

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...t\data\2016-10-19\2016-10-19\_001\_HiSeq670\_Libraries\_1-8.xad

Created: 10/19/2016 9:29:52 AM  
Modified: 10/19/2016 3:07:36 PM

**Electrophoresis File Run Summary**

Instrument Information:

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

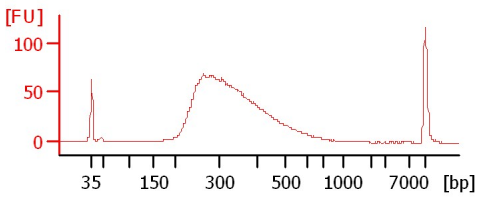
Assay Information:

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

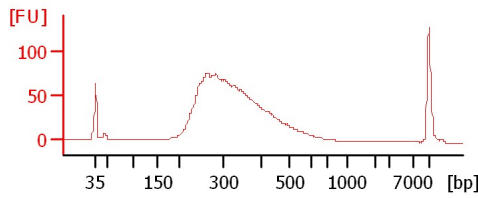
Chip Information:

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

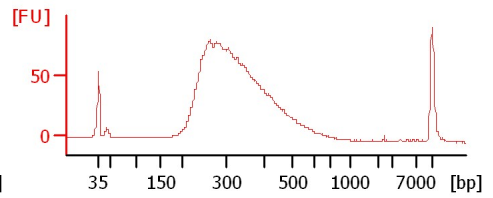
**1 library (1:8)**



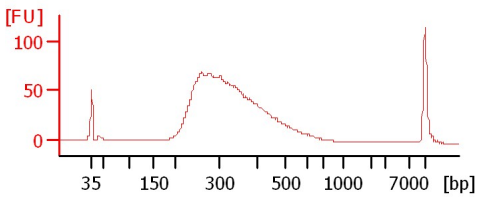
**2 library (1:4)**



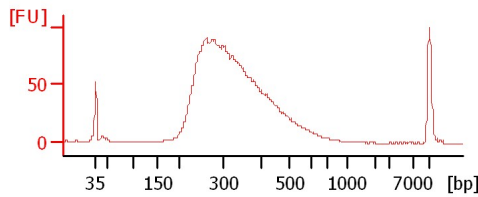
**3 library (1:4)**



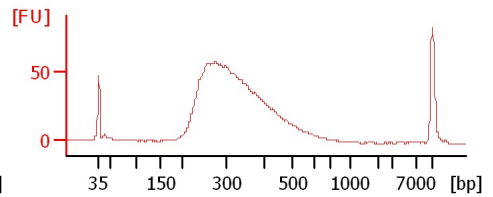
**4 library (1:6)**



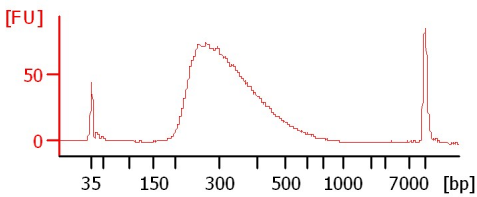
**5 library (1:6)**



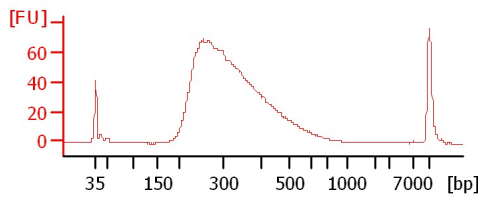
**6 library (1:6)**



**7 library (1:5)**



**8 library (1:6)**



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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
1 library (1:8)		<input type="checkbox"/>	✓			
2 library (1:4)		<input type="checkbox"/>	✓			
3 library (1:4)		<input type="checkbox"/>	✓			
4 library (1:6)		<input type="checkbox"/>	✓			
5 library (1:6)		<input type="checkbox"/>	✓			
6 library (1:6)		<input type="checkbox"/>	✓			
7 library (1:5)		<input type="checkbox"/>	✓			
8 library (1:6)		<input type="checkbox"/>	✓			
Ladder		<input type="checkbox"/>	✓			

Chip Lot #

Reagent Kit Lot #

Chip Comments :

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Data Path: C:\...t\data\2016-10-19\2016-10-19\_001\_HiSeq670\_Libraries\_1-8.xad

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**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

