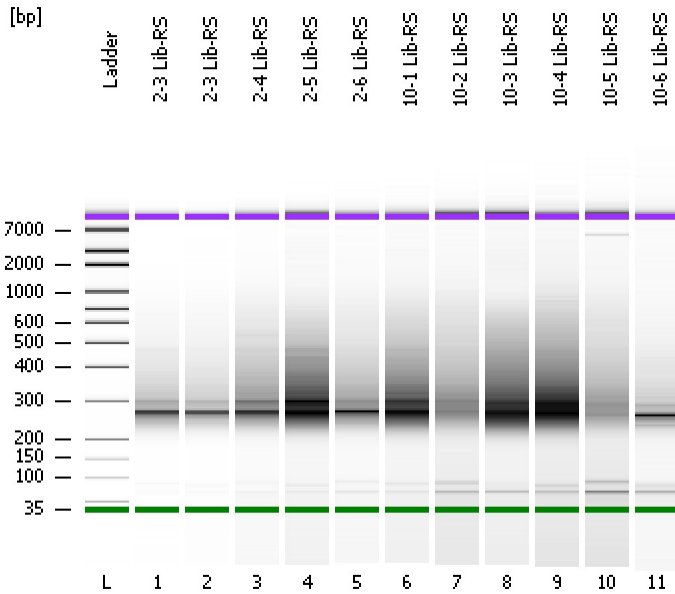


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-04-24\2014-04-24\_003.xad

Created: 4/24/2014 1:50:18 PM  
Modified: 4/25/2014 9:56:16 AM

**Electrophoresis File Run Summary**



Instrument Information:

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

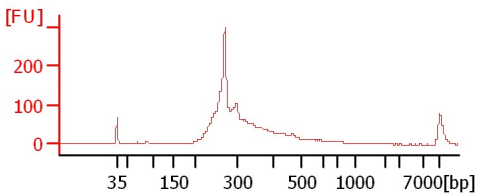
Assay Information:

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

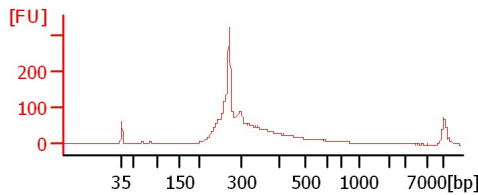
Chip Information:

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

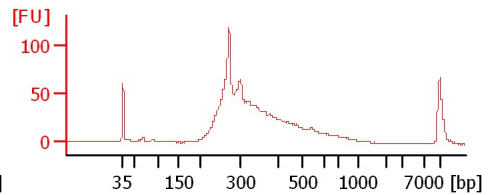
**2-3 Lib-RS**



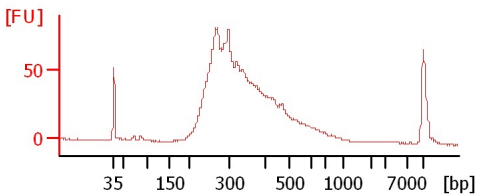
**2-3 Lib-RS**



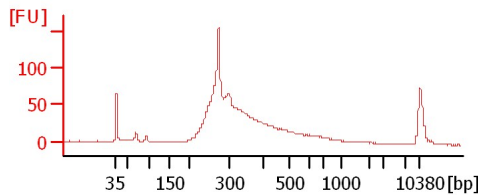
**2-4 Lib-RS**



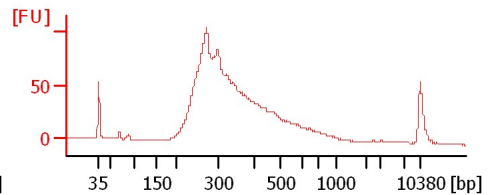
**2-5 Lib-RS**



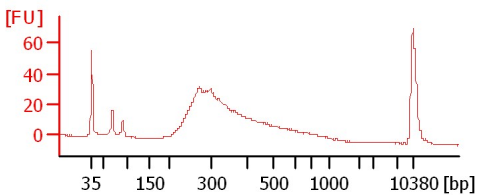
**2-6 Lib-RS**



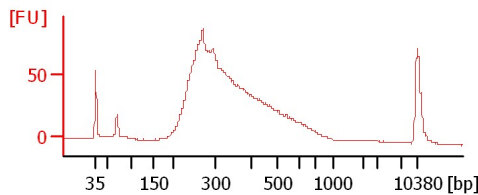
**10-1 Lib-RS**



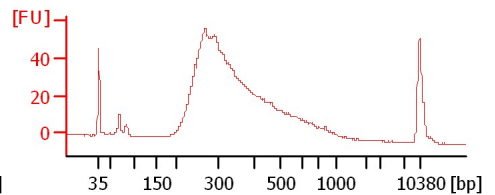
**10-2 Lib-RS**



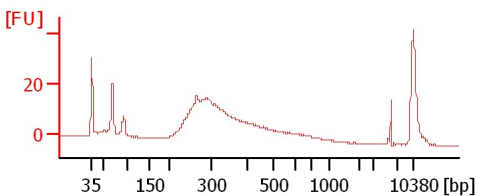
**10-3 Lib-RS**



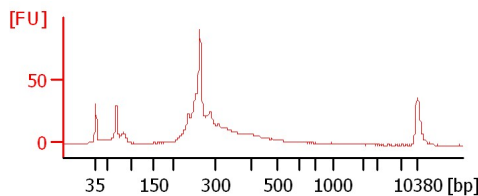
**10-4 Lib-RS**



**10-5 Lib-RS**



**10-6 Lib-RS**



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-04-24\2014-04-24\_003.xad

Created: 4/24/2014 1:50:18 PM  
Modified: 4/25/2014 9:56:16 AM

**Electrophoresis File Run Summary (Chip Summary)**

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
2-3 Lib-RS		<input type="checkbox"/>	✓			
2-3 Lib-RS		<input type="checkbox"/>	✓			
2-4 Lib-RS		<input type="checkbox"/>	✓			
2-5 Lib-RS		<input type="checkbox"/>	✓			
2-6 Lib-RS		<input type="checkbox"/>	✓			
10-1 Lib-RS		<input type="checkbox"/>	✓			
10-2 Lib-RS		<input type="checkbox"/>	✓			
10-3 Lib-RS		<input type="checkbox"/>	✓			
10-4 Lib-RS		<input type="checkbox"/>	✓			
10-5 Lib-RS		<input type="checkbox"/>	✓			
10-6 Lib-RS		<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\2014-04-24\2014-04-24\_003.xad

