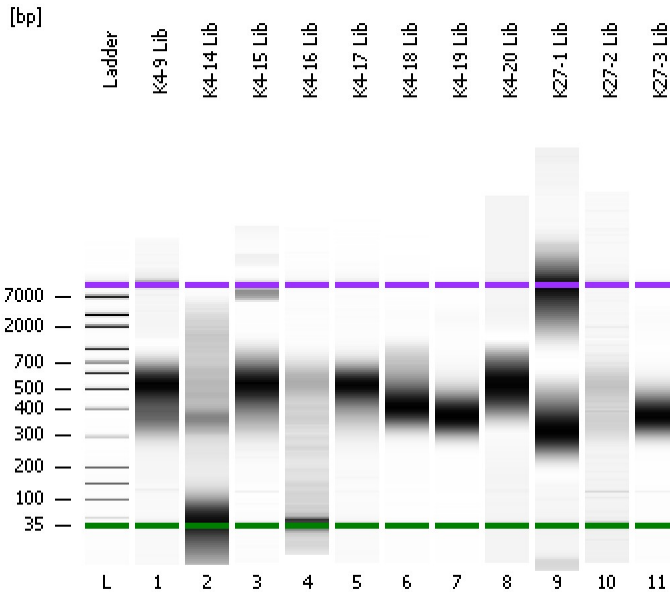


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-09\2012-08-09_002.xad

Created: 8/9/2012 10:55:14 AM
Modified: 8/9/2012 11:39:19 AM

Electrophoresis File Run Summary



Instrument Information:

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

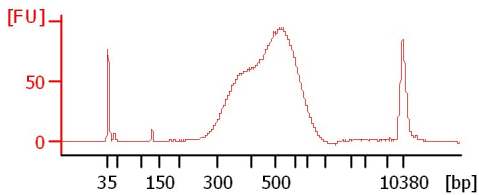
Assay Information:

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

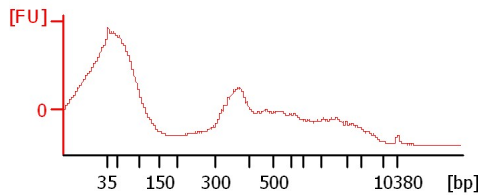
Chip Information:

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

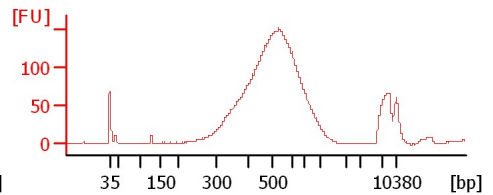
K4-9 Lib



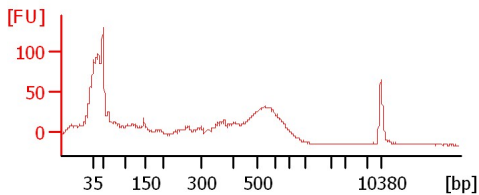
K4-14 Lib



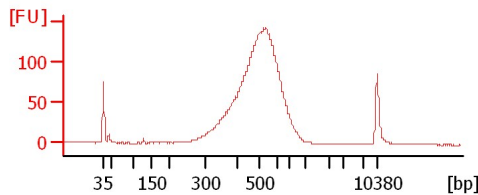
K4-15 Lib



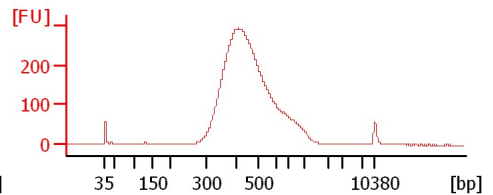
K4-16 Lib



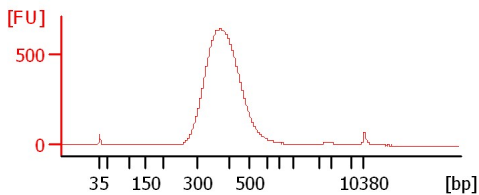
K4-17 Lib



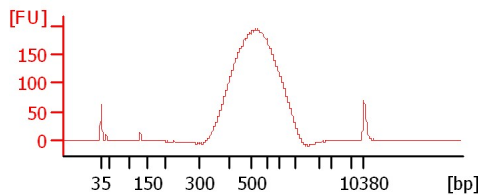
K4-18 Lib



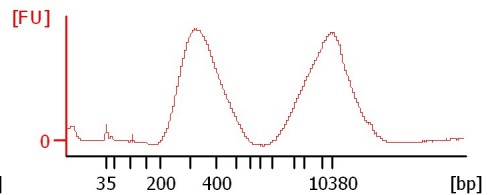
K4-19 Lib



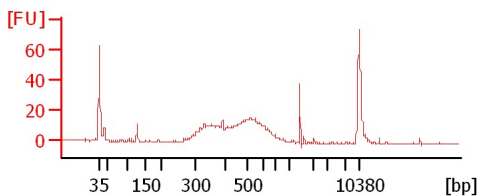
K4-20 Lib



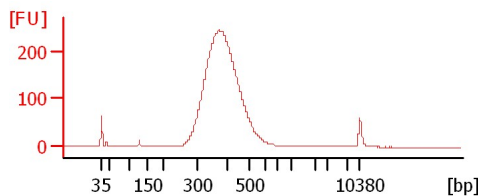
K27-1 Lib



K27-2 Lib



K27-3 Lib



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-09\2012-08-09_002.xad

Created: 8/9/2012 10:55:14 AM
 Modified: 8/9/2012 11:39:19 AM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
K4-9 Lib		<input type="checkbox"/>	✓			
K4-14 Lib		<input type="checkbox"/>	✓			
K4-15 Lib		<input type="checkbox"/>	✓			
K4-16 Lib		<input type="checkbox"/>	✓			
K4-17 Lib		<input type="checkbox"/>	✓			
K4-18 Lib		<input type="checkbox"/>	✓			
K4-19 Lib		<input type="checkbox"/>	✓			
K4-20 Lib		<input type="checkbox"/>	✓			
K27-1 Lib		<input type="checkbox"/>	✓			
K27-2 Lib		<input type="checkbox"/>	✓			
K27-3 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\2012-08-09\2012-08-09_002.xad

