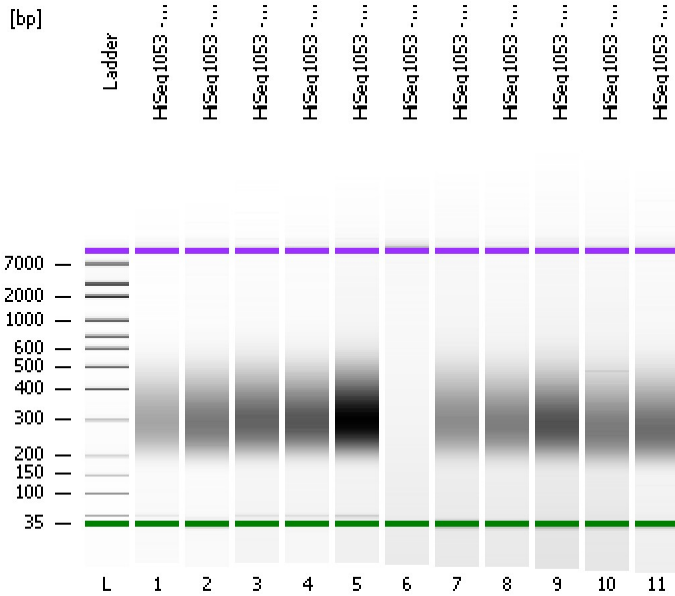


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2017-09-14\2017-09-14\_002.xad

Created: 9/14/2017 12:26:37 PM  
Modified: 9/14/2017 1:07:36 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

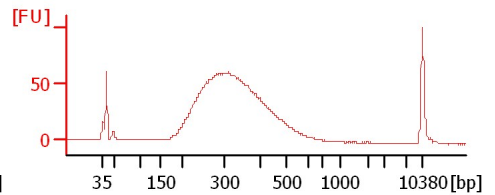
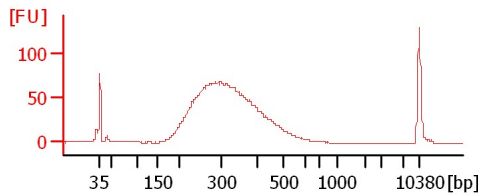
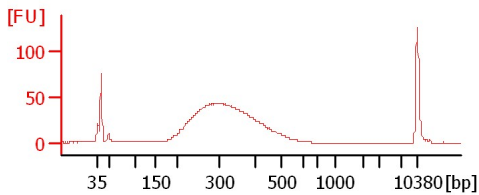
Chip Information:

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

HiSeq1053 - 12 library

HiSeq1053 - 13 library

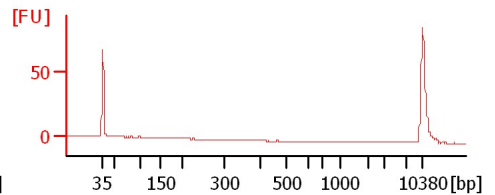
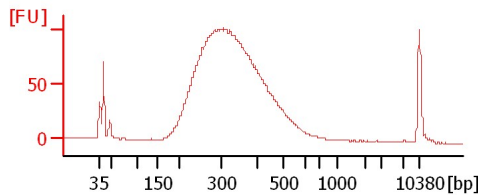
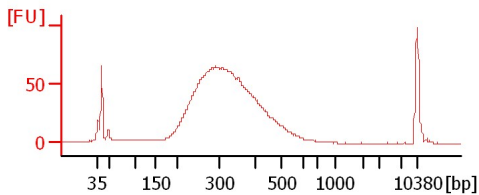
HiSeq1053 - 14 library



HiSeq1053 - 15 library

HiSeq1053 - 16 library

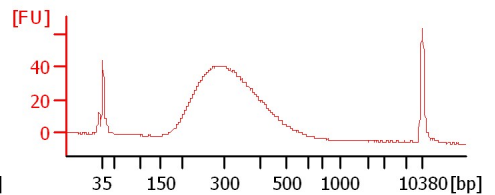
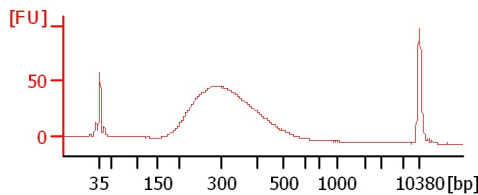
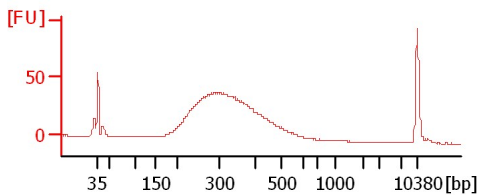
HiSeq1053 - 17 library



HiSeq1053 - 18 library

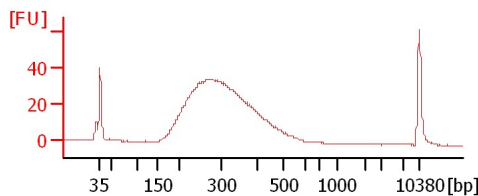
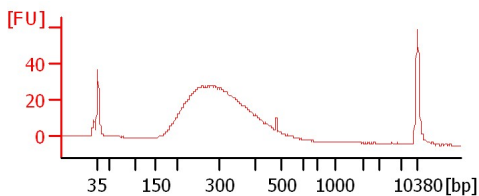
HiSeq1053 - 19 library

HiSeq1053 - 20 library



HiSeq1053 - 21 library

HiSeq1053 - 22 library



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-09-14\2017-09-14\_002.xad

Created: 9/14/2017 12:26:37 PM  
 Modified: 9/14/2017 1:07:36 PM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
HiSeq1053 - 12 library		<input type="checkbox"/>	✓			
HiSeq1053 - 13 library		<input type="checkbox"/>	✓			
HiSeq1053 - 14 library		<input type="checkbox"/>	✓			
HiSeq1053 - 15 library		<input type="checkbox"/>	✓			
HiSeq1053 - 16 library		<input type="checkbox"/>	✓			
HiSeq1053 - 17 library		<input type="checkbox"/>	✓			
HiSeq1053 - 18 library		<input type="checkbox"/>	✓			
HiSeq1053 - 19 library		<input type="checkbox"/>	✓			
HiSeq1053 - 20 library		<input type="checkbox"/>	✓			
HiSeq1053 -21 library		<input type="checkbox"/>	✓			
HiSeq1053 - 22 library		<input type="checkbox"/>	✓			
Ladder		<input type="checkbox"/>	✓			