Created: 4/24/2014 1:50:18 PM  
Modified: 4/25/2014 9:56:16 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

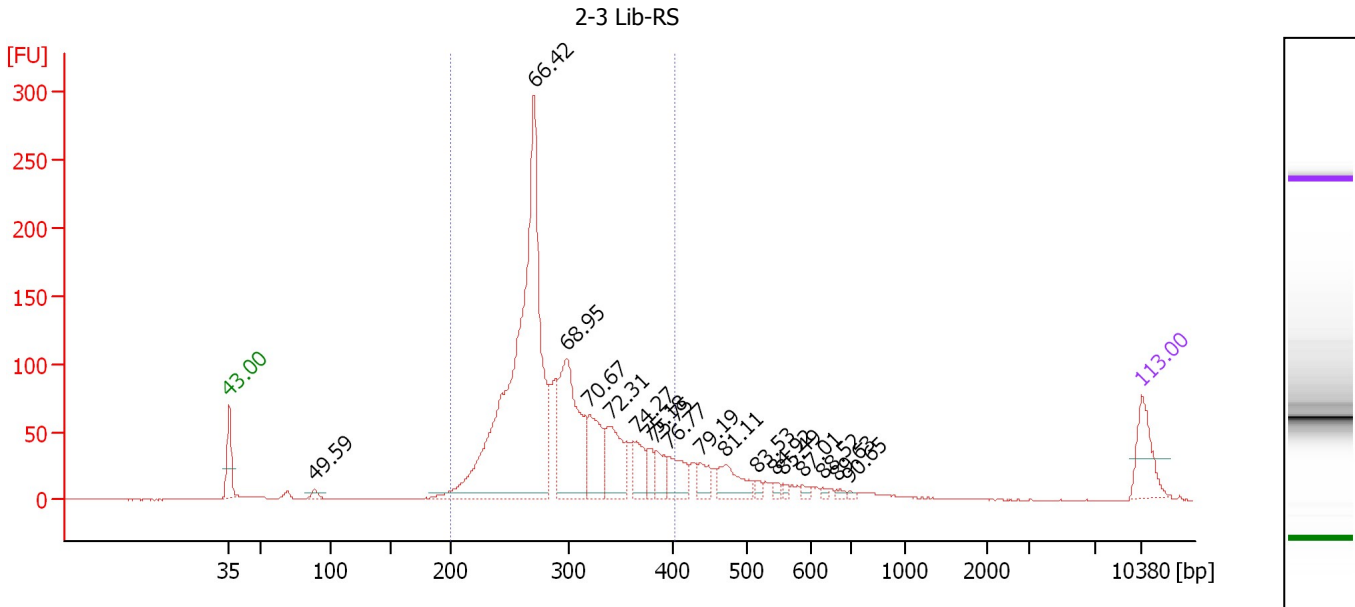
**Ladder**

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\2014-04-24\2014-04-24\_003.xad

Created: 4/24/2014 1:50:18 PM  
 Modified: 4/25/2014 9:56:16 AM

**Electropherogram Summary**



**Overall Results for sample 1 : 2-3 Lib-RS**

Number of peaks found: 18      Corr. Area 1: 1,820.9  
 Noise: 0.2

**Peak table for sample 1 : 2-3 Lib-RS**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	89	15.83	269.0	
3	271	1,418.53	7,938.5	
4	299	389.30	1,974.0	
5	320	145.94	691.0	
6	340	151.57	674.8	
7	365	70.62	293.4	
8	376	39.33	158.5	
9	383	51.61	204.2	
10	396	82.30	315.2	
11	436	44.28	153.7	
12	470	83.18	268.1	
13	515	12.23	36.0	
14	544	10.85	30.2	
15	556	8.54	23.3	
16	588	9.90	25.5	
17	629	7.14	17.2	
18	664	8.11	18.5	
19	696	5.22	11.4	
20	10,380	75.00	10.9	Upper Marker

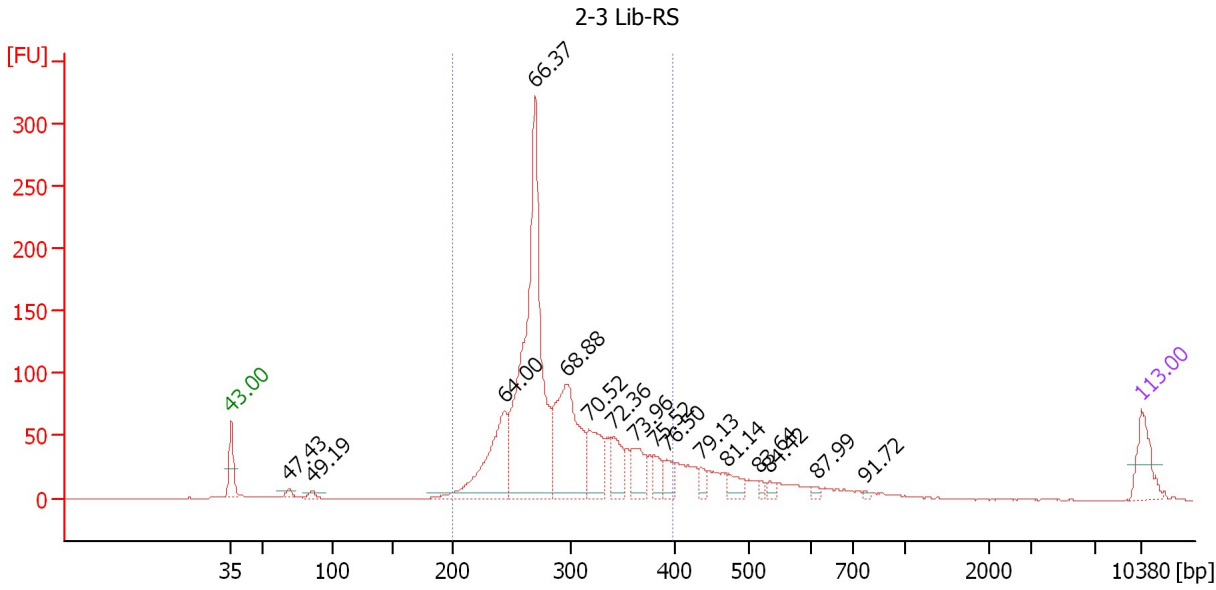
**Region table for sample 1 : 2-3 Lib-RS**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	403	291	13,384.9	2,507.02	1,820.9	84	15.2	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-04-24\2014-04-24\_003.xad