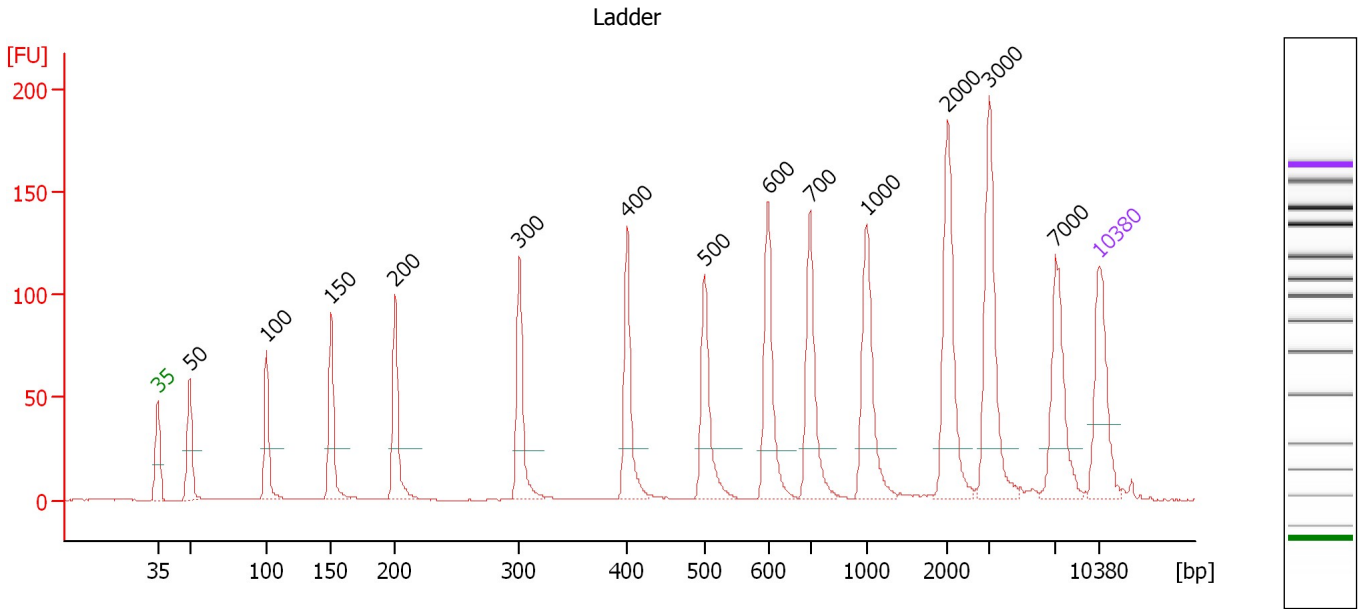
**Ladder**

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

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Created: 10/19/2016 9:29:52 AM  
 Modified: 10/19/2016 3:07:36 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.2