Created: 8/9/2012 10:55:14 AM
Modified: 8/9/2012 11:39:19 AM

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

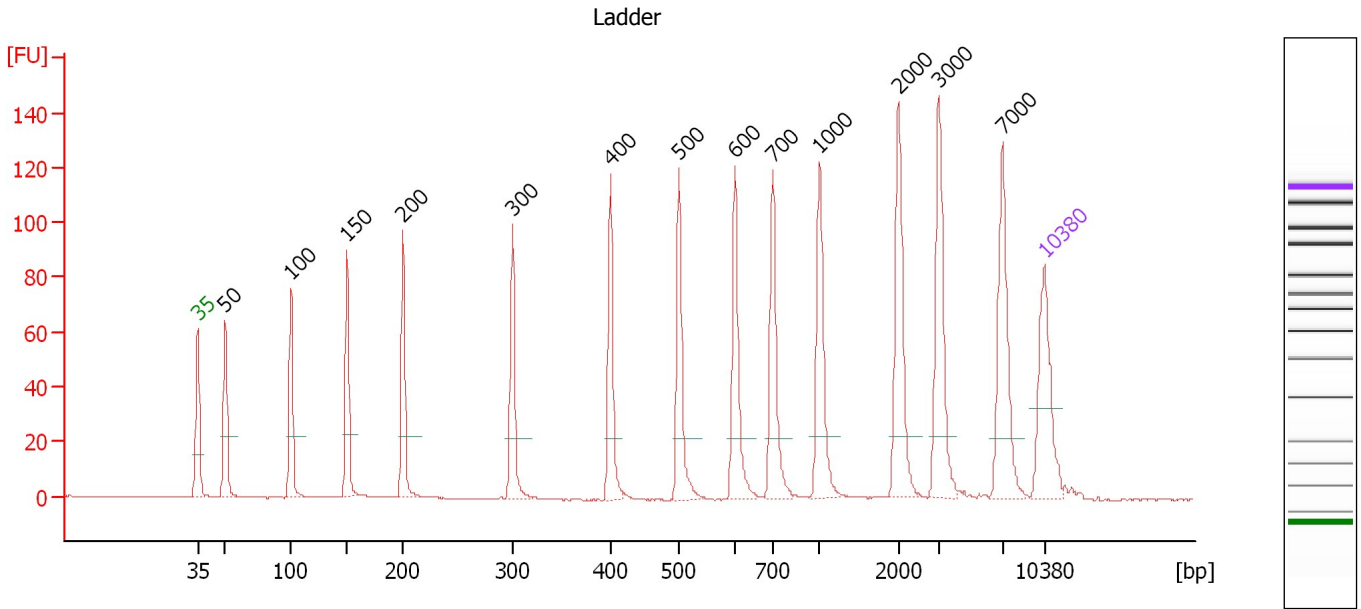
Ladder

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\2012-08-09\2012-08-09_002.xad

Created: 8/9/2012 10:55:14 AM
 Modified: 8/9/2012 11:39:19 AM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

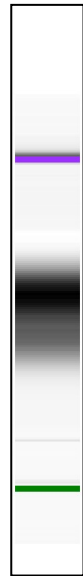
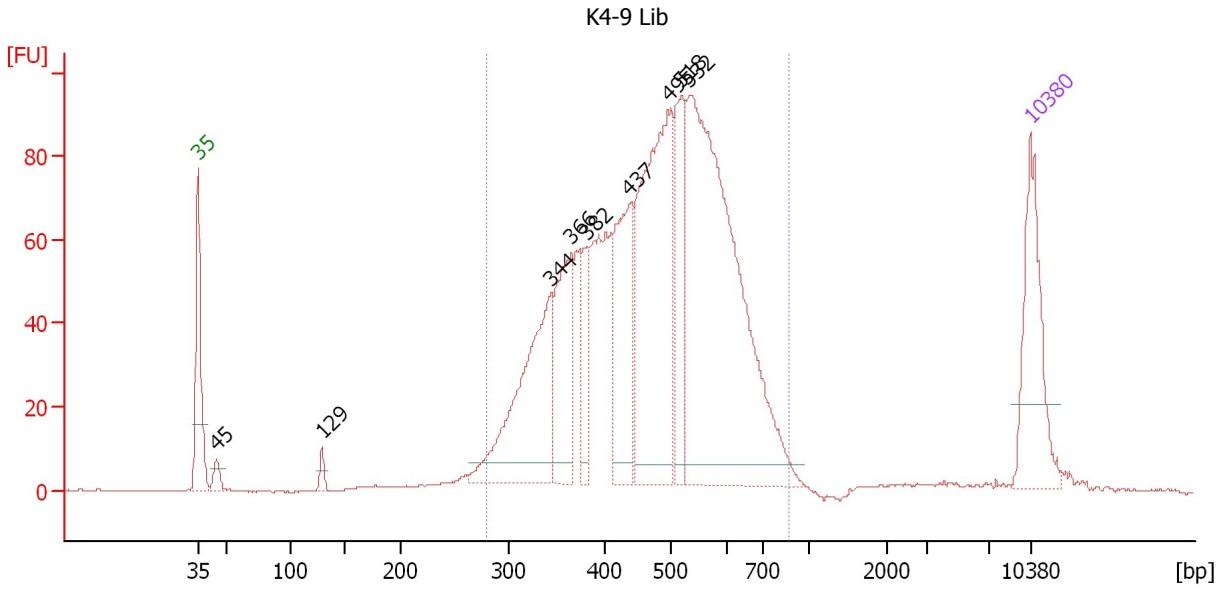
Peak table for Ladder

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\2012-08-09\2012-08-09_002.xad

Created: 8/9/2012 10:55:14 AM
 Modified: 8/9/2012 11:39:19 AM

Electropherogram Summary Continued ...