Created: 4/24/2014 1:50:18 PM  
 Modified: 4/25/2014 9:56:16 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : 2-3 Lib-RS**

Number of peaks found: 16      Corr. Area 1: 1,654.4  
 Noise: 0.2

**Peak table for sample 2 : 2-3 Lib-RS**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	69	18.23	398.7	
3	85	19.51	345.8	
4	244	363.26	2,255.9	
5	270	1,146.48	6,426.8	
6	298	453.00	2,303.6	
7	318	164.45	783.4	
8	341	102.88	457.2	
9	361	98.95	415.5	
10	380	55.38	220.7	
11	392	44.98	173.7	
12	435	25.09	87.3	
13	471	44.28	142.6	
14	517	12.28	36.0	
15	534	13.91	39.5	
16	612	10.60	26.2	
17	769	4.83	9.5	
18	10,380	75.00	10.9	Upper Marker

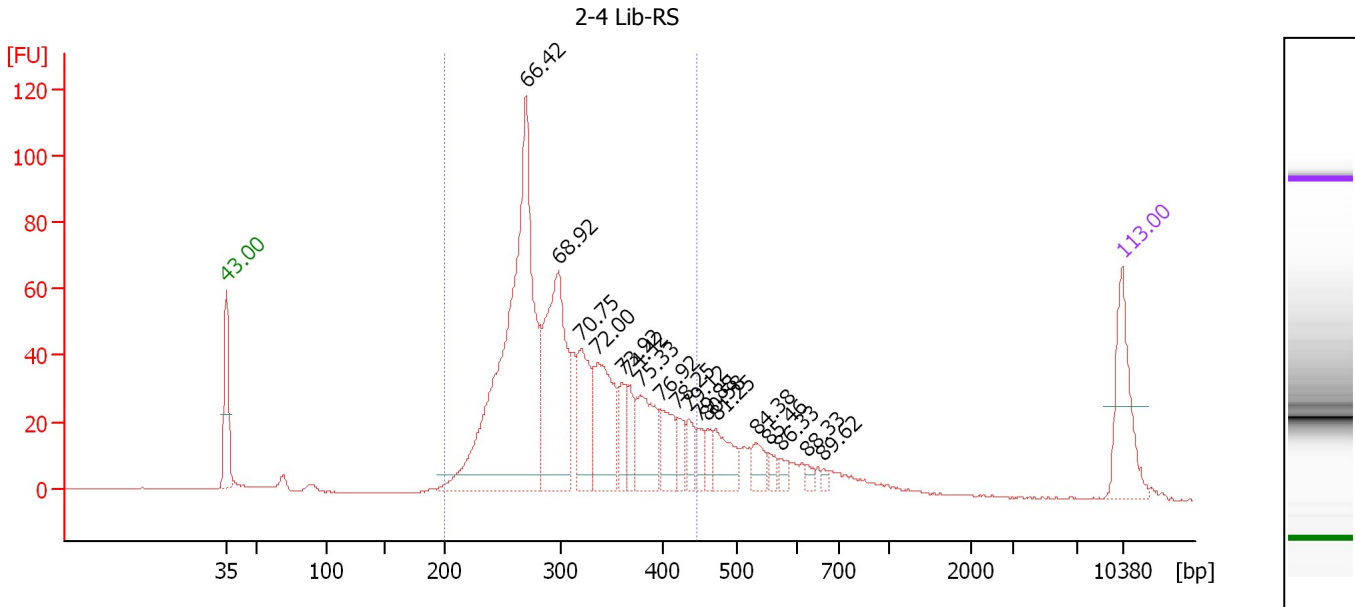
**Region table for sample 2 : 2-3 Lib-RS**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	399	291	13,724.3	2,572.83	1,654.4	81	14.9	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-04-24\2014-04-24\_003.xad

Created: 4/24/2014 1:50:18 PM  
 Modified: 4/25/2014 9:56:16 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : 2-4 Lib-RS**

Number of peaks found: 18      Corr. Area 1: 1,092.2  
 Noise: 0.1

**Peak table for sample 3 : 2-4 Lib-RS**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	271	691.18	3,867.8	
3	298	285.34	1,448.8	
4	321	108.66	513.0	
5	336	144.65	651.4	
6	360	41.67	175.3	
7	366	34.01	140.6	
8	378	92.79	372.1	
9	397	52.64	200.7	
10	420	26.83	96.8	
11	435	26.73	93.0	
12	448	18.53	62.6	
13	461	20.89	68.7	
14	473	50.63	162.3	
15	533	23.60	67.1	
16	555	10.78	29.4	
17	574	10.82	28.6	
18	623	7.78	18.9	
19	664	5.99	13.7	
20	10,380	75.00	10.9	Upper Marker

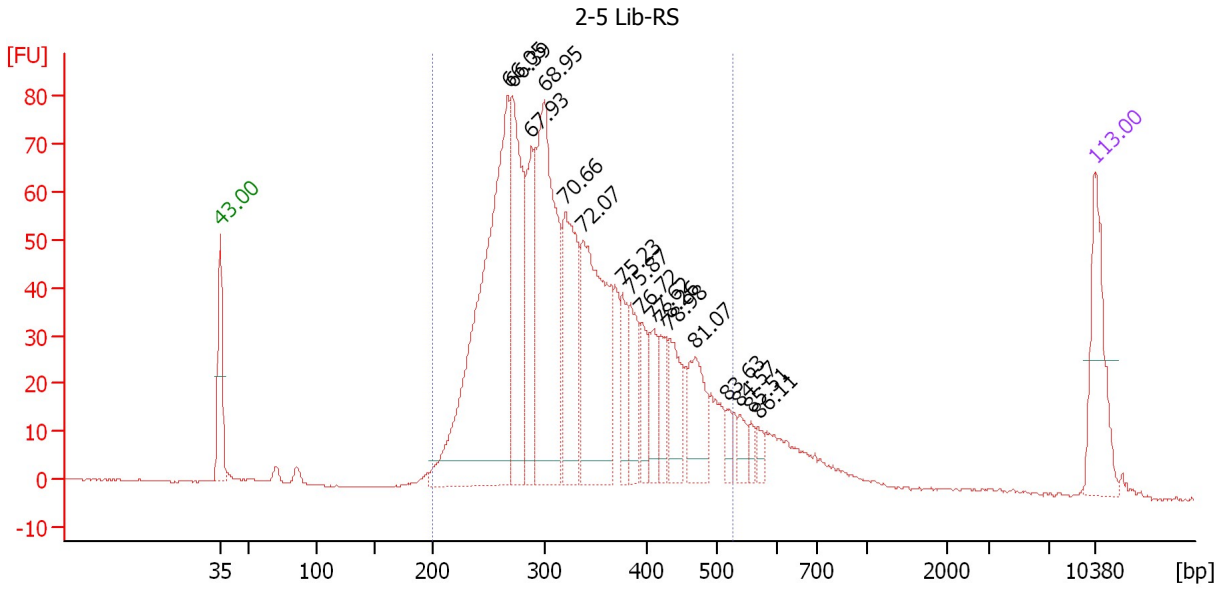
**Region table for sample 3 : 2-4 Lib-RS**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	447	311	8,148.7	1,603.74	1,092.2	81	17.9	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-04-24\2014-04-24\_003.xad

