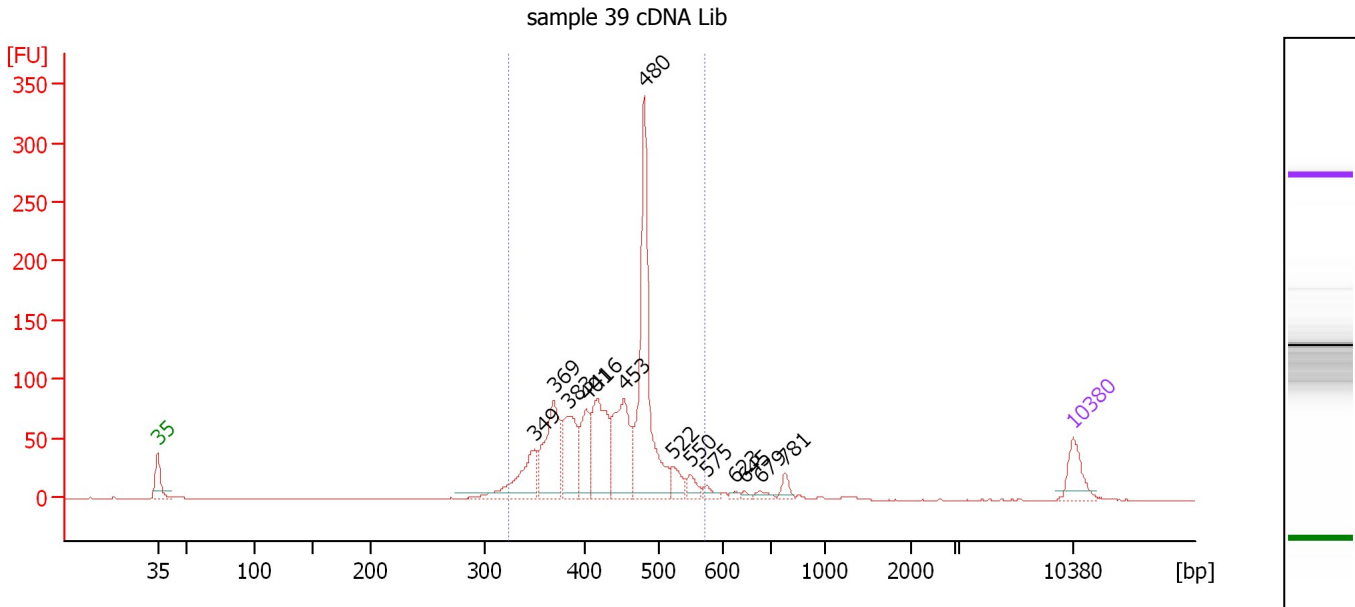
Region table for sample 9 : sample 26 cDNA Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
301	619	431	8,640.7	2,393.37	1,402.5	95	14.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-15\2013-04-15_004.xad

Created: 4/15/2013 3:20:48 PM
 Modified: 4/15/2013 4:08:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : sample 39 cDNA Lib

Number of peaks found: 14 Corr. Area 1: 1,173.8
 Noise: 0.1

Peak table for sample 10 : sample 39 cDNA Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	349	208.91	906.4	
3	369	292.97	1,204.2	
4	383	221.67	878.0	
5	401	142.91	540.0	
6	416	282.84	1,030.6	
7	453	279.62	935.4	
8	480	652.38	2,058.6	
9	522	59.04	171.5	
10	550	38.21	105.3	
11	575	23.81	62.8	
12	623	10.32	25.1	
13	645	9.05	21.2	
14	679	18.74	41.8	
15	781	29.17	56.6	
16	10,380	75.00	10.9	Upper Marker