Overall Results for sample 1 : K4-9 Lib

Number of peaks found: 9 Corr. Area 1: 1,799.5
 Noise: 0.2

Peak table for sample 1 : K4-9 Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	45	13.49	451.4	
3	129	10.25	120.3	
4	344	183.47	806.9	
5	366	107.53	444.9	
6	382	54.21	215.2	
7	437	124.56	431.7	
8	495	280.40	858.7	
9	518	88.75	259.7	
10	532	462.56	1,316.6	
11	10,380	75.00	10.9	Upper Marker

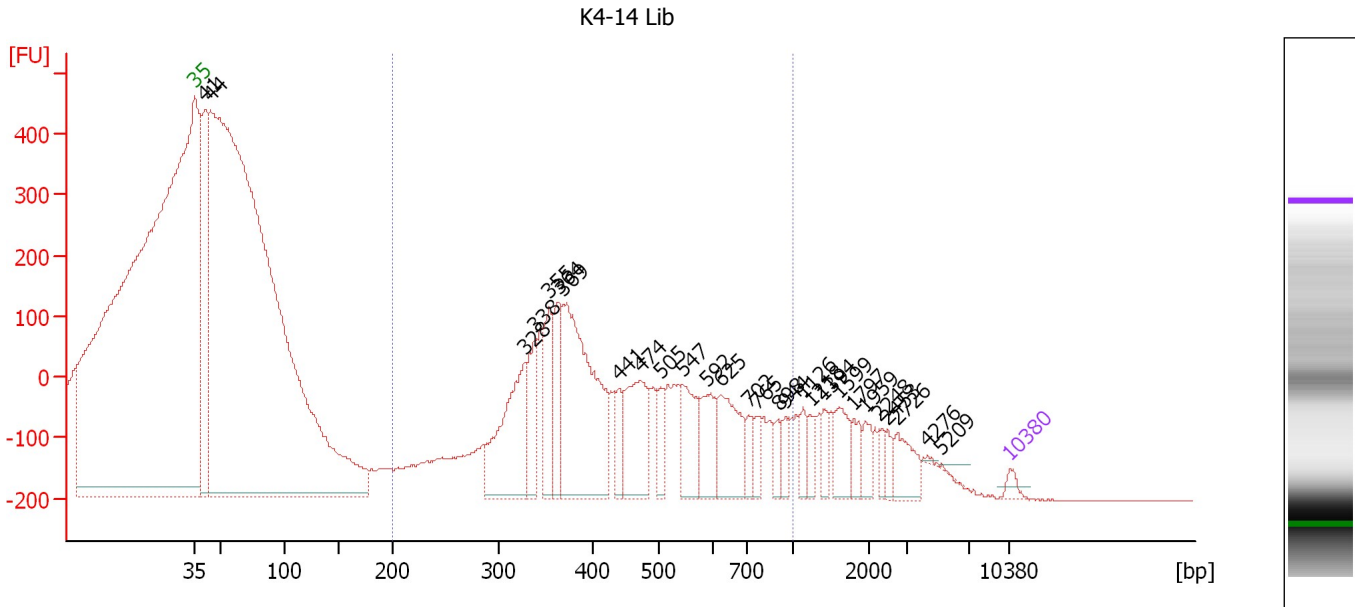
Region table for sample 1 : K4-9 Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
280	867	480	5,147.0	1,516.65	1,799.5	94	22.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-09\2012-08-09_002.xad

Created: 8/9/2012 10:55:14 AM
 Modified: 8/9/2012 11:39:19 AM

Electropherogram Summary Continued ...



Overall Results for sample 2 : K4-14 Lib

Number of peaks found: 28 Corr. Area 1: 2,898.9
 Noise: 0.5

Peak table for sample 2 : K4-14 Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	41	3,091.31	115,124.1	
3	44	33,147.20	1,149,876.8	
4	328	1,881.17	8,692.6	
5	338	726.49	3,255.7	
6	355	807.47	3,445.3	
7	364	742.05	3,087.4	
8	369	3,190.48	13,090.9	
9	441	327.28	1,124.9	
10	474	1,172.13	3,748.3	
11	505	339.70	1,018.5	
12	547	742.78	2,058.1	
13	592	609.02	1,558.0	
14	625	903.26	2,188.1	
15	702	221.58	478.0	
16	765	213.45	422.6	
17	898	186.89	315.2	
18	944	163.37	262.3	
19	1,126	204.03	274.5	
20	1,218	156.90	195.2	
21	1,394	172.98	188.0	
22	1,599	419.84	397.8	
23	1,797	189.50	159.8	
24	1,959	197.44	152.7	
25	2,248	121.85	82.1	
26	2,453	106.46	65.8	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-09\2012-08-09_002.xad


Created: 8/9/2012 10:55:14 AM
 Modified: 8/9/2012 11:39:19 AM

Electropherogram Summary Continued ...

... Peak table for sample 2 : K4-14 Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	2,726	368.78	205.0	
28	4,276	16.16	5.7	
29	5,209	4.51	1.3	
30	10,380	75.00	10.9	Upper Marker