**Chip Lot #**

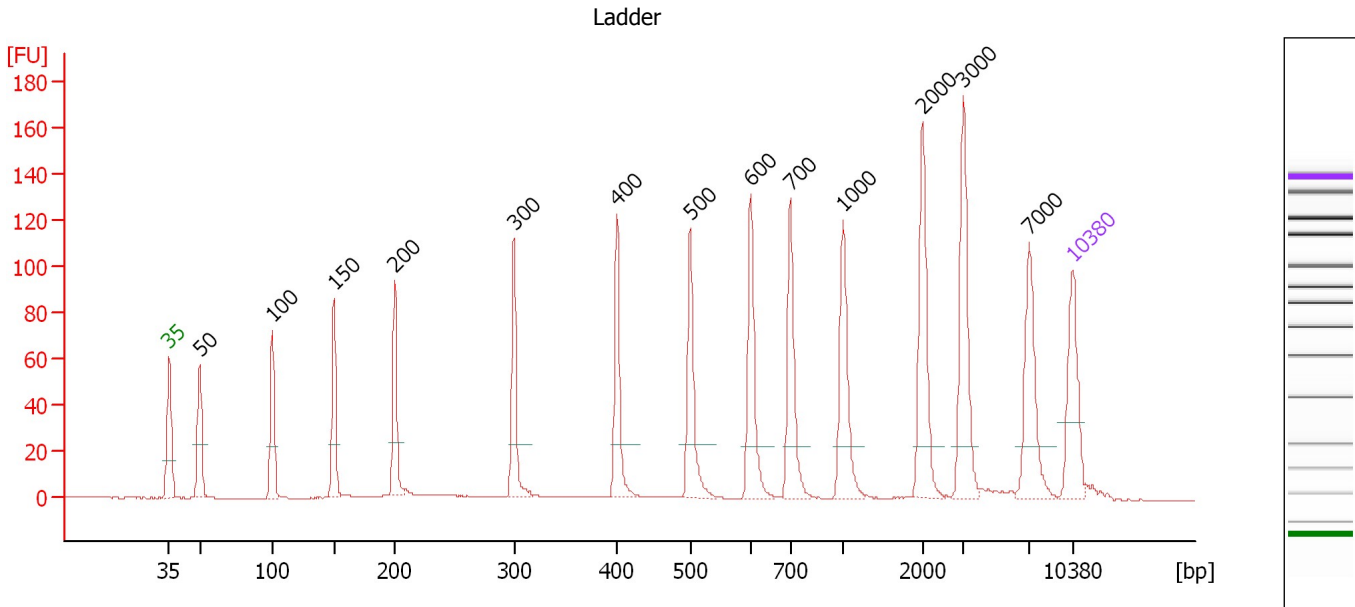
**Reagent Kit Lot #**

**Chip Comments :**

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-09-14\2017-09-14\_002.xad

Created: 9/14/2017 12:26:37 PM  
 Modified: 9/14/2017 1:07:36 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.1

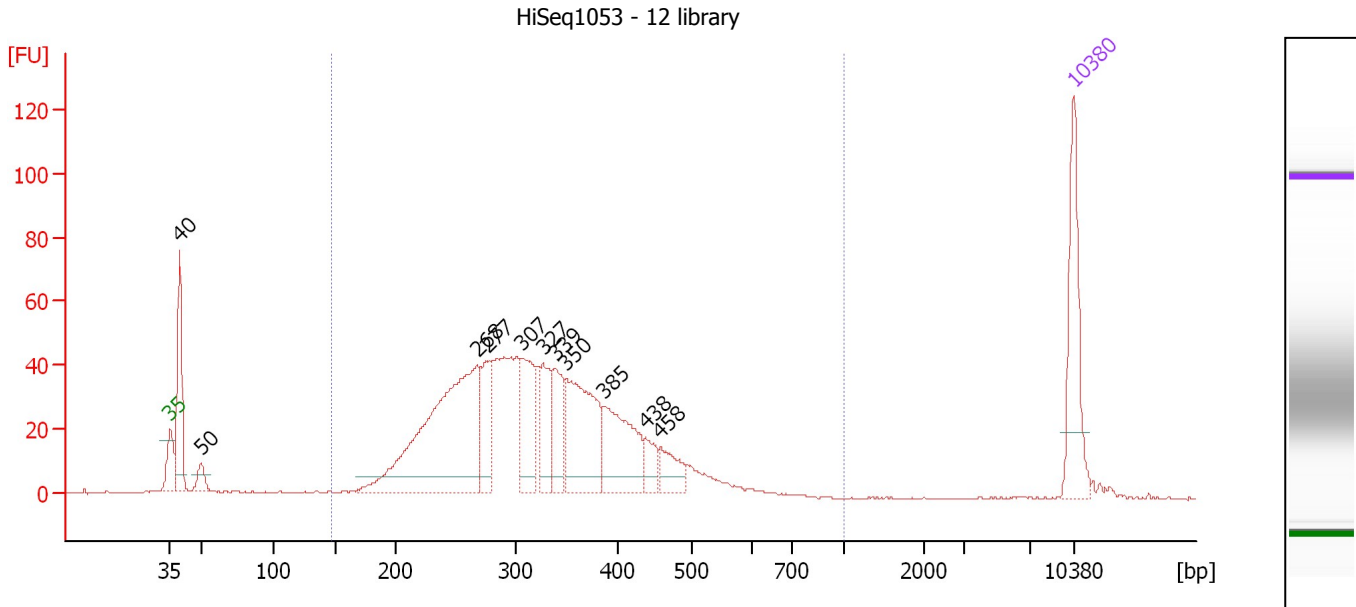
**Peak table for Ladder**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	50	150.00	4,545.5	Ladder Peak	45.35
3	100	150.00	2,272.7	Ladder Peak	51.00
4	150	150.00	1,515.2	Ladder Peak	55.75
5	200	150.00	1,136.4	Ladder Peak	60.50
6	300	150.00	757.6	Ladder Peak	69.72
7	400	150.00	568.2	Ladder Peak	77.68
8	500	150.00	454.5	Ladder Peak	83.38
9	600	150.00	378.8	Ladder Peak	88.08
10	700	150.00	324.7	Ladder Peak	91.11
11	1,000	150.00	227.3	Ladder Peak	95.23
12	2,000	150.00	113.6	Ladder Peak	101.38
13	3,000	150.00	75.8	Ladder Peak	104.54
14	7,000	150.00	32.5	Ladder Peak	109.61
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-09-14\2017-09-14\_002.xad