Created: 4/24/2014 1:50:18 PM  
 Modified: 4/25/2014 9:56:16 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : 2-5 Lib-RS**

Number of peaks found: 17                      Corr. Area 1: 1,457.8  
 Noise: 0.1

**Peak table for sample 4 : 2-5 Lib-RS**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	267	554.98	3,153.0	
3	270	213.08	1,193.7	
4	287	113.11	596.2	
5	299	339.34	1,720.8	
6	320	170.41	807.3	
7	337	257.40	1,156.3	
8	376	45.16	181.7	
9	384	64.91	255.8	
10	395	44.48	170.6	
11	409	42.42	157.3	
12	420	36.05	130.1	
13	433	57.45	201.1	
14	470	69.24	223.5	
15	517	14.07	41.2	
16	537	17.41	49.1	
17	557	10.56	28.8	
18	569	10.95	29.2	
19	10,380	75.00	10.9	Upper Marker

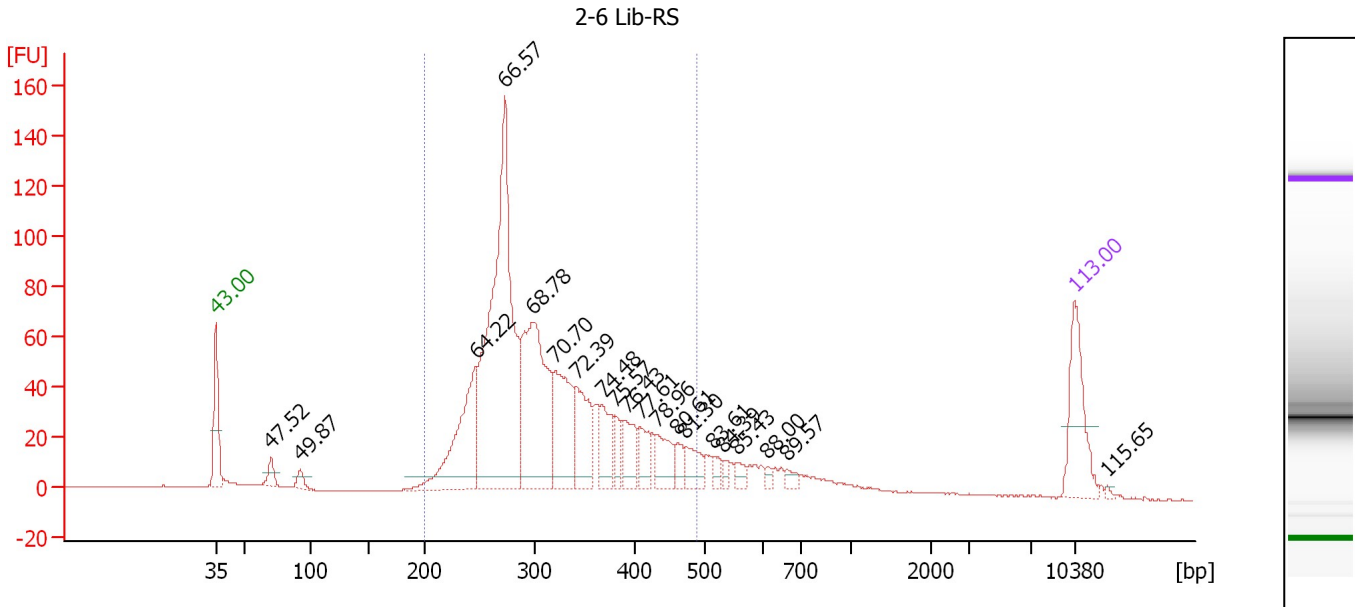
**Region table for sample 4 : 2-5 Lib-RS**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	525	330	10,874.6	2,223.34	1,457.8	90	22.1	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-04-24\2014-04-24\_003.xad

Created: 4/24/2014 1:50:18 PM  
 Modified: 4/25/2014 9:56:16 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : 2-6 Lib-RS**

Number of peaks found: 20      Corr. Area 1: 1,338.5  
 Noise: 0.1

**Peak table for sample 5 : 2-6 Lib-RS**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	70	21.20	458.0	
3	92	15.81	261.3	
4	246	194.77	1,197.5	
5	272	580.27	3,227.6	
6	297	293.72	1,498.8	
7	320	139.01	657.6	
8	341	94.46	419.3	
9	367	59.20	244.2	
10	381	24.96	99.4	
11	391	48.28	186.8	
12	409	33.32	123.5	
13	432	42.49	148.9	
14	461	20.70	68.0	
15	474	33.32	106.6	
16	517	12.15	35.6	
17	533	8.14	23.1	
18	555	11.19	30.5	
19	613	5.60	13.8	
20	662	8.98	20.6	
21	10,380	75.00	10.9	Upper Marker
22	12,899	0.00	0.0	