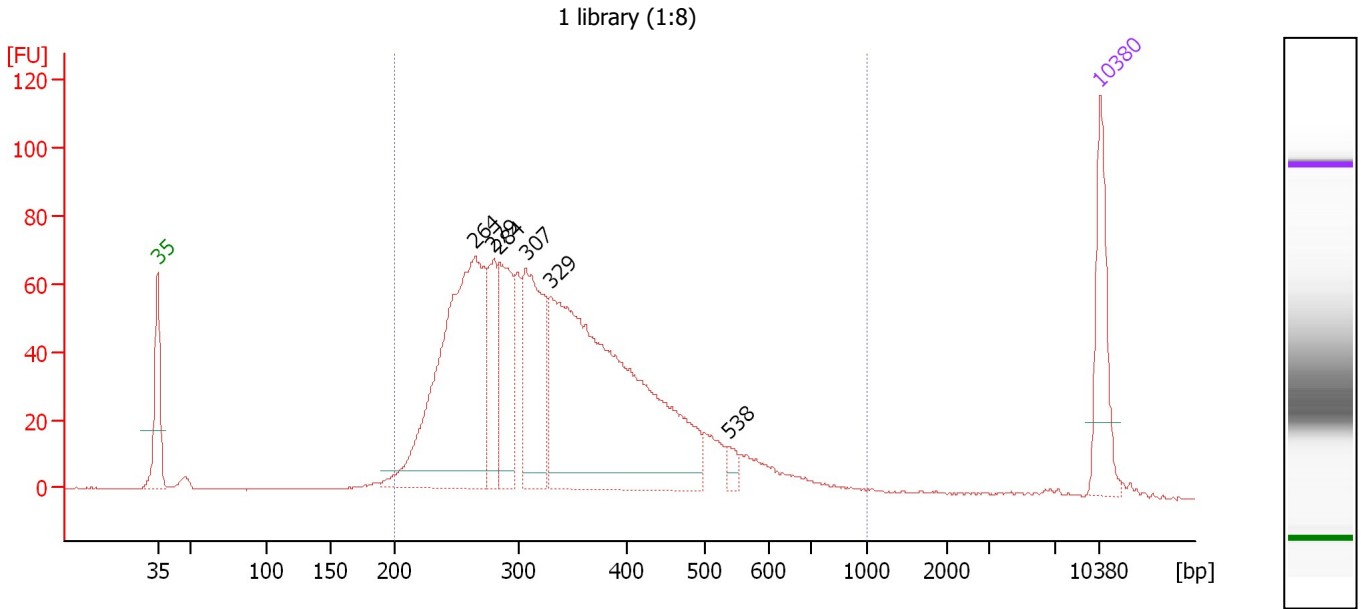
**Peak table for Ladder**

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	45.40
3	100	150.00	2,272.7	Ladder Peak	51.11
4	150	150.00	1,515.2	Ladder Peak	55.91
5	200	150.00	1,136.4	Ladder Peak	60.66
6	300	150.00	757.6	Ladder Peak	69.87
7	400	150.00	568.2	Ladder Peak	77.88
8	500	150.00	454.5	Ladder Peak	83.64
9	600	150.00	378.8	Ladder Peak	88.34
10	700	150.00	324.7	Ladder Peak	91.46
11	1,000	150.00	227.3	Ladder Peak	95.68
12	2,000	150.00	113.6	Ladder Peak	101.68
13	3,000	150.00	75.8	Ladder Peak	104.75
14	7,000	150.00	32.5	Ladder Peak	109.69
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...t\data\2016-10-19\2016-10-19\_001\_HiSeq670\_Libraries\_1-8.xad

Created: 10/19/2016 9:29:52 AM  
 Modified: 10/19/2016 3:07:36 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : 1 library (1:8)**

Number of peaks found: 6                      Corr. Area 1: 1,501.8  
 Noise: 0.2

**Peak table for sample 4 : 1 library (1:8)**

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	264	502.76	2,887.6		66.53
3	279	102.67	557.5		67.94
4	284	134.50	717.8		68.39
5	307	190.61	942.2		70.39
6	329	679.59	3,129.7		72.19
7	538	13.24	37.3		85.41
8	10,380	75.00	10.9	Upper Marker	113.00

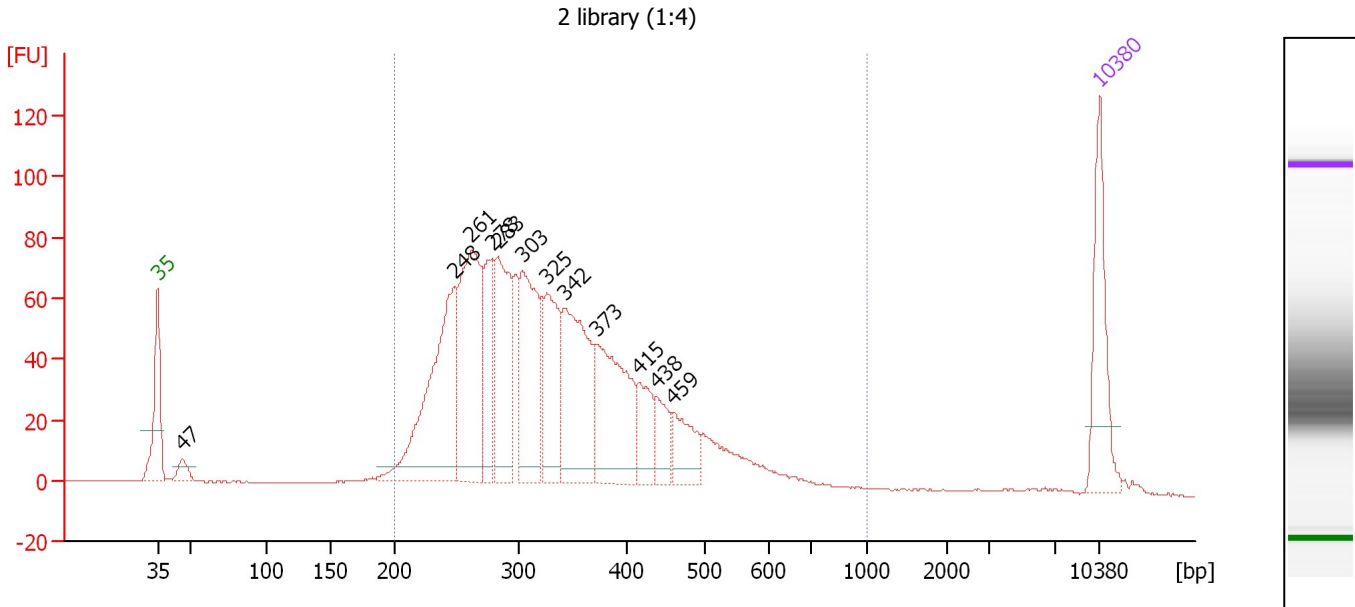
**Region table for sample 4 : 1 library (1:8)**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	347	1,501.8	8,483.9	1,765.45	97	30.0

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...t\data\2016-10-19\2016-10-19\_001\_HiSeq670\_Libraries\_1-8.xad