Created: 9/14/2017 12:26:37 PM  
 Modified: 9/14/2017 1:07:36 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : HiSeq1053 - 12 library**

Number of peaks found: 11                      Corr. Area 1: 1,087.2  
 Noise: 0.2

**Peak table for sample 1 : HiSeq1053 - 12 library**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	40	125.75	4,809.2		43.72
3	50	20.55	622.6		45.35
4	268	355.72	2,012.5		66.76
5	277	61.98	338.9		67.62
6	307	87.30	430.8		70.29
7	327	58.83	272.6		71.87
8	339	60.28	269.5		72.82
9	350	140.77	610.0		73.68
10	385	103.17	405.5		76.53
11	438	23.98	83.0		79.83
12	458	31.04	102.6		81.01
13	10,380	75.00	10.9	Upper Marker	113.00

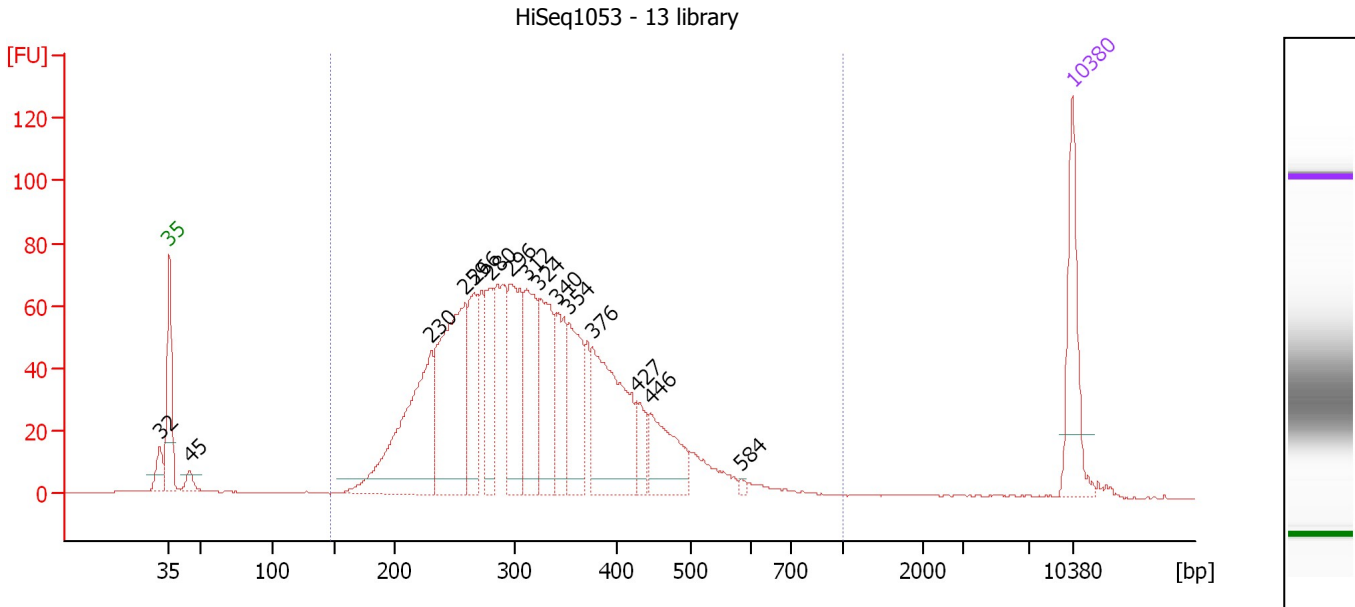
**Region table for sample 1 : HiSeq1053 - 12 library**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
148	1,000	329	1,087.2	6,314.6	1,250.82	88	26.9

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-09-14\2017-09-14\_002.xad

Created: 9/14/2017 12:26:37 PM  
 Modified: 9/14/2017 1:07:36 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : HiSeq1053 - 13 library**

Number of peaks found: 15                      Corr. Area 1: 1,678.4  
 Noise: 0.2

**Peak table for sample 2 : HiSeq1053 - 13 library**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	32	0.00	0.0		42.26
2	35	125.00	5,411.3	Lower Marker	43.00
3	45	16.84	566.9		44.57
4	230	263.72	1,734.4		63.30
5	259	271.19	1,587.1		65.93
6	266	94.14	535.4		66.63
7	280	83.46	451.0		67.92
8	296	139.95	715.4		69.39
9	312	120.71	586.0		70.69
10	324	129.73	606.2		71.66
11	340	90.95	404.7		72.95
12	354	106.30	455.2		74.01
13	376	195.92	788.6		75.81
14	427	33.29	118.1		79.22
15	446	85.90	291.5		80.33
16	584	3.20	8.3		87.34
17	10,380	75.00	10.9	Upper Marker	113.00