**Region table for sample 5 : 2-6 Lib-RS**

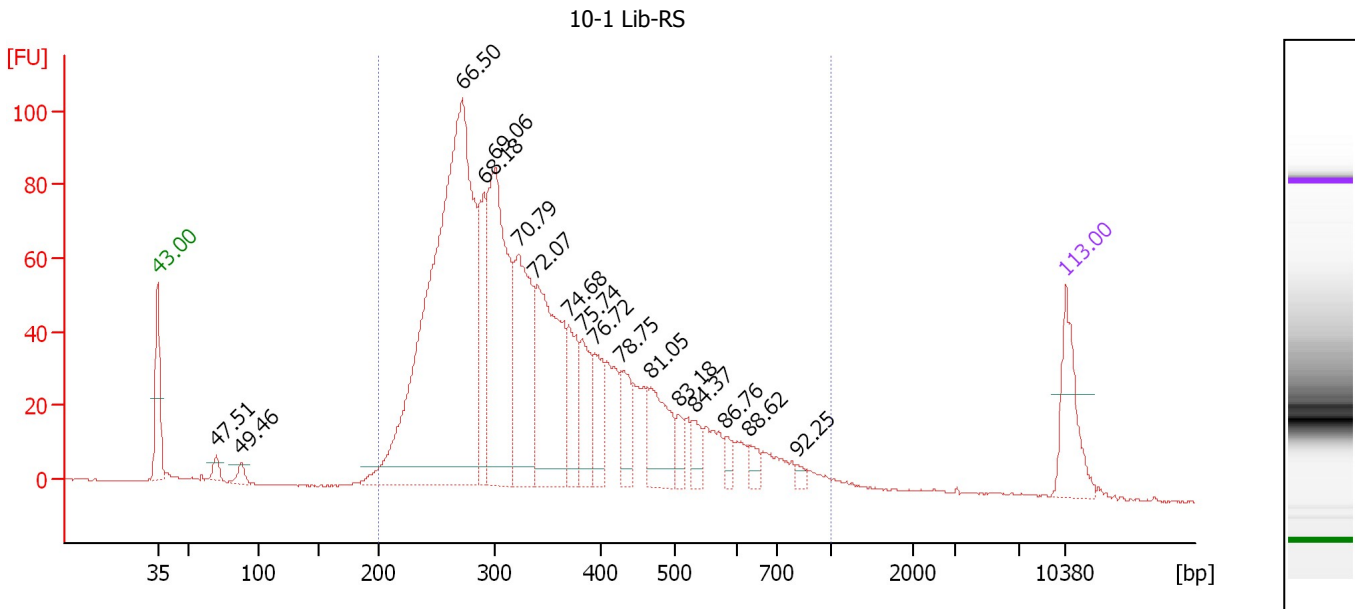
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	490	315	8,442.6	1,668.17	1,338.5	84	20.4	Blue



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-04-24\2014-04-24\_003.xad

Created: 4/24/2014 1:50:18 PM  
 Modified: 4/25/2014 9:56:16 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : 10-1 Lib-RS**

Number of peaks found: 17      Corr. Area 1: 1,797.3  
 Noise: 0.1

**Peak table for sample 6 : 10-1 Lib-RS**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	70	18.60	402.3	
3	88	17.58	302.9	
4	272	1,167.78	6,513.9	
5	290	133.28	695.8	
6	300	397.87	2,009.3	
7	321	247.49	1,166.6	
8	337	302.45	1,358.4	
9	370	88.41	362.3	
10	383	82.41	326.1	
11	395	74.11	284.3	
12	429	56.41	199.4	
13	469	99.06	319.9	
14	508	26.61	79.4	
15	533	30.79	87.6	
16	583	17.69	46.0	
17	632	18.29	43.8	
18	808	8.14	15.3	
19	10,380	75.00	10.9	Upper Marker

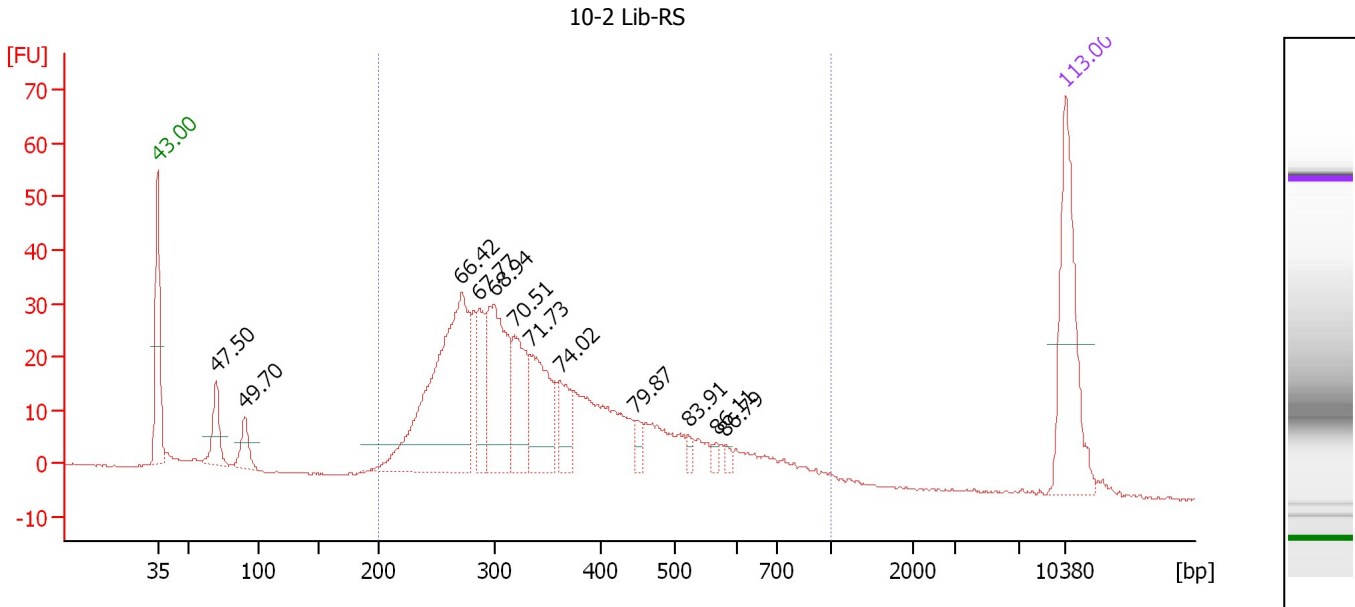
**Region table for sample 6 : 10-1 Lib-RS**

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	359	14,991.4	3,138.85	1,797.3	96	34.8	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-04-24\2014-04-24\_003.xad

Created: 4/24/2014 1:50:18 PM  
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**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : 10-2 Lib-RS**