Created: 10/19/2016 9:29:52 AM  
 Modified: 10/19/2016 3:07:36 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : 2 library (1:4)**

Number of peaks found: 12                      Corr. Area 1: 1,609.6  
 Noise: 0.2

**Peak table for sample 5 : 2 library (1:4)**

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	47	19.02	617.5		44.87
3	248	253.04	1,548.6		65.04
4	261	221.34	1,283.6		66.30
5	278	87.13	474.4		67.86
6	283	151.38	811.6		68.27
7	303	157.81	788.3		70.13
8	325	115.86	539.6		71.90
9	342	173.26	768.3		73.21
10	373	161.22	655.7		75.68
11	415	47.13	172.0		78.76
12	438	38.75	134.0		80.07
13	459	48.69	160.7		81.28
14	10,380	75.00	10.9	Upper Marker	113.00

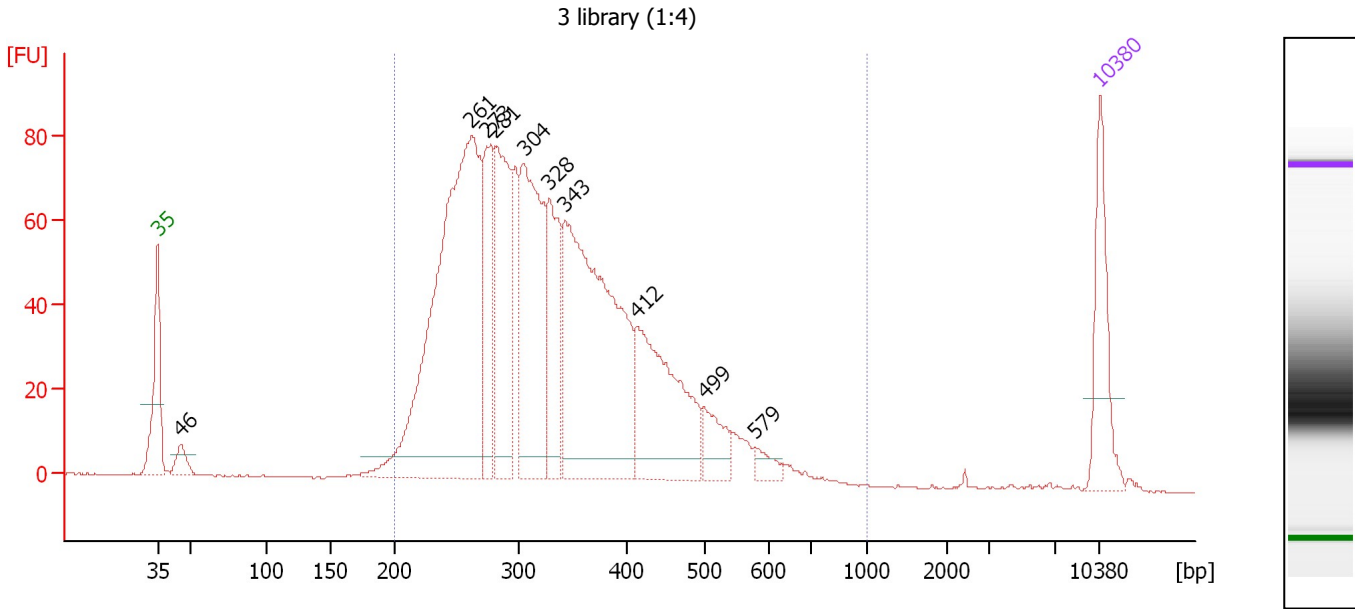
**Region table for sample 5 : 2 library (1:4)**

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	339	1,609.6	8,107.6	1,660.43	96	28.3

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...t\data\2016-10-19\2016-10-19\_001\_HiSeq670\_Libraries\_1-8.xad

Created: 10/19/2016 9:29:52 AM  
 Modified: 10/19/2016 3:07:36 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : 3 library (1:4)**

Number of peaks found: 10                      Corr. Area 1: 1,700.2  
 Noise: 0.2

**Peak table for sample 6 : 3 library (1:4)**

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	46	26.69	888.2		44.68
3	261	704.11	4,083.4		66.30
4	273	130.14	721.1		67.42
5	281	208.15	1,123.8		68.08
6	304	280.45	1,395.6		70.23
7	328	129.81	599.6		72.11
8	343	479.76	2,121.5		73.28
9	412	216.14	794.4		78.59
10	499	45.35	137.7		83.58
11	579	16.63	43.5		87.36
12	10,380	75.00	10.9	Upper Marker	113.00