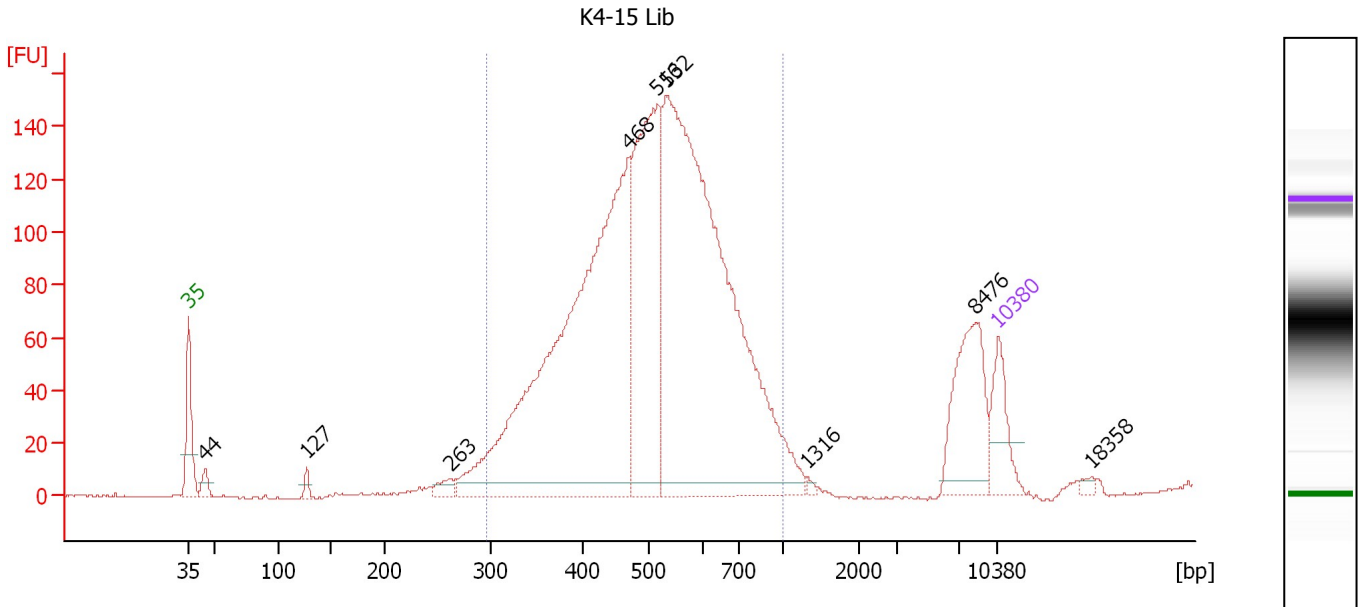
Region table for sample 2 : K4-14 Lib

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	482	22,483.3	6,408.12	2,898.9	31	32.0	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-09\2012-08-09_002.xad

Created: 8/9/2012 10:55:14 AM
 Modified: 8/9/2012 11:39:19 AM

Electropherogram Summary Continued ...



Overall Results for sample 3 : K4-15 Lib

Number of peaks found: 9 Corr. Area 1: 2,596.0
 Noise: 0.4

Peak table for sample 3 : K4-15 Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	44	32.15	1,098.2	
3	127	17.50	209.2	
4	263	29.92	172.4	
5	468	1,433.76	4,639.7	
6	516	614.62	1,805.6	
7	532	1,561.84	4,450.8	
8	1,316	5.76	6.6	
9	8,476	180.92	32.3	
10	10,380	75.00	10.9	Upper Marker
11	18,358	0.00	0.0	

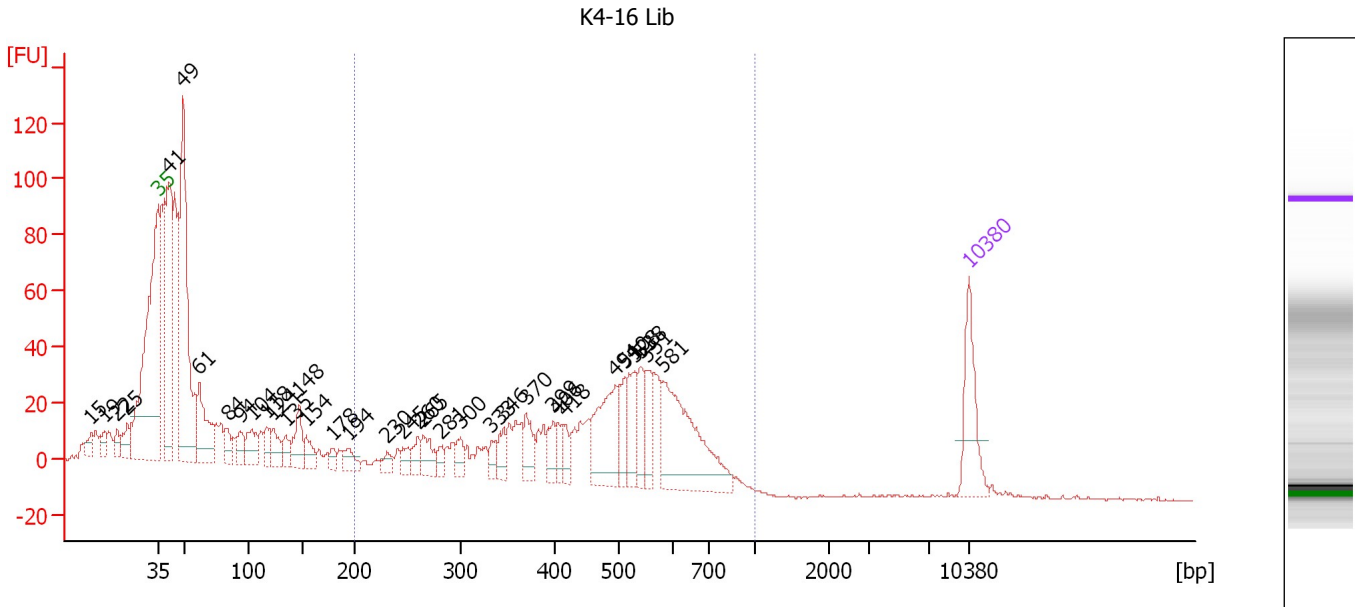
Region table for sample 3 : K4-15 Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
297	1,000	521	10,747.2	3,423.56	2,596.0	91	24.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-09\2012-08-09_002.xad

Created: 8/9/2012 10:55:14 AM
 Modified: 8/9/2012 11:39:19 AM

Electropherogram Summary Continued ...



Overall Results for sample 4 : K4-16 Lib

Number of peaks found: 35 Corr. Area 1: 759.5
 Noise: 0.2

Peak table for sample 4 : K4-16 Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	15	0.00	0.0	
2	19	0.00	0.0	
3	22	0.00	0.0	
4	25	0.00	0.0	
5	35	125.00	5,411.3	Lower Marker
6	41	415.48	15,457.2	
7	49	517.16	16,036.3	
8	61	141.66	3,510.8	
9	84	34.12	618.1	
10	94	37.89	611.8	
11	104	56.82	829.9	
12	118	33.56	432.2	
13	124	43.22	529.7	
14	135	28.21	316.4	
15	148	63.12	648.4	
16	154	35.54	348.6	
17	178	15.70	133.4	
18	194	28.92	226.1	
19	230	19.13	125.9	
20	245	21.44	132.4	
21	260	24.69	144.1	
22	265	44.75	256.2	
23	281	16.95	91.3	
24	300	25.96	131.0	
25	333	23.39	106.5	
26	346	28.48	124.8	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-09\2012-08-09_002.xad


Created: 8/9/2012 10:55:14 AM
 Modified: 8/9/2012 11:39:19 AM

Electropherogram Summary Continued ...