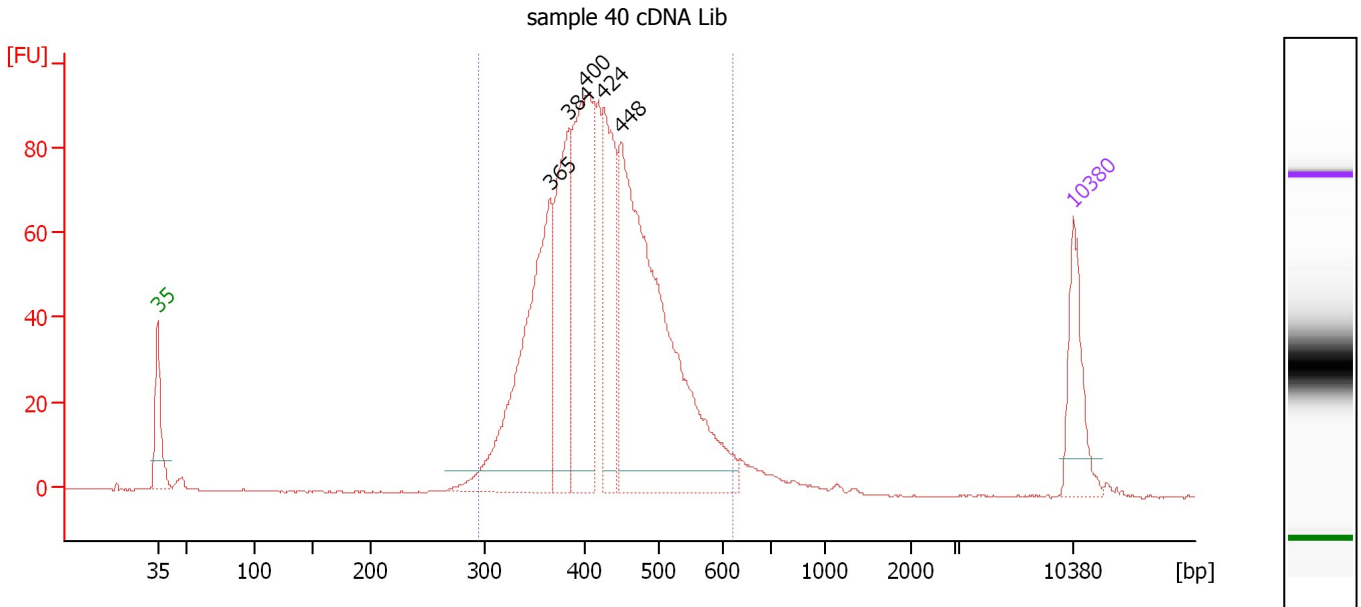
Region table for sample 10 : sample 39 cDNA Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
323	571	433	7,686.2	2,155.40	1,173.8	92	12.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-15\2013-04-15_004.xad

Created: 4/15/2013 3:20:48 PM
 Modified: 4/15/2013 4:08:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : sample 40 cDNA Lib

Number of peaks found: 5 Corr. Area 1: 1,234.0
 Noise: 0.2

Peak table for sample 11 : sample 40 cDNA Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	365	409.45	1,701.8	
3	384	213.70	843.3	
4	400	324.85	1,229.0	
5	424	197.91	706.5	
6	448	659.47	2,228.3	
7	10,380	75.00	10.9	Upper Marker