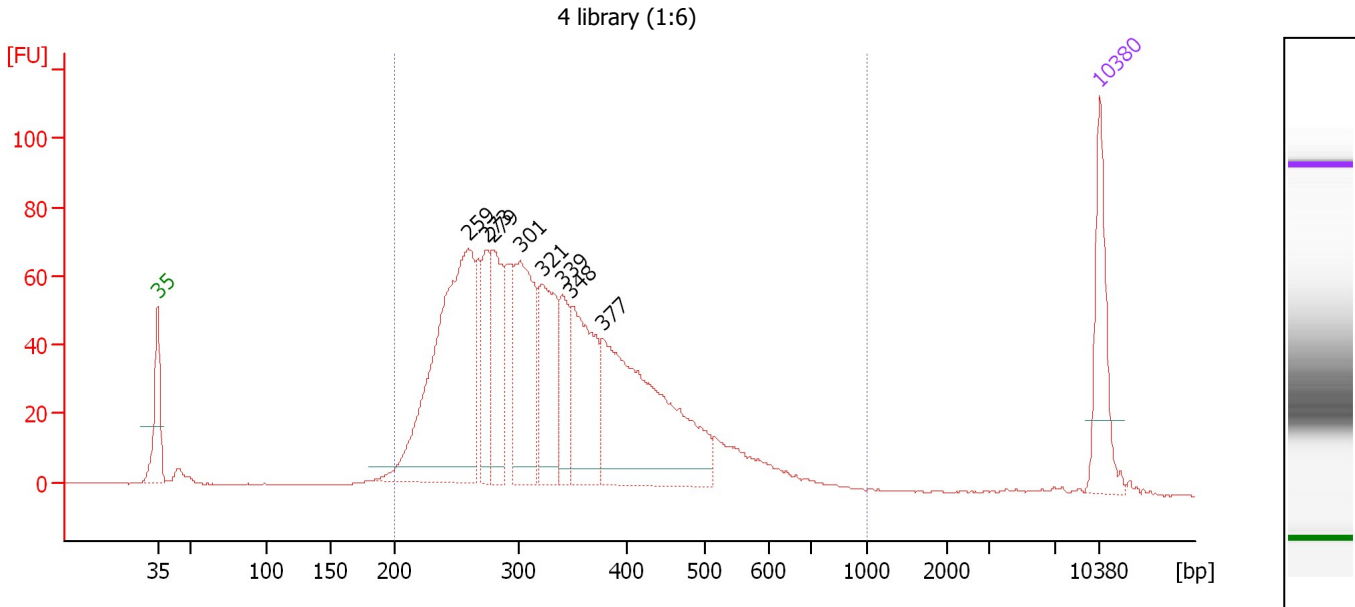
**Region table for sample 6 : 3 library (1:4)**

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	338	1,700.2	11,713.5	2,392.92	97	28.1

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...t\data\2016-10-19\2016-10-19\_001\_HiSeq670\_Libraries\_1-8.xad

Created: 10/19/2016 9:29:52 AM  
 Modified: 10/19/2016 3:07:36 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : 4 library (1:6)**

Number of peaks found: 8                      Corr. Area 1: 1,509.6  
 Noise: 0.1

**Peak table for sample 7 : 4 library (1:6)**

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	259	461.51	2,703.5		66.06
3	273	90.24	500.5		67.40
4	279	131.29	713.5		67.92
5	301	195.28	983.8		69.93
6	321	140.87	664.2		71.58
7	339	75.19	335.7		73.02
8	348	158.52	689.4		73.74
9	377	346.21	1,390.1		76.07
10	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 7 : 4 library (1:6)**