... Peak table for sample 4 : K4-16 Lib

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
27	370	42.86	175.3	
28	399	33.11	125.8	
29	406	24.68	92.2	
30	418	22.75	82.5	
31	494	134.31	411.9	
32	510	43.11	128.2	
33	528	58.46	167.9	
34	538	46.37	130.5	
35	551	51.83	142.4	
36	581	219.66	572.6	
37	▶ 10,380	75.00	10.9	Upper Marker

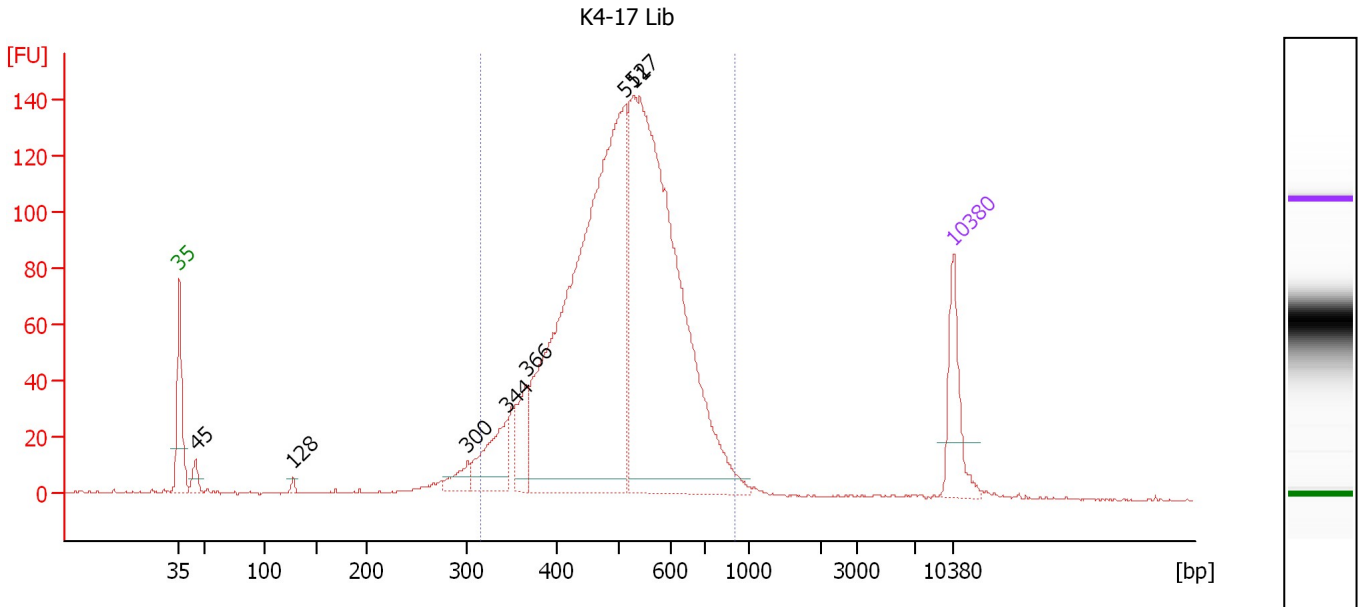
Region table for sample 4 : K4-16 Lib

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	473	3,986.2	1,085.26	759.5	41	27.3	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-09\2012-08-09_002.xad

Created: 8/9/2012 10:55:14 AM
 Modified: 8/9/2012 11:39:19 AM

Electropherogram Summary Continued ...



Overall Results for sample 5 : K4-17 Lib

Number of peaks found: 7 Corr. Area 1: 2,023.4
 Noise: 0.2

Peak table for sample 5 : K4-17 Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	45	28.93	979.2	
3	128	7.48	88.9	
4	300	31.94	161.2	
5	344	105.59	465.4	
6	366	76.94	318.7	
7	511	1,107.65	3,282.9	
8	527	1,040.74	2,993.2	
9	10,380	75.00	10.9	Upper Marker

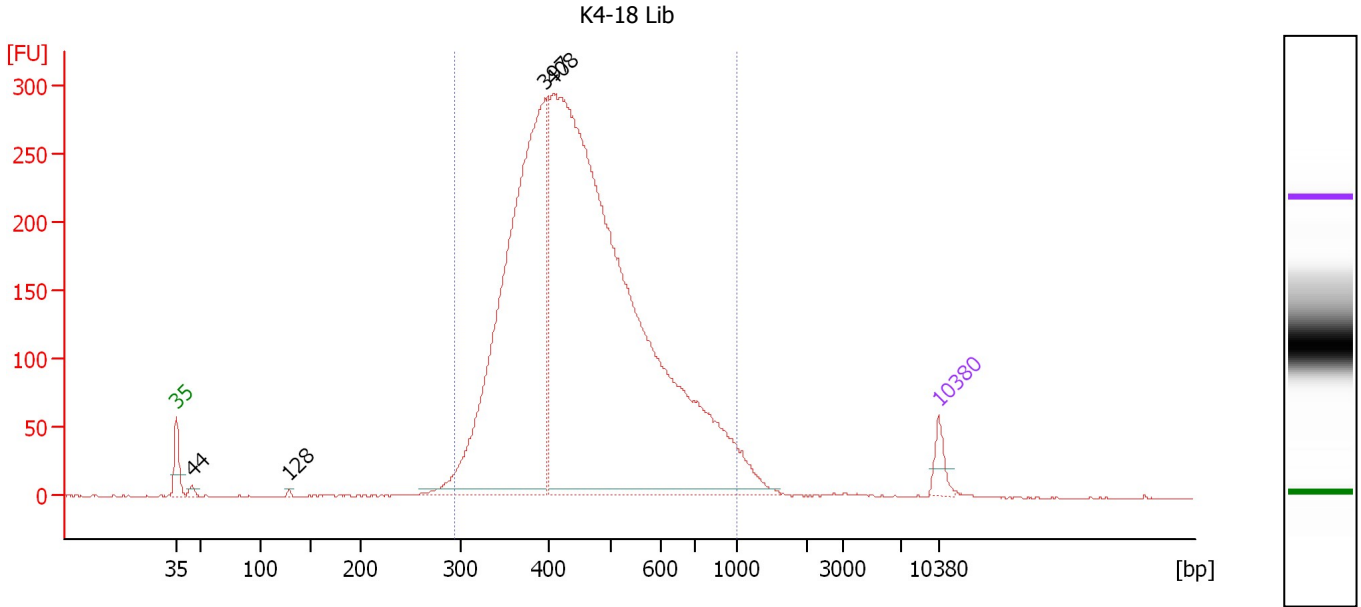
Region table for sample 5 : K4-17 Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
314	908	509	7,438.3	2,373.50	2,023.4	95	19.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-09\2012-08-09_002.xad

Created: 8/9/2012 10:55:14 AM
 Modified: 8/9/2012 11:39:19 AM

Electropherogram Summary Continued ...