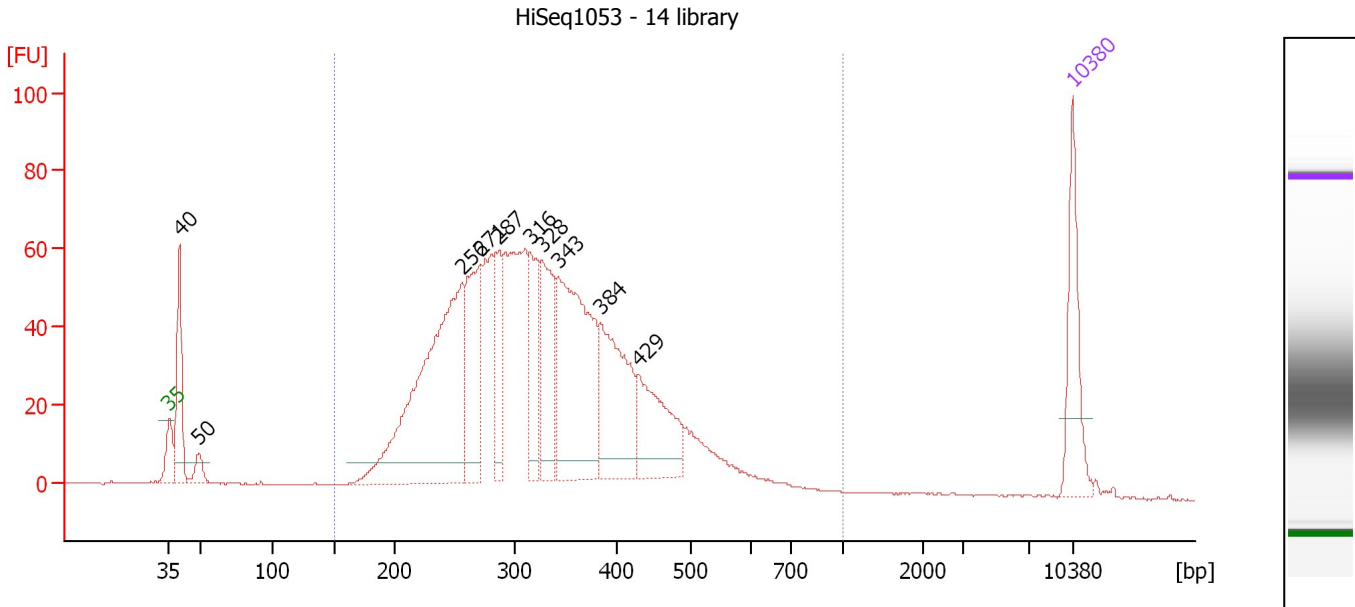
**Region table for sample 2 : HiSeq1053 - 13 library**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
147	1,000	328	1,678.4	9,896.6	1,945.82	96	28.4

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-09-14\2017-09-14\_002.xad

Created: 9/14/2017 12:26:37 PM  
 Modified: 9/14/2017 1:07:36 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : HiSeq1053 - 14 library**

Number of peaks found: 10                      Corr. Area 1: 1,538.1  
 Noise: 0.2

**Peak table for sample 3 : HiSeq1053 - 14 library**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	40	132.61	5,021.2		43.79
3	50	25.21	767.8		45.31
4	256	487.88	2,883.2		65.70
5	271	166.92	931.8		67.09
6	287	87.69	463.0		68.52
7	316	102.89	493.8		70.97
8	328	131.31	606.8		71.94
9	343	292.57	1,292.5		73.15
10	384	176.12	695.5		76.38
11	429	123.96	437.7		79.34
12	10,380	75.00	10.9	Upper Marker	113.00

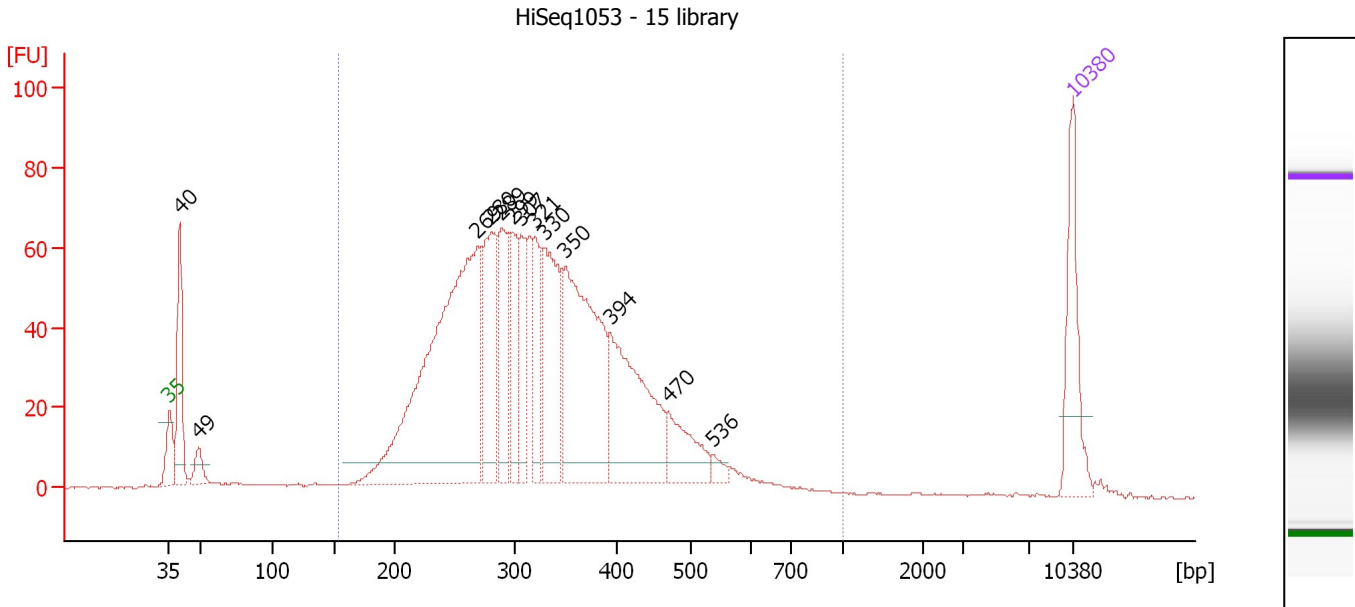
**Region table for sample 3 : HiSeq1053 - 14 library**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
151	1,000	334	1,538.1	11,164.7	2,239.31	93	27.8

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-09-14\2017-09-14\_002.xad

Created: 9/14/2017 12:26:37 PM  
 Modified: 9/14/2017 1:07:36 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : HiSeq1053 - 15 library**

Number of peaks found: 13                      Corr. Area 1: 1,582.4  
 Noise: 0.1

**Peak table for sample 4 : HiSeq1053 - 15 library**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	40	134.84	5,097.6		43.80
3	49	27.98	859.1		45.25
4	269	606.43	3,413.7		66.88
5	280	151.98	821.5		67.91
6	289	120.46	630.5		68.75
7	299	79.71	404.4		69.60
8	307	83.21	411.2		70.25
9	321	73.07	345.2		71.37
10	330	158.79	730.0		72.08
11	350	303.01	1,311.2		73.72
12	394	206.36	794.2		77.18
13	470	66.51	214.4		81.68
14	536	10.80	30.5		85.09
15	10,380	75.00	10.9	Upper Marker	113.00