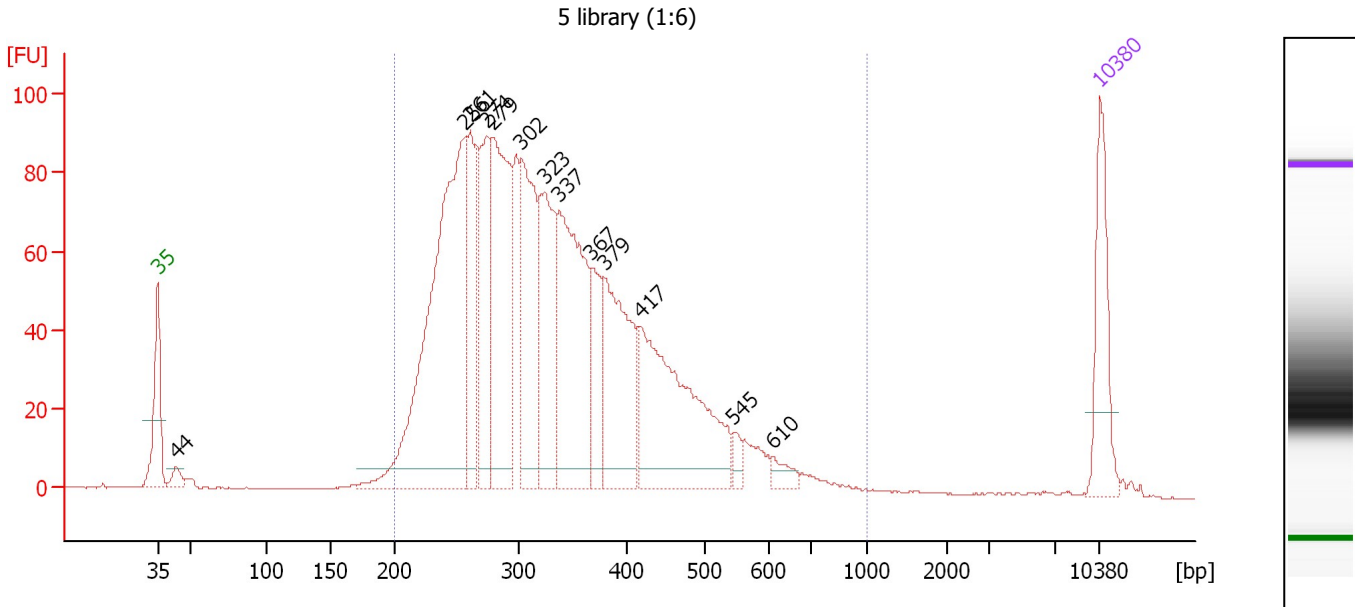
From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	343	1,509.6	8,889.8	1,828.79	97	29.4



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...t\data\2016-10-19\2016-10-19\_001\_HiSeq670\_Libraries\_1-8.xad

Created: 10/19/2016 9:29:52 AM  
 Modified: 10/19/2016 3:07:36 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : 5 library (1:6)**

Number of peaks found: 13                      Corr. Area 1: 1,934.6  
 Noise: 0.2

**Peak table for sample 8 : 5 library (1:6)**

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	44	17.42	603.3		44.40
3	256	552.96	3,270.3		65.83
4	261	153.39	891.5		66.25
5	274	147.78	818.2		67.44
6	279	264.73	1,439.1		67.91
7	302	200.31	1,004.7		70.03
8	323	169.61	796.1		71.70
9	337	276.16	1,241.4		72.84
10	367	78.77	325.3		75.22
11	379	180.71	723.4		76.16
12	417	277.53	1,008.5		78.86
13	545	13.09	36.4		85.76
14	610	15.38	38.2		88.66
15	10,380	75.00	10.9	Upper Marker	113.00

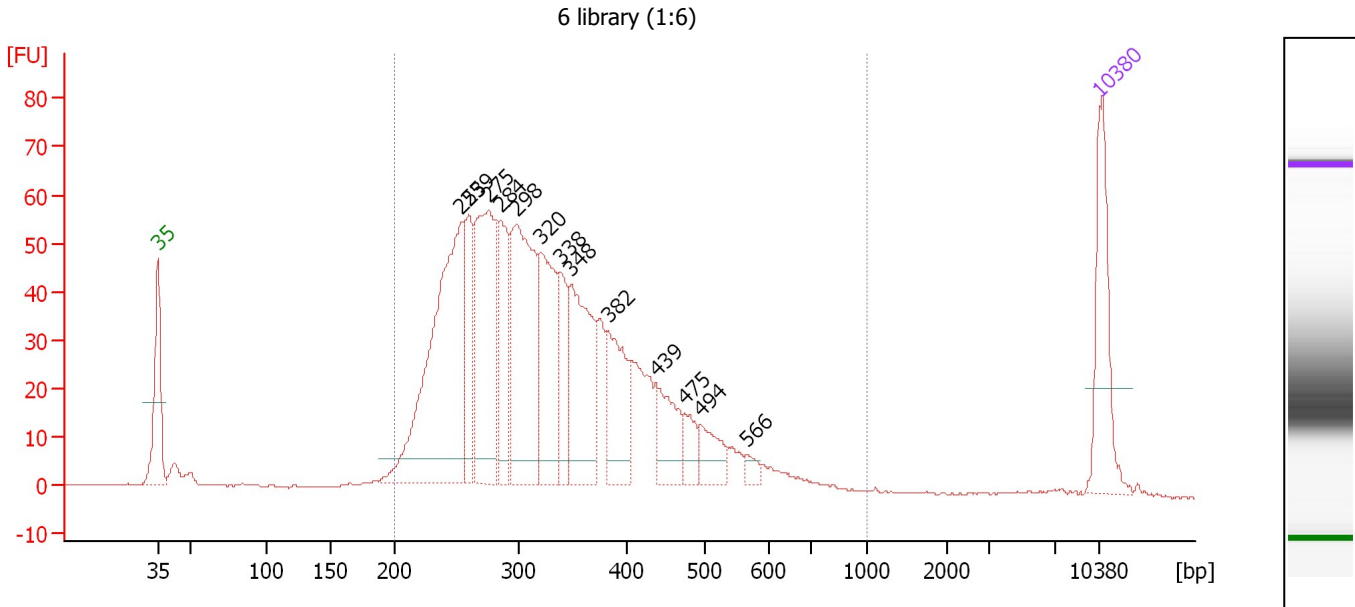
**Region table for sample 8 : 5 library (1:6)**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	340	1,934.6	12,489.3	2,551.10	98	29.5