Overall Results for sample 6 : K4-18 Lib

Number of peaks found: 4 Corr. Area 1: 4,989.0
 Noise: 0.2

Peak table for sample 6 : K4-18 Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	44	34.14	1,167.9	
3	128	11.51	136.0	
4	397	3,538.17	13,504.4	
5	408	6,990.17	25,974.3	
6	10,380	75.00	10.9	Upper Marker

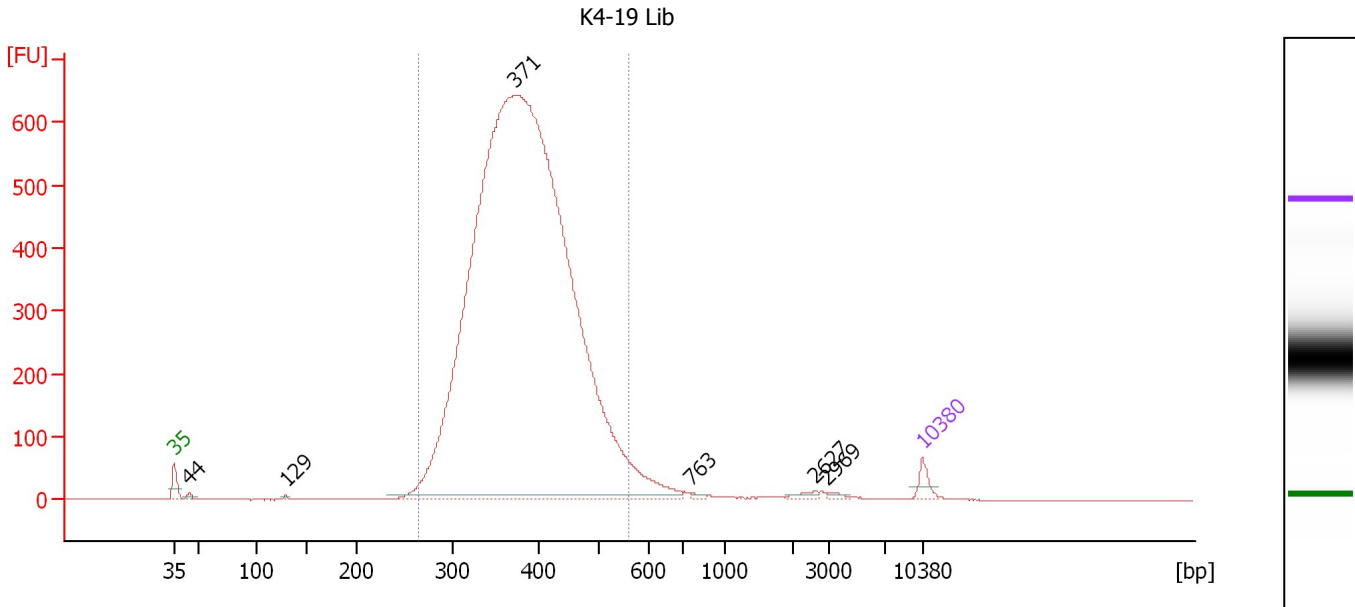
Region table for sample 6 : K4-18 Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
294	1,000	470	35,138.4	10,136.96	4,989.0	96	26.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-09\2012-08-09_002.xad

Created: 8/9/2012 10:55:14 AM
 Modified: 8/9/2012 11:39:19 AM

Electropherogram Summary Continued ...



Overall Results for sample 7 : K4-19 Lib

Number of peaks found: 6 Corr. Area 1: 9,235.1
 Noise: 0.2

Peak table for sample 7 : K4-19 Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	44	37.97	1,303.4	
3	129	16.32	191.2	
4	371	17,626.56	71,979.3	
5	763	18.14	36.0	
6	2,627	29.28	16.9	
7	2,969	18.94	9.7	
8	10,380	75.00	10.9	Upper Marker

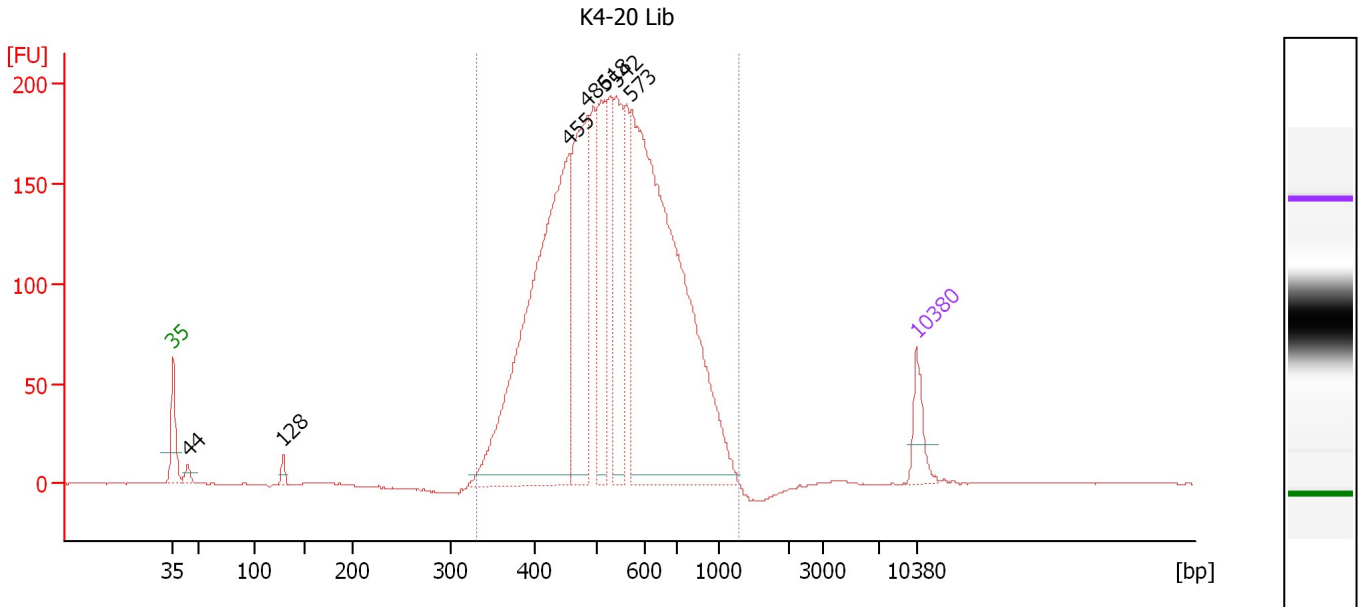
Region table for sample 7 : K4-19 Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
265	559	386	69,472.0	17,253.21	9,235.1	95	14.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-09\2012-08-09_002.xad