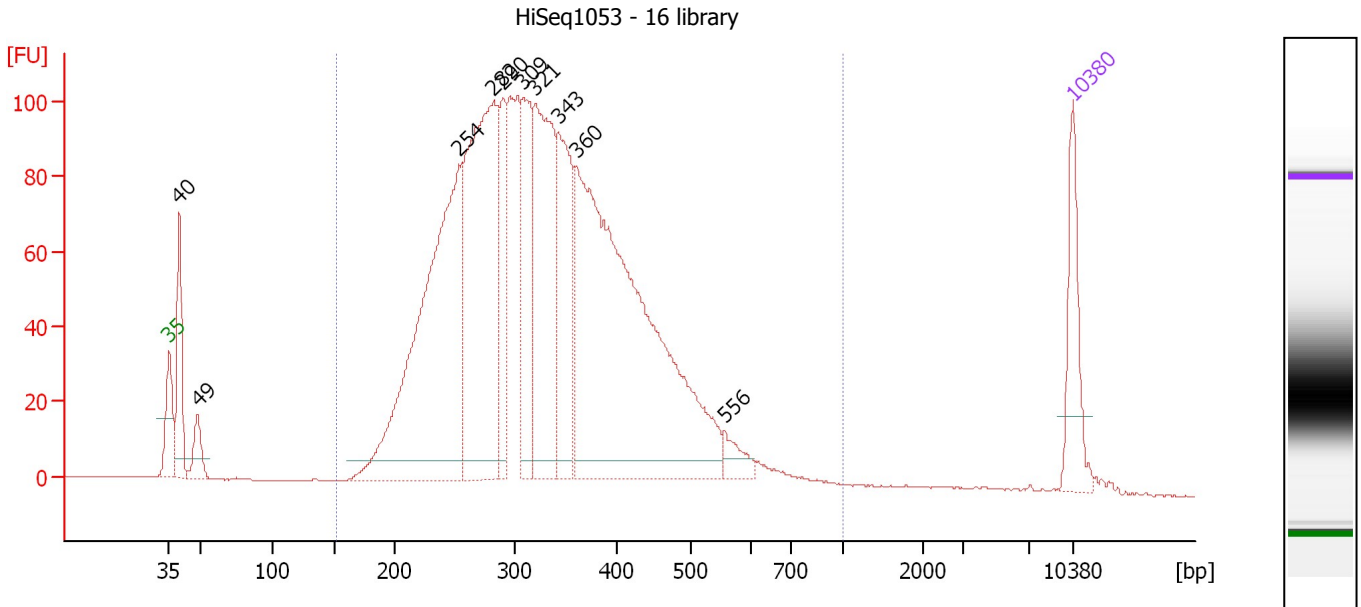
**Region table for sample 4 : HiSeq1053 - 15 library**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
154	1,000	332	1,582.4	10,773.7	2,154.78	92	27.5

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-09-14\2017-09-14\_002.xad

Created: 9/14/2017 12:26:37 PM  
 Modified: 9/14/2017 1:07:36 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : HiSeq1053 - 16 library**

Number of peaks found: 10                      Corr. Area 1: 2,572.9  
 Noise: 0.2

**Peak table for sample 5 : HiSeq1053 - 16 library**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	40	136.65	5,196.3		43.76
3	49	49.27	1,525.8		45.18
4	254	689.00	4,116.0		65.45
5	282	559.22	2,999.9		68.11
6	290	129.12	674.3		68.82
7	309	170.94	838.6		70.43
8	321	334.91	1,581.8		71.38
9	343	215.69	953.2		73.14
10	360	916.03	3,853.7		74.51
11	556	28.19	76.9		86.00
12	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 5 : HiSeq1053 - 16 library**

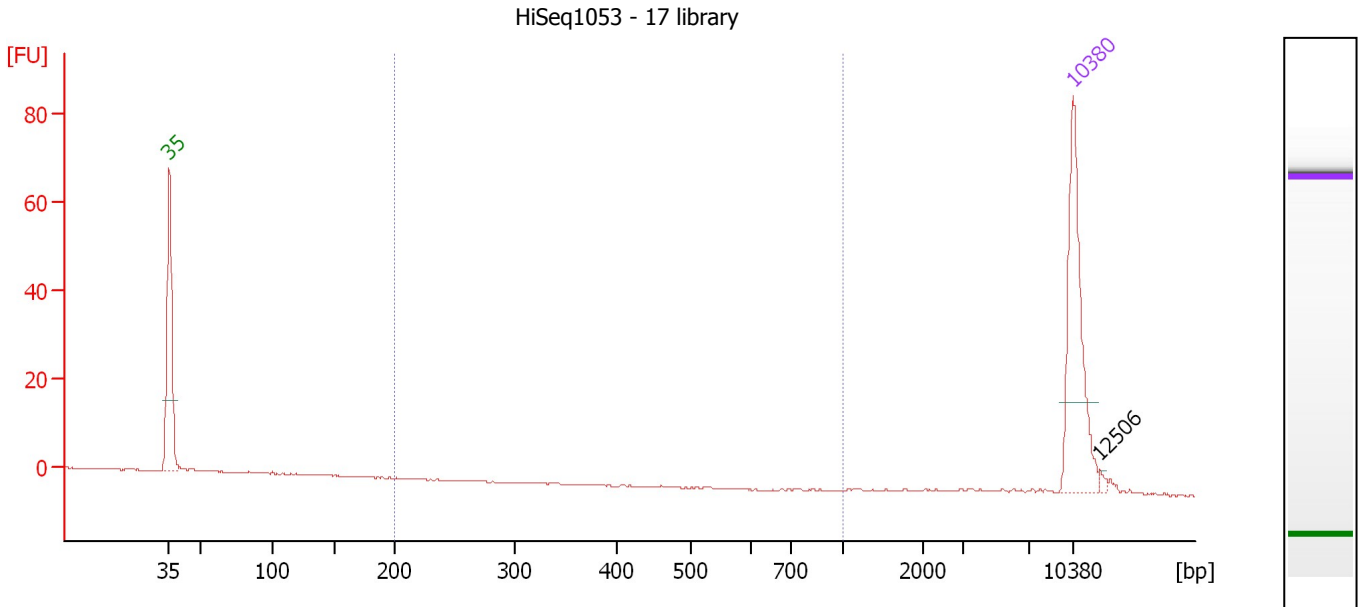
From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
152	1,000	339	2,572.9	16,709.0	3,393.61	95	28.6