Number of peaks found: 12      Corr. Area 1: 683.4  
 Noise: 0.2

**Peak table for sample 7 : 10-2 Lib-RS**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	70	35.83	776.9	
3	90	25.11	422.2	
4	271	231.23	1,293.6	
5	286	43.69	231.7	
6	299	107.98	547.8	
7	318	62.15	296.1	
8	333	67.06	305.0	
9	362	30.51	127.9	
10	448	9.03	30.5	
11	523	5.44	15.8	
12	569	4.35	11.6	
13	583	3.69	9.6	
14	10,380	75.00	10.9	Upper Marker

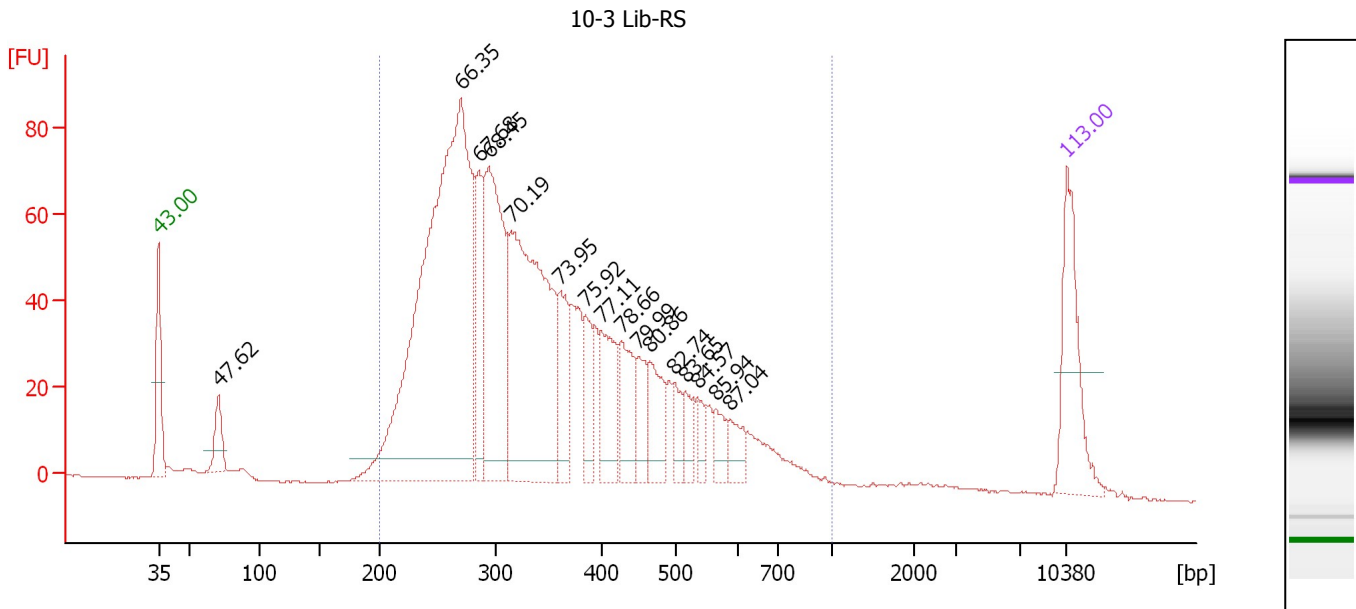
**Region table for sample 7 : 10-2 Lib-RS**

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	373	4,003.8	861.61	683.4	90	36.2	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-04-24\2014-04-24\_003.xad

Created: 4/24/2014 1:50:18 PM  
 Modified: 4/25/2014 9:56:16 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : 10-3 Lib-RS**

Number of peaks found: 16      Corr. Area 1: 1,694.8  
 Noise: 0.1

**Peak table for sample 8 : 10-3 Lib-RS**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	71	38.78	826.9	
3	270	742.91	4,168.9	
4	285	81.36	433.0	
5	293	229.65	1,186.4	
6	314	351.19	1,694.2	
7	361	63.18	265.4	
8	385	41.71	164.1	
9	400	69.94	265.0	
10	427	54.88	194.7	
11	450	38.63	129.9	
12	466	48.82	158.8	
13	499	23.04	70.0	
14	518	21.99	64.4	
15	537	15.48	43.7	
16	566	20.76	55.6	
17	588	23.41	60.3	
18	10,380	75.00	10.9	Upper Marker

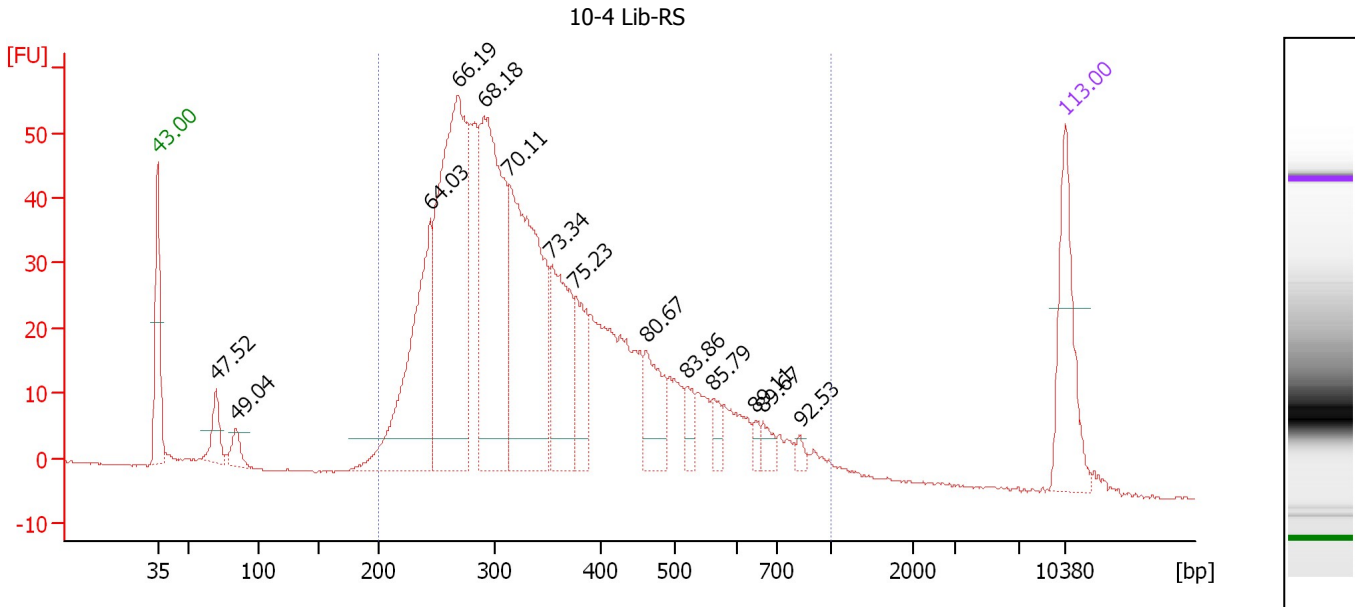
**Region table for sample 8 : 10-3 Lib-RS**