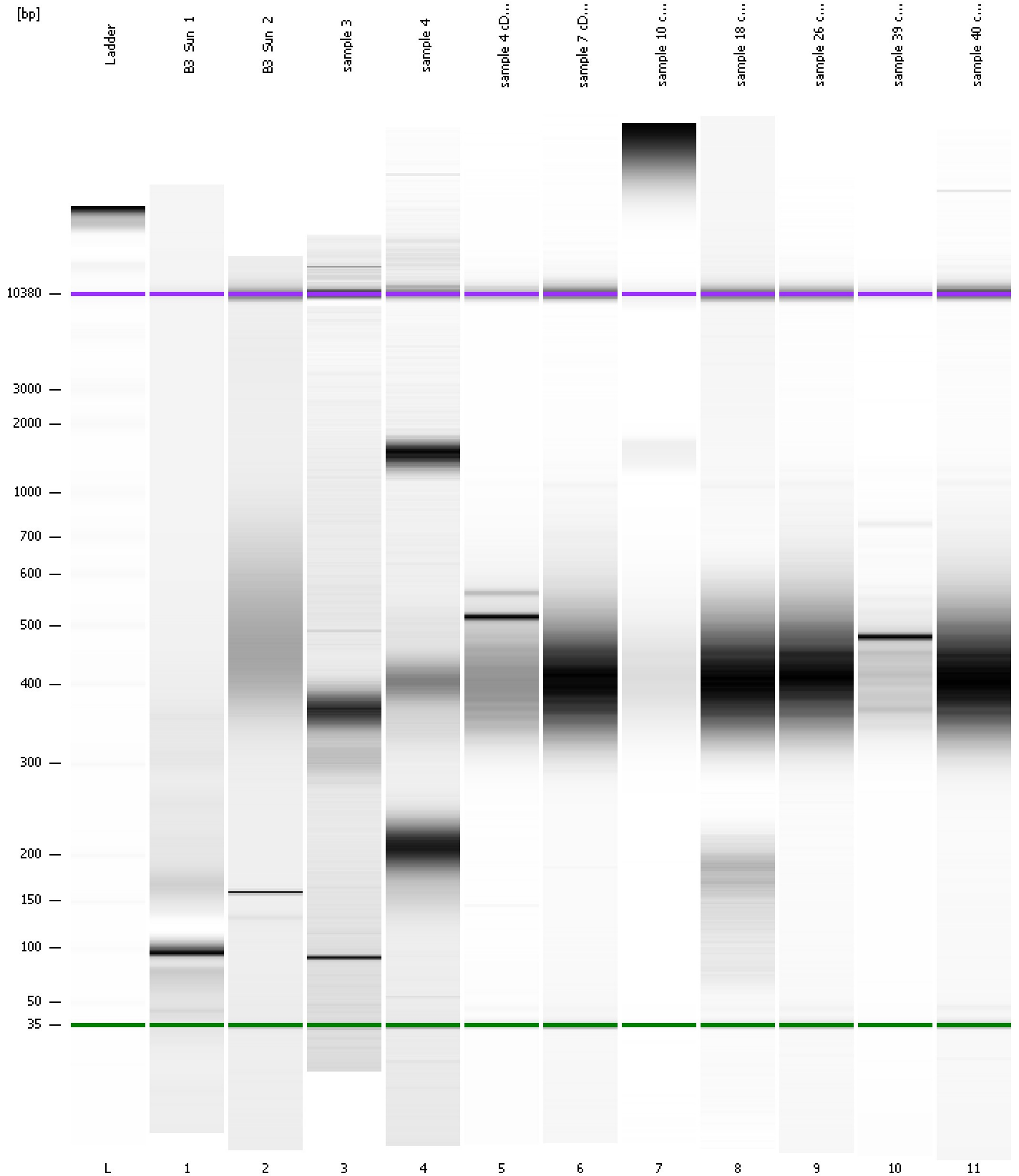
Region table for sample 11 : sample 40 cDNA Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
295	621	426	6,948.1	1,898.74	1,234.0	96	15.3	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-15\2013-04-15_004.xad

Created: 4/15/2013 3:20:48 PM
Modified: 4/15/2013 4:08:25 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-15\2013-04-15_004.xad

Created: 4/15/2013 3:20:48 PM
 Modified: 4/15/2013 4:08:25 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		4/15/2013 4:02:06 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-04-15\2013-04-15_004.xad)		Instrument	Run		4/15/2013 3:20:53 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		4/15/2013 3:20:53 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		4/15/2013 3:20:53 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		4/15/2013 3:20:53 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		4/15/2013 3:20:53 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		4/15/2013 3:20:53 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		4/15/2013 3:20:53 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1