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-09-14\2017-09-14\_002.xad

Created: 9/14/2017 12:26:37 PM  
 Modified: 9/14/2017 1:07:36 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : HiSeq1053 - 17 library**

Number of peaks found: 1                      Corr. Area 1: 0.0  
 Noise: 0.1

**Peak table for sample 6 : HiSeq1053 - 17 library**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	10,380	75.00	10.9	Upper Marker	113.00
3	12,506	0.00	0.0		115.13

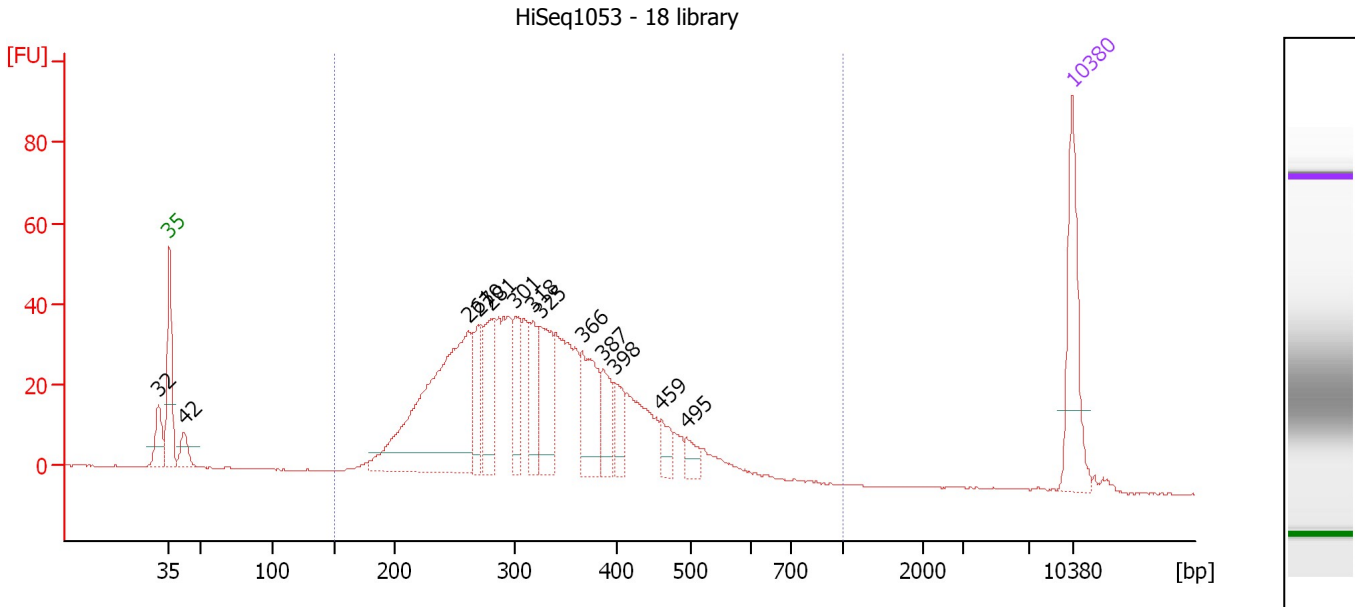
**Region table for sample 6 : HiSeq1053 - 17 library**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	0	0.0	0.0	0.00	0	0.0

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-09-14\2017-09-14\_002.xad

Created: 9/14/2017 12:26:37 PM  
 Modified: 9/14/2017 1:07:36 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : HiSeq1053 - 18 library**

Number of peaks found: 13                      Corr. Area 1: 966.8  
 Noise: 0.1

**Peak table for sample 7 : HiSeq1053 - 18 library**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	32	0.00	0.0		42.17
2	35	125.00	5,411.3	Lower Marker	43.00
3	42	28.88	1,037.1		44.13
4	261	356.09	2,064.9		66.15
5	270	54.12	304.0		66.94
6	281	80.61	434.7		67.97
7	301	57.77	290.5		69.83
8	318	49.95	238.0		71.16
9	325	90.79	422.8		71.75
10	366	83.52	345.7		74.98
11	387	41.60	162.9		76.65
12	398	33.91	129.1		77.53
13	459	21.93	72.3		81.07
14	495	17.71	54.2		83.08
15	10,380	75.00	10.9	Upper Marker	113.00

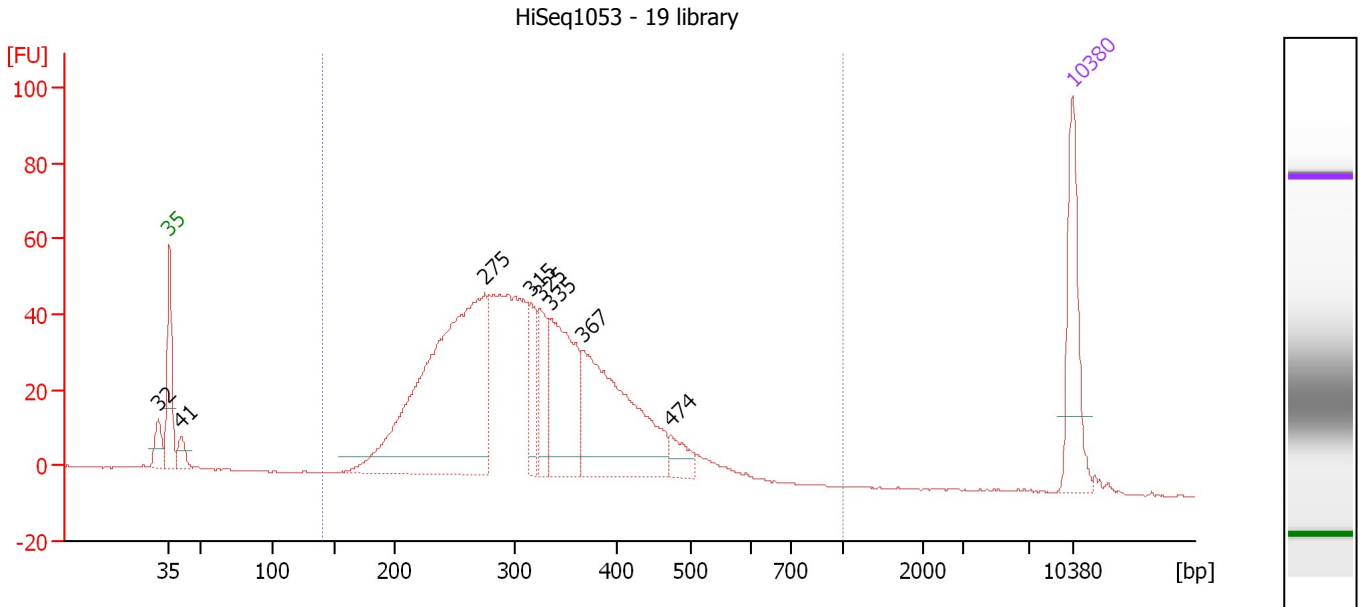
**Region table for sample 7 : HiSeq1053 - 18 library**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
150	1,000	334	966.8	7,082.5	1,417.74	94	28.1