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...t\data\2016-10-19\2016-10-19\_001\_HiSeq670\_Libraries\_1-8.xad

Created: 10/19/2016 9:29:52 AM  
 Modified: 10/19/2016 3:07:36 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : 6 library (1:6)**

Number of peaks found: 13                      Corr. Area 1: 1,199.2  
 Noise: 0.2

**Peak table for sample 9 : 6 library (1:6)**

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	253	366.29	2,195.3		65.52
3	259	88.69	518.8		66.09
4	275	205.89	1,133.0		67.60
5	284	100.17	533.7		68.43
6	298	230.70	1,173.5		69.67
7	320	133.59	633.4		71.44
8	338	66.44	298.1		72.89
9	348	146.96	639.7		73.72
10	382	96.50	382.4		76.47
11	439	57.81	199.7		80.10
12	475	24.43	78.0		82.18
13	494	35.10	107.6		83.32
14	566	9.89	26.5		86.74
15	10,380	75.00	10.9	Upper Marker	113.00

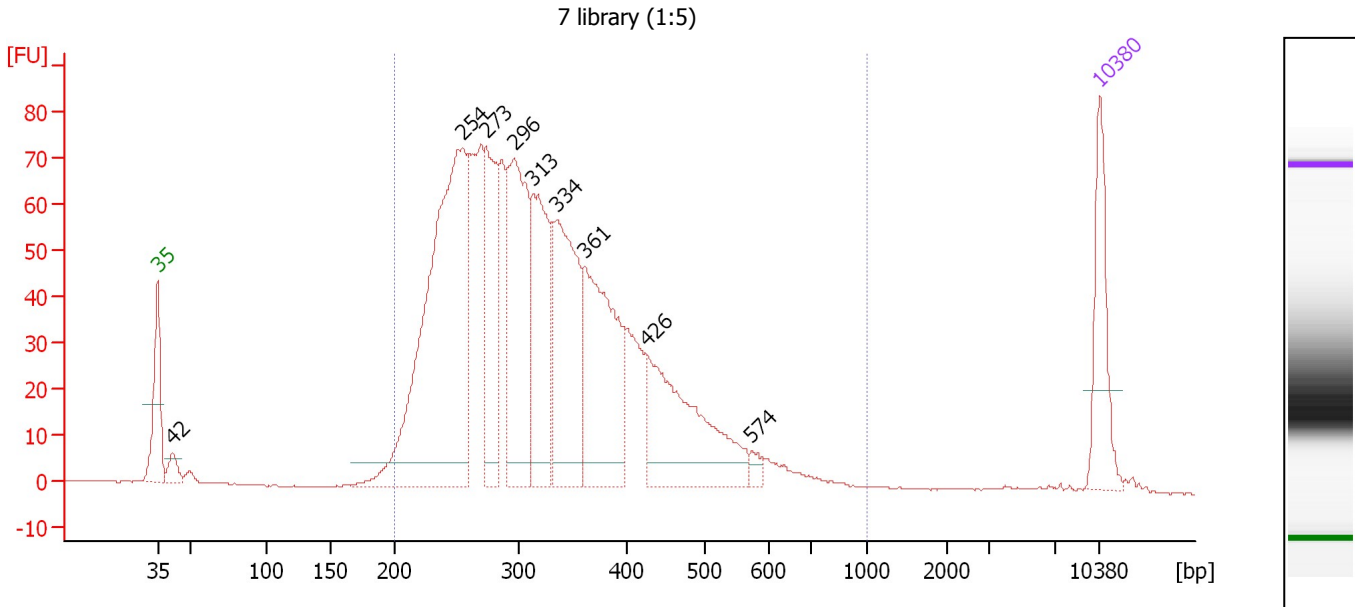
**Region table for sample 9 : 6 library (1:6)**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	338	1,199.2	9,000.4	1,833.99	97	28.5

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 Data Path: C:\...t\data\2016-10-19\2016-10-19\_001\_HiSeq670\_Libraries\_1-8.xad

Created: 10/19/2016 9:29:52 AM  
 Modified: 10/19/2016 3:07:36 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : 7 library (1:5)**