Created: 8/9/2012 10:55:14 AM
 Modified: 8/9/2012 11:39:19 AM

Electropherogram Summary Continued ...



Overall Results for sample 8 : K4-20 Lib

Number of peaks found: 7 Corr. Area 1: 3,331.8
 Noise: 0.2

Peak table for sample 8 : K4-20 Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	44	34.09	1,177.3	
3	128	27.14	320.2	
4	455	1,601.68	5,330.7	
5	486	654.70	2,040.5	
6	518	407.94	1,193.9	
7	542	375.98	1,051.9	
8	573	1,888.18	4,992.5	
9	10,380	75.00	10.9	Upper Marker

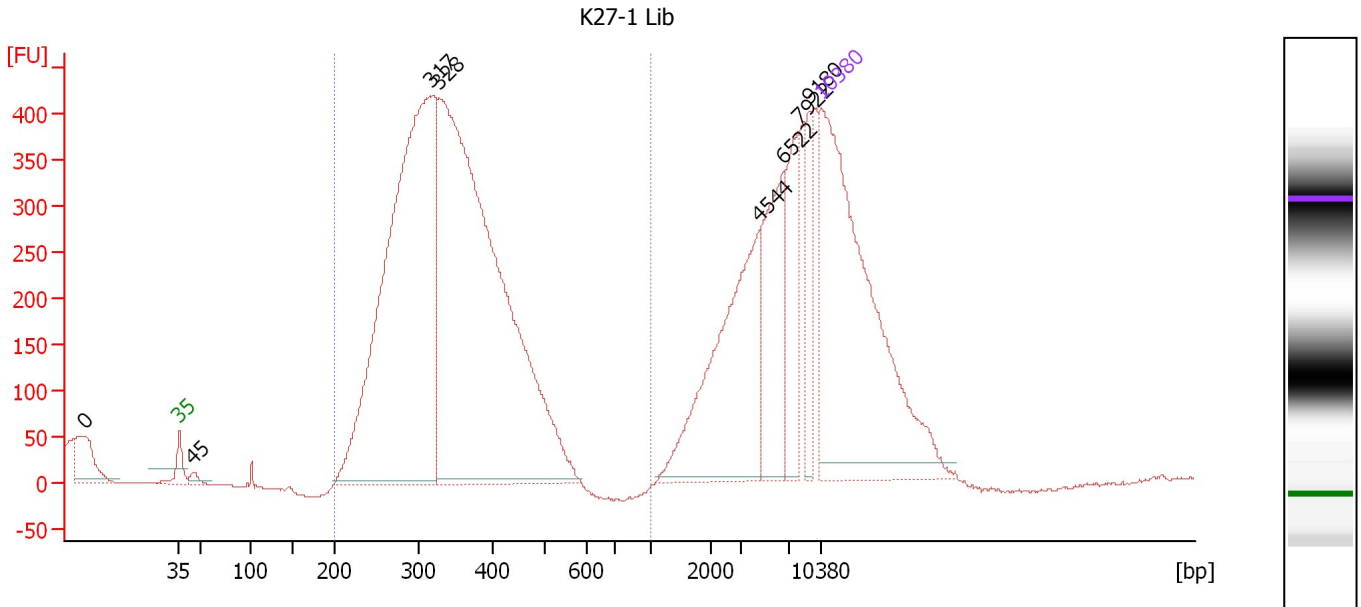
Region table for sample 8 : K4-20 Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
331	1,286	552	16,316.6	5,532.38	3,331.8	99	25.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-09\2012-08-09_002.xad

Created: 8/9/2012 10:55:14 AM
 Modified: 8/9/2012 11:39:19 AM

Electropherogram Summary Continued ...



Overall Results for sample 9 : K27-1 Lib

Number of peaks found: 8 Corr. Area 1: 6,312.2
 Noise: 0.2

Peak table for sample 9 : K27-1 Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	0	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	45	2.19	73.4	
4	317	182.71	874.7	
5	328	221.41	1,022.6	
6	4,544	47.25	15.8	
7	6,522	26.90	6.2	
8	7,922	17.76	3.4	
9	9,180	11.82	2.0	
10	10,380	75.00	10.9	Upper Marker