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-09-14\2017-09-14\_002.xad

Created: 9/14/2017 12:26:37 PM  
 Modified: 9/14/2017 1:07:36 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : HiSeq1053 - 19 library**

Number of peaks found: 8                      Corr. Area 1: 1,124.7  
 Noise: 0.2

**Peak table for sample 8 : HiSeq1053 - 19 library**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	32	0.00	0.0		42.15
2	35	125.00	5,411.3	Lower Marker	43.00
3	41	23.57	877.1		43.89
4	275	543.98	2,992.2		67.46
5	315	53.80	258.5		70.94
6	325	54.06	251.8		71.74
7	335	166.42	752.1		72.53
8	367	244.23	1,007.9		75.07
9	474	25.69	82.0		81.93
10	10,380	75.00	10.9	Upper Marker	113.00

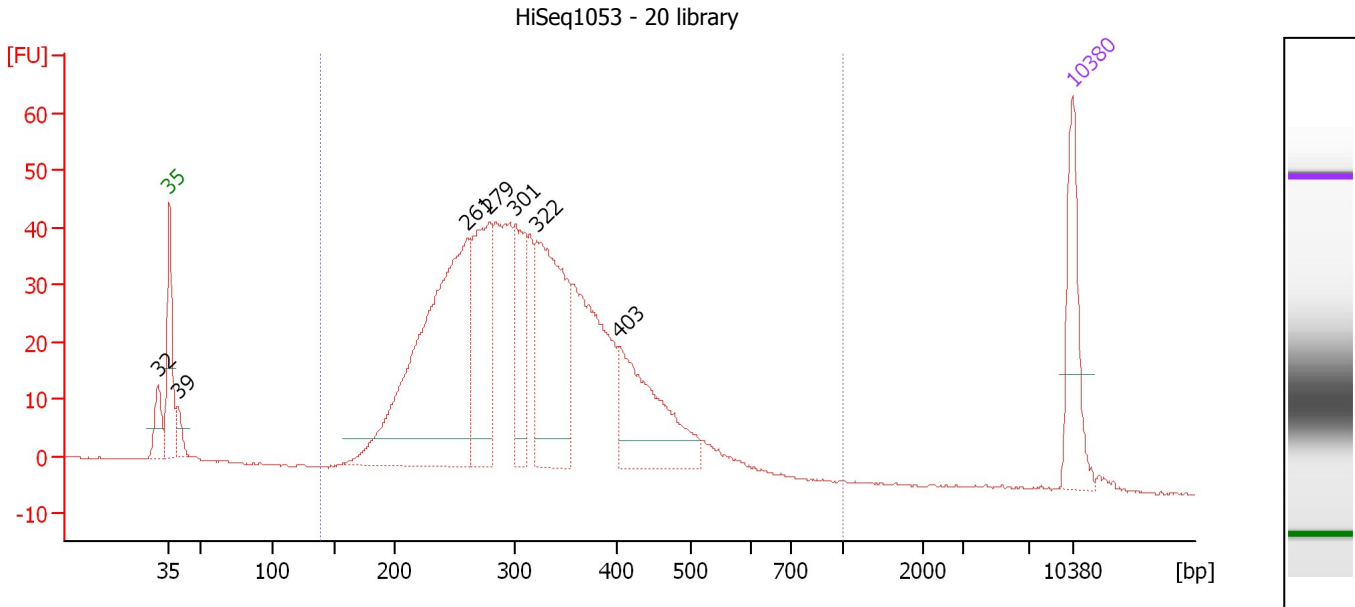
**Region table for sample 8 : HiSeq1053 - 19 library**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
141	1,000	322	1,124.7	7,627.7	1,485.76	96	26.3

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-09-14\2017-09-14\_002.xad

Created: 9/14/2017 12:26:37 PM  
 Modified: 9/14/2017 1:07:36 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : HiSeq1053 - 20 library**

Number of peaks found: 7                      Corr. Area 1: 1,004.3  
 Noise: 0.1

**Peak table for sample 9 : HiSeq1053 - 20 library**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	32	0.00	0.0		42.14
2	35	125.00	5,411.3	Lower Marker	43.00
3	39	24.69	955.1		43.65
4	261	541.72	3,148.6		66.10
5	279	206.87	1,122.5		67.81
6	301	109.73	553.1		69.77
7	322	264.93	1,246.2		71.48
8	403	176.03	661.3		77.87
9	10,380	75.00	10.9	Upper Marker	113.00