Number of peaks found: 9                      Corr. Area 1: 1,548.8  
 Noise: 0.1

**Peak table for sample 10 : 7 library (1:5)**

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	42	23.28	843.5		44.09
3	254	633.14	3,775.1		65.64
4	273	176.51	978.6		67.41
5	296	262.11	1,342.4		69.48
6	313	192.05	928.6		70.94
7	334	252.30	1,144.2		72.60
8	361	246.28	1,034.6		74.73
9	426	222.98	793.9		79.35
10	574	9.73	25.7		87.14
11	10,380	75.00	10.9	Upper Marker	113.00

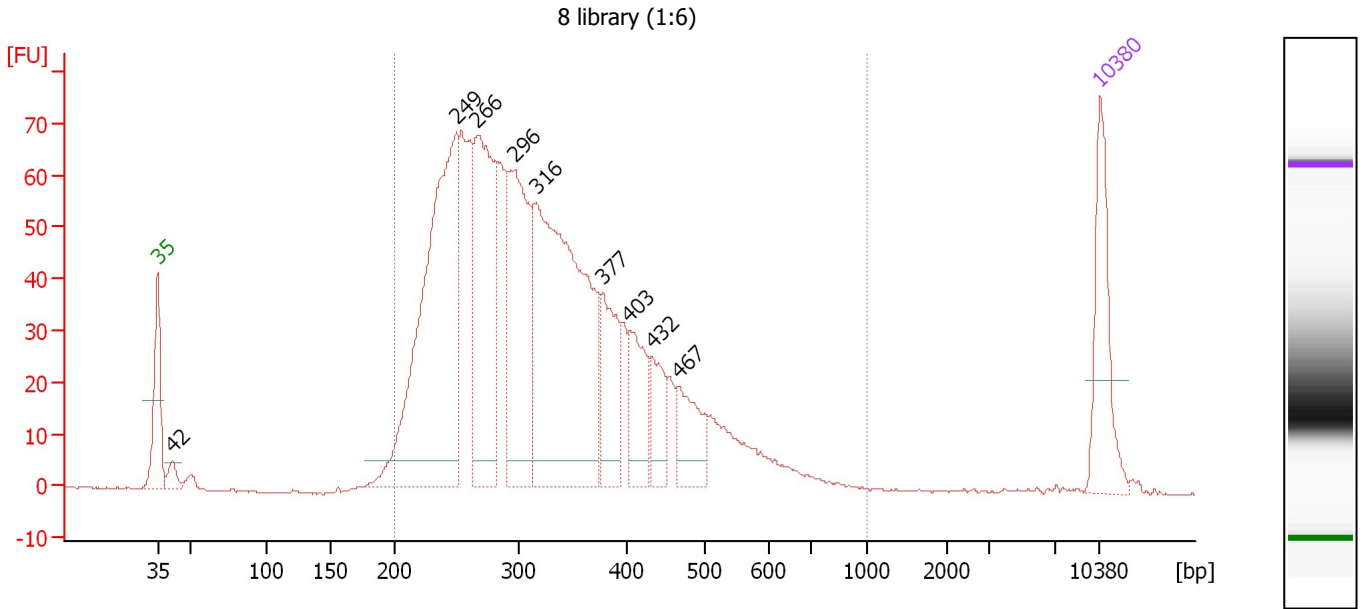
**Region table for sample 10 : 7 library (1:5)**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	334	1,548.8	12,214.2	2,455.95	96	29.4

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Created: 10/19/2016 9:29:52 AM  
 Modified: 10/19/2016 3:07:36 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : 8 library (1:6)**

Number of peaks found: 9                      Corr. Area 1: 1,432.6  
 Noise: 0.1

**Peak table for sample 11 : 8 library (1:6)**

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	42	18.18	658.1		44.10
3	249	486.13	2,954.0		65.20
4	266	261.71	1,491.9		66.72
5	296	236.18	1,207.3		69.54
6	316	466.21	2,234.8		71.16
7	377	93.82	376.7		76.07
8	403	71.93	270.4		78.05
9	432	46.99	164.8		79.72
10	467	59.81	194.3		81.71
11	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 11 : 8 library (1:6)**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	335	1,432.6	10,920.9	2,186.04	96	30.7

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**Gel Image**

Assay Class: High Sensitivity DNA Assay  
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Created: 10/19/2016 9:29:52 AM  
 Modified: 10/19/2016 3:07:36 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		10/19/2016 10:11:11 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\data\2016-10-19\2016-10-19_001.xad)		Instrument	Run		10/19/2016 9:29:58 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		10/19/2016 9:29:58 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		10/19/2016 9:29:58 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		10/19/2016 9:29:58 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		10/19/2016 9:29:58 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		10/19/2016 9:29:58 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		10/19/2016 9:29:58 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1