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	359	9,966.0	2,082.95	1,694.8	95	33.9	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-04-24\2014-04-24\_003.xad

Created: 4/24/2014 1:50:18 PM  
 Modified: 4/25/2014 9:56:16 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : 10-4 Lib-RS**

Number of peaks found: 14      Corr. Area 1: 1,160.6  
 Noise: 0.1

**Peak table for sample 9 : 10-4 Lib-RS**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	70	38.21	826.0	
3	84	22.75	409.9	
4	244	242.26	1,502.3	
5	268	404.02	2,281.6	
6	290	319.74	1,669.2	
7	313	312.01	1,510.0	
8	353	129.27	554.6	
9	377	64.04	257.7	
10	462	59.98	196.5	
11	522	17.89	51.9	
12	562	15.27	41.2	
13	648	7.82	18.3	
14	665	12.79	29.1	
15	829	6.23	11.4	
16	10,380	75.00	10.9	Upper Marker

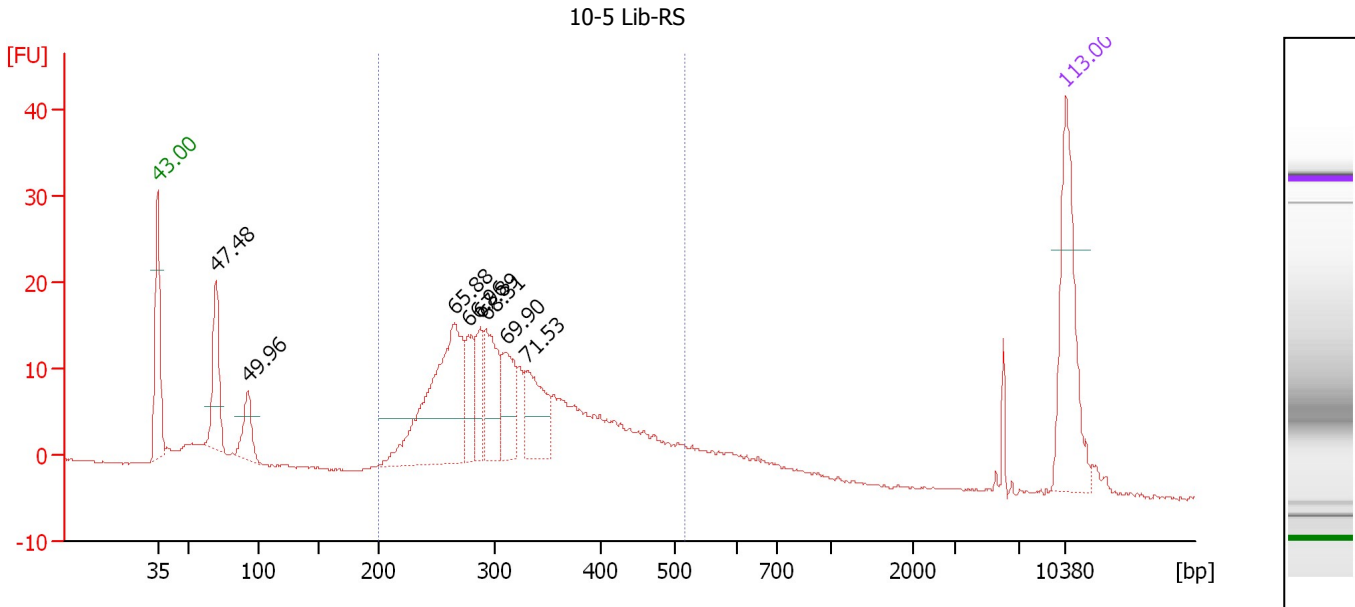
**Region table for sample 9 : 10-4 Lib-RS**

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	366	9,874.2	2,088.50	1,160.5	95	36.0	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-04-24\2014-04-24\_003.xad

Created: 4/24/2014 1:50:18 PM  
 Modified: 4/25/2014 9:56:16 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : 10-5 Lib-RS**

Number of peaks found: 8      Corr. Area 1: 291.0  
 Noise: 0.1

**Peak table for sample 10 : 10-5 Lib-RS**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	70	69.32	1,505.5	
3	93	35.22	576.9	
4	265	174.04	995.7	
5	277	35.23	192.9	
6	287	30.96	163.4	
7	292	58.78	305.3	
8	310	46.21	225.6	
9	331	52.50	240.6	
10	10,380	75.00	10.9	Upper Marker