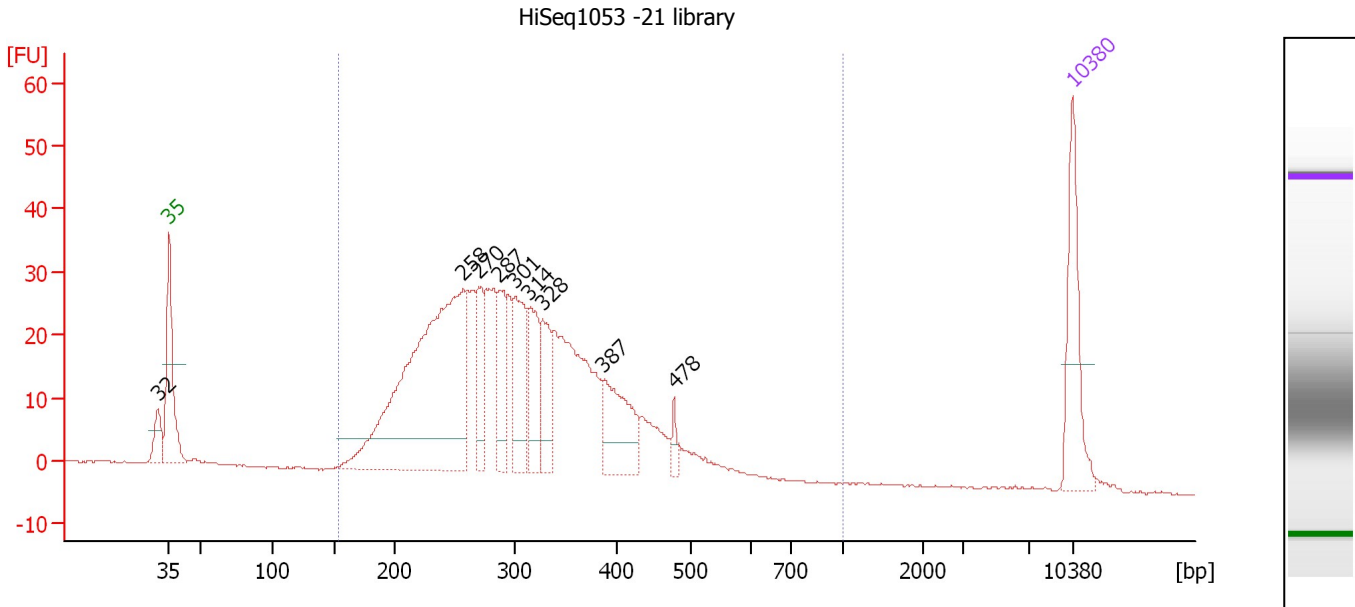
**Region table for sample 9 : HiSeq1053 - 20 library**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
138	1,000	323	1,004.3	9,882.9	1,928.99	96	26.5

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-09-14\2017-09-14\_002.xad

Created: 9/14/2017 12:26:37 PM  
 Modified: 9/14/2017 1:07:36 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : HiSeq1053 -21 library**

Number of peaks found: 9                      Corr. Area 1: 689.1  
 Noise: 0.2

**Peak table for sample 10 : HiSeq1053 -21 library**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	32	0.00	0.0		42.08
2	35	125.00	5,411.3	Lower Marker	43.00
3	258	529.79	3,117.0		65.81
4	270	66.53	373.0		66.98
5	287	72.75	383.6		68.56
6	301	98.04	494.0		69.78
7	314	72.99	352.1		70.85
8	328	65.52	303.1		71.92
9	387	90.11	352.8		76.65
10	478	13.19	41.8		82.15
11	10,380	75.00	10.9	Upper Marker	113.00

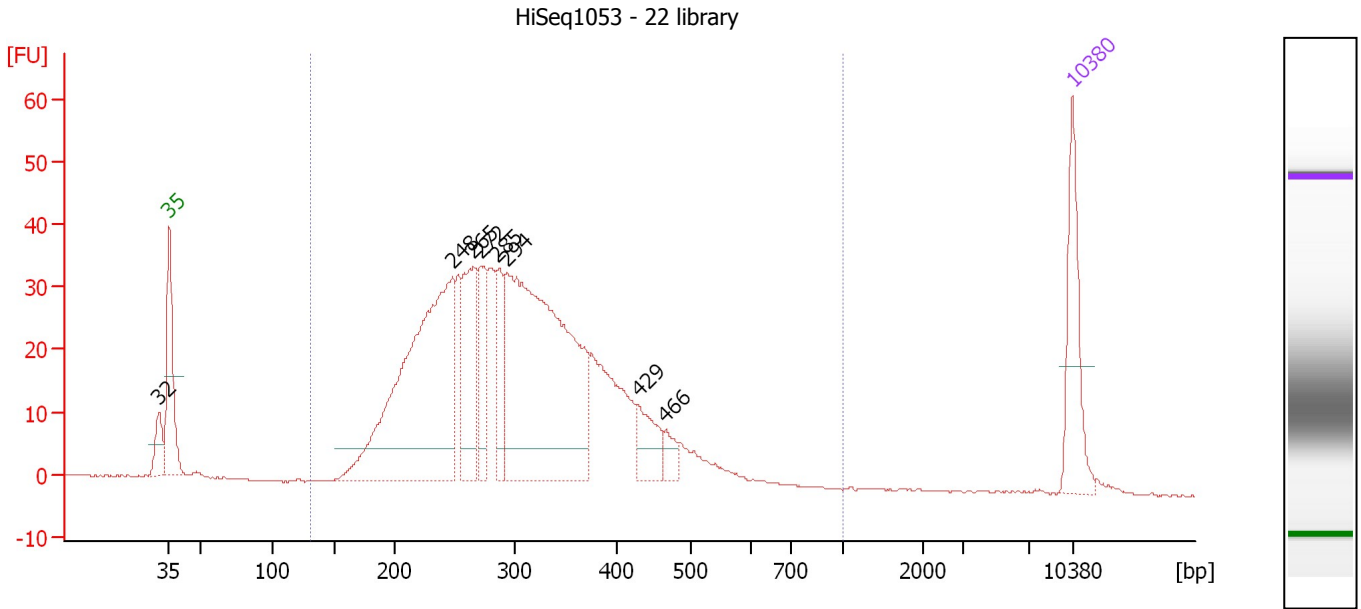
**Region table for sample 10 : HiSeq1053 -21 library**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
154	1,000	310	689.1	8,477.2	1,585.24	97	27.1

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-09-14\2017-09-14\_002.xad

Created: 9/14/2017 12:26:37 PM  
 Modified: 9/14/2017 1:07:36 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : HiSeq1053 - 22 library**

Number of peaks found: 8                      Corr. Area 1: 812.1  
 Noise: 0.1

**Peak table for sample 11 : HiSeq1053 - 22 library**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	32	0.00	0.0		42.18
2	35	125.00	5,411.3	Lower Marker	43.00
3	248	510.54	3,116.3		64.95
4	265	133.80	763.7		66.54
5	272	87.50	488.1		67.10
6	285	71.88	381.5		68.38
7	294	563.78	2,907.4		69.15
8	429	47.99	169.3		79.36
9	466	18.71	60.8		81.46
10	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 11 : HiSeq1053 - 22 library**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
131	1,000	312	812.1	9,698.3	1,816.97	97	28.2

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2017-09-14\2017-09-14\_002.xad

Created: 9/14/2017 12:26:37 PM  
Modified: 9/14/2017 1:07:36 PM

**Gel Image**