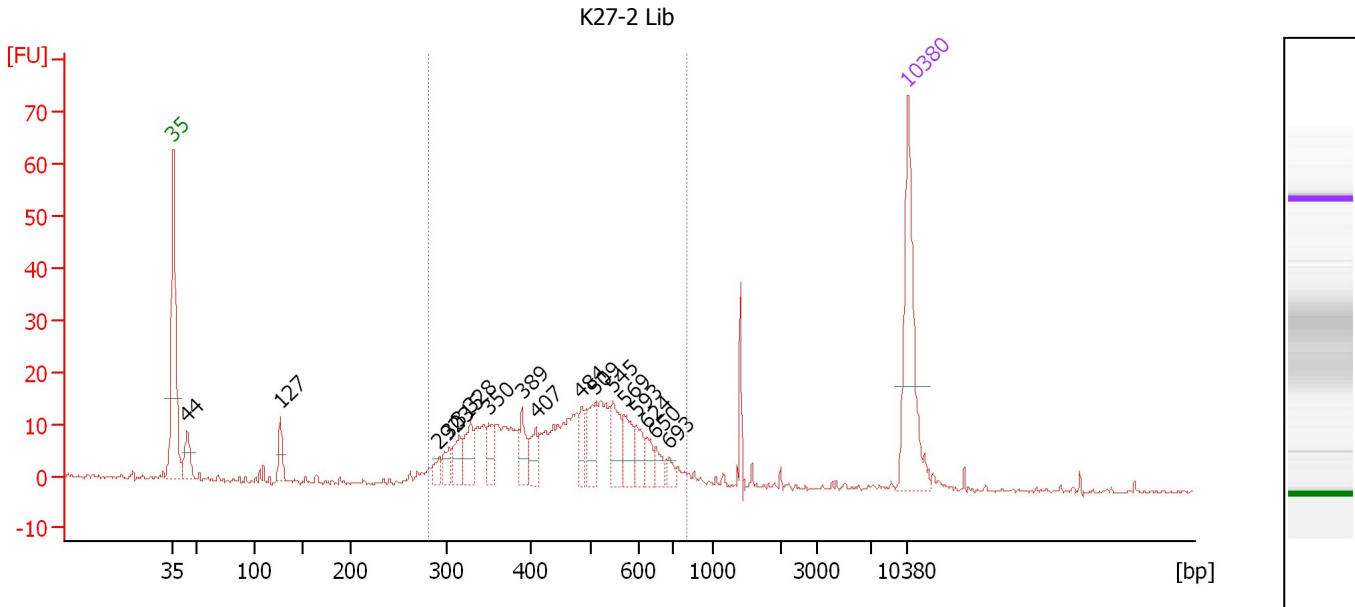
Region table for sample 9 : K27-1 Lib

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	342	1,550.0	335.45	6,312.2	68	18.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-09\2012-08-09_002.xad

Created: 8/9/2012 10:55:14 AM
 Modified: 8/9/2012 11:39:19 AM

Electropherogram Summary Continued ...



Overall Results for sample 10 : K27-2 Lib

Number of peaks found: 17 Corr. Area 1: 303.9
 Noise: 0.3

Peak table for sample 10 : K27-2 Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	44	30.84	1,070.6	
3	127	20.25	241.6	
4	292	10.33	53.7	
5	303	13.57	68.0	
6	315	20.67	99.3	
7	328	24.88	114.8	
8	350	20.93	90.6	
9	389	21.04	82.0	
10	407	18.89	70.2	
11	484	18.00	56.3	
12	509	31.45	93.6	
13	545	29.74	82.6	
14	569	22.89	61.0	
15	593	18.72	47.9	
16	624	11.30	27.5	
17	650	10.03	23.4	
18	693	7.53	16.5	
19	10,380	75.00	10.9	Upper Marker

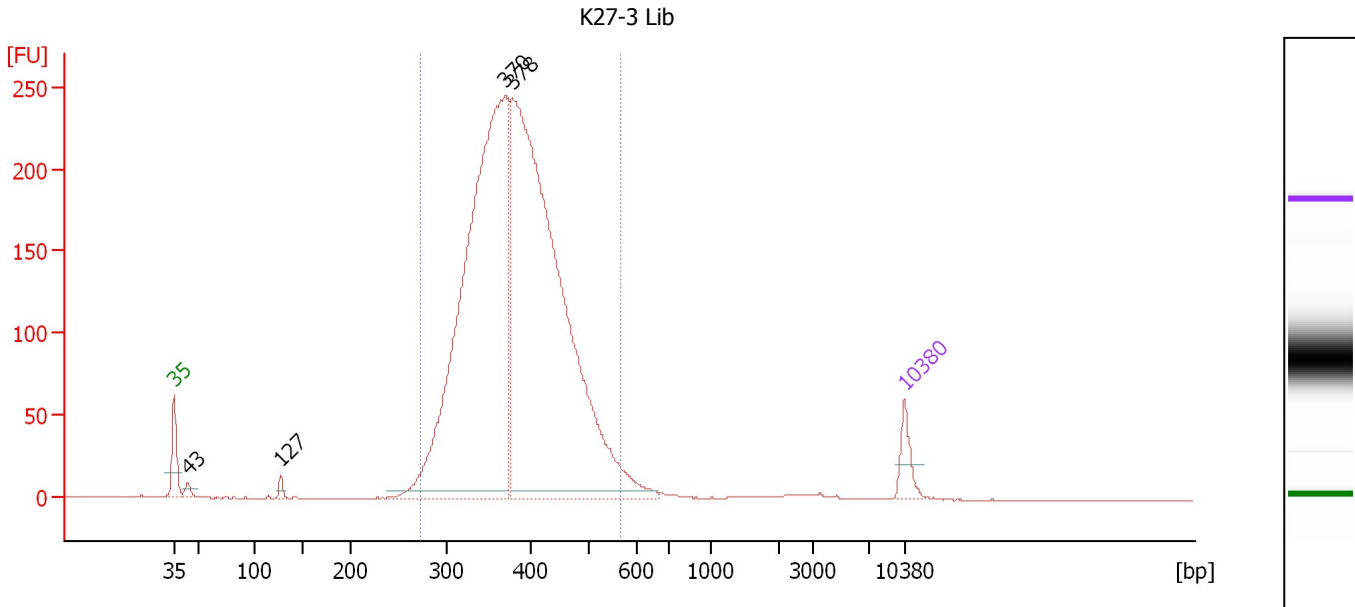
Region table for sample 10 : K27-2 Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
280	810	462	1,662.9	469.22	303.9	85	23.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-09\2012-08-09_002.xad

Created: 8/9/2012 10:55:14 AM
 Modified: 8/9/2012 11:39:19 AM

Electropherogram Summary Continued ...



Overall Results for sample 11 : K27-3 Lib

Number of peaks found: 4 Corr. Area 1: 3,337.3
 Noise: 0.2

Peak table for sample 11 : K27-3 Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	43	40.88	1,428.2	
3	127	30.45	362.9	
4	370	3,217.08	13,172.3	
5	378	3,579.40	14,336.6	
6	10,380	75.00	10.9	Upper Marker

Region table for sample 11 : K27-3 Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
273	564	387	26,940.5	6,715.08	3,337.3	96	14.7	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-09\2012-08-09_002.xad

Created: 8/9/2012 10:55:14 AM
Modified: 8/9/2012 11:39:19 AM

Gel Image