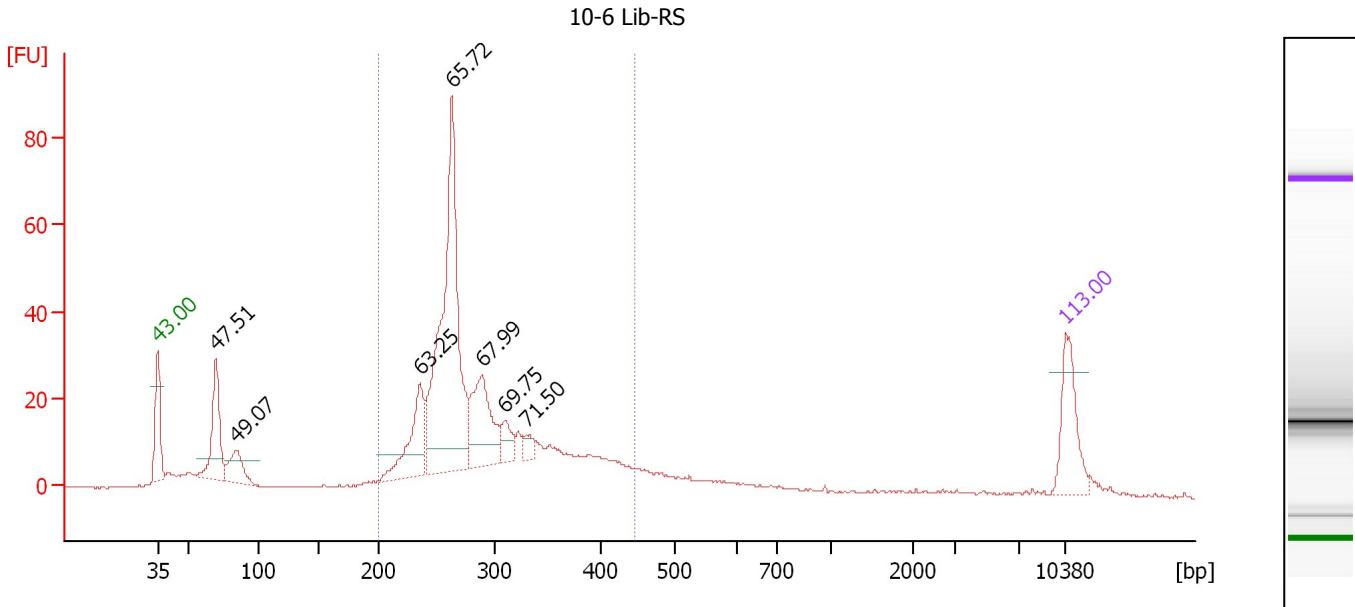
**Region table for sample 10 : 10-5 Lib-RS**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	516	327	3,206.6	651.66	291.0	74	21.6	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-04-24\2014-04-24\_003.xad

Created: 4/24/2014 1:50:18 PM  
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**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : 10-6 Lib-RS**

Number of peaks found: 7                      Corr. Area 1: 456.3  
 Noise: 0.1

**Peak table for sample 11 : 10-6 Lib-RS**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	70	143.15	3,099.7	
3	84	67.48	1,212.1	
4	236	128.72	827.3	
5	263	528.34	3,043.6	
6	288	149.58	786.4	
7	309	34.53	169.6	
8	330	16.33	74.9	
9	10,380	75.00	10.9	Upper Marker

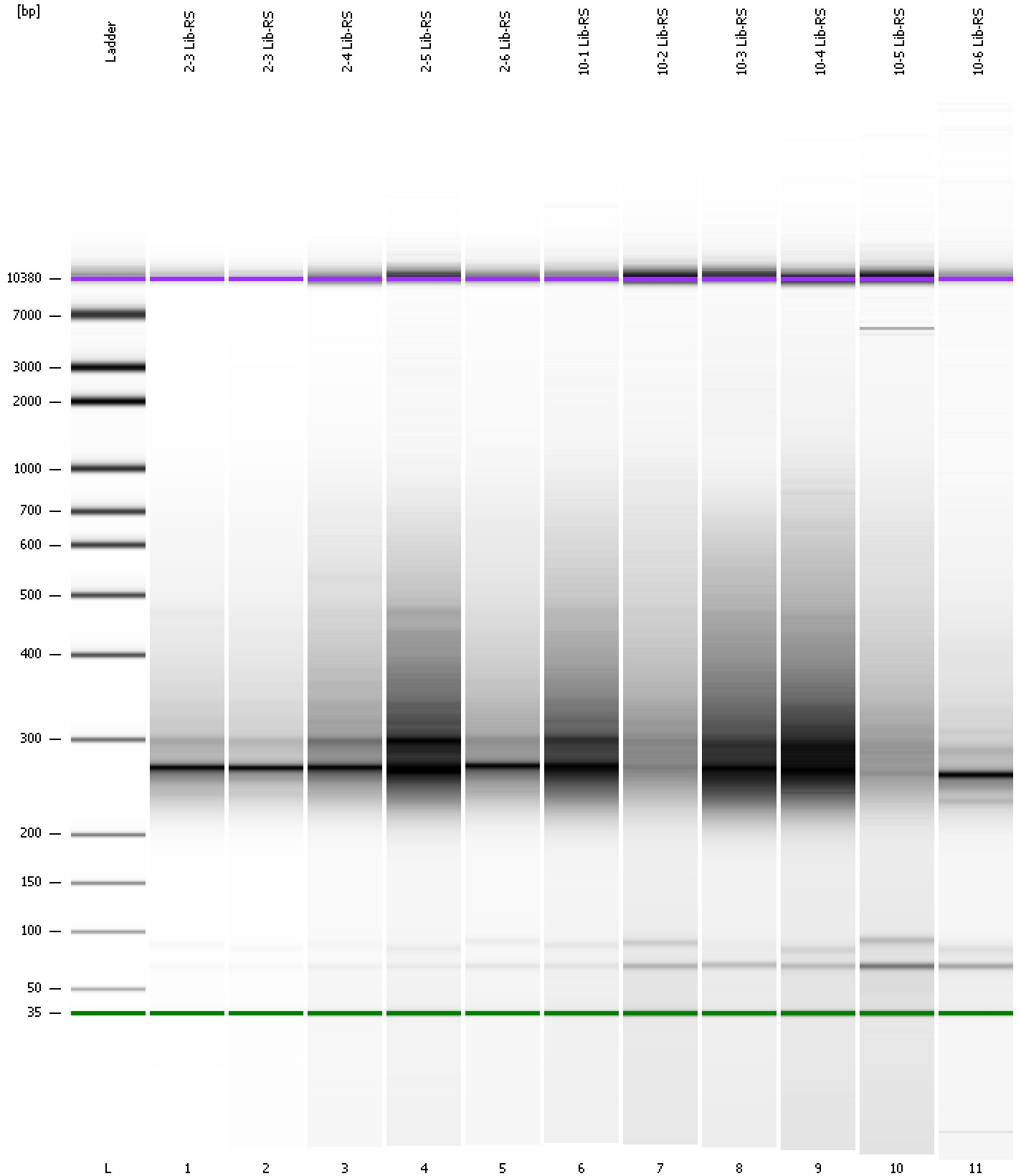
**Region table for sample 11 : 10-6 Lib-RS**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	446	290	6,935.2	1,279.94	456.3	78	18.0	Blue

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-04-24\2014-04-24\_003.xad

Created: 4/24/2014 1:50:18 PM  
Modified: 4/25/2014 9:56:16 AM

**Gel Image**



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-04-24\2014-04-24\_003.xad

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**Curves**

**Standard Curve**

