

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-10-19\2016-10-19_003.xad

Created: 10/19/2016 12:42:23 PM
Modified: 10/19/2016 1:22:51 PM

Electrophoresis File Run Summary

Instrument Information:

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

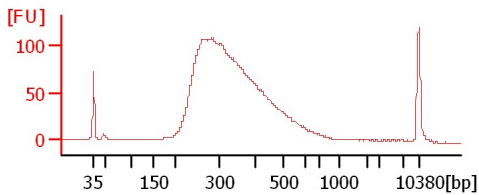
Assay Information:

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

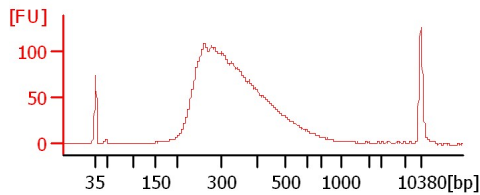
Chip Information:

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

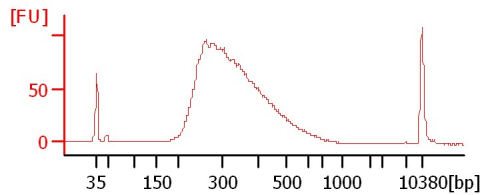
20 library (1:9)



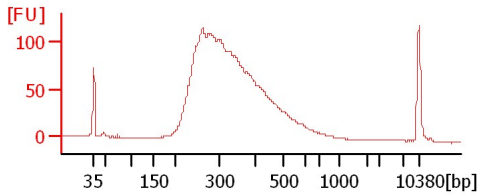
A library (1:7)



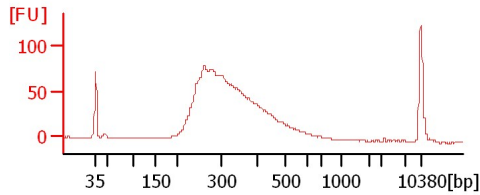
B library (1:5)



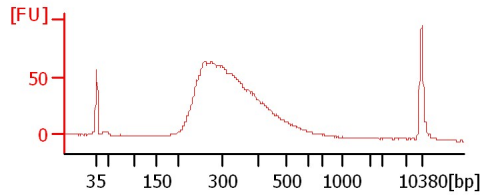
C library (1:10)



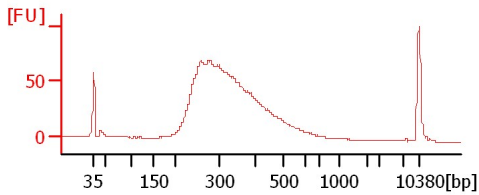
D library (1:7)



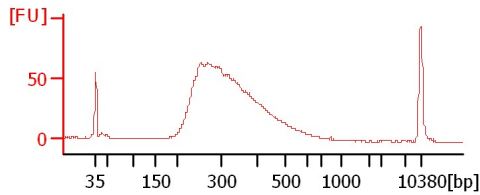
E library (1:10)



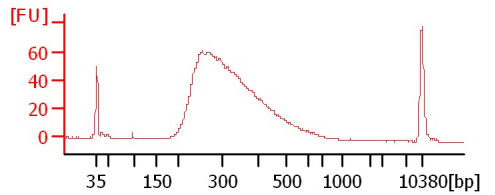
F library (1:6)



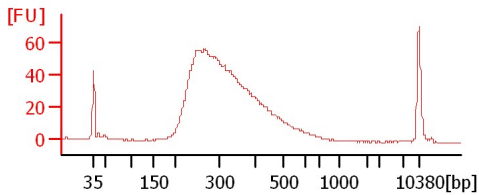
G library (1:8)



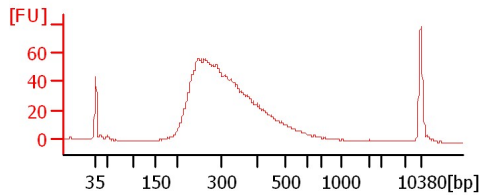
H library (1:7)



I library (1:9)



J library (1:8)



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Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
20 library (1:9)		<input type="checkbox"/>	✓			
A library (1:7)		<input type="checkbox"/>	✓			
B library (1:5)		<input type="checkbox"/>	✓			
C library (1:10)		<input type="checkbox"/>	✓			
D library (1:7)		<input type="checkbox"/>	✓			
E library (1:10)		<input type="checkbox"/>	✓			
F library (1:6)		<input type="checkbox"/>	✓			
G library (1:8)		<input type="checkbox"/>	✓			
H library (1:7)		<input type="checkbox"/>	✓			
I library (1:9)		<input type="checkbox"/>	✓			
J library (1:8)		<input type="checkbox"/>	✓			
Ladder		<input type="checkbox"/>	✓			

Chip Lot #

Reagent Kit Lot #

Chip Comments :

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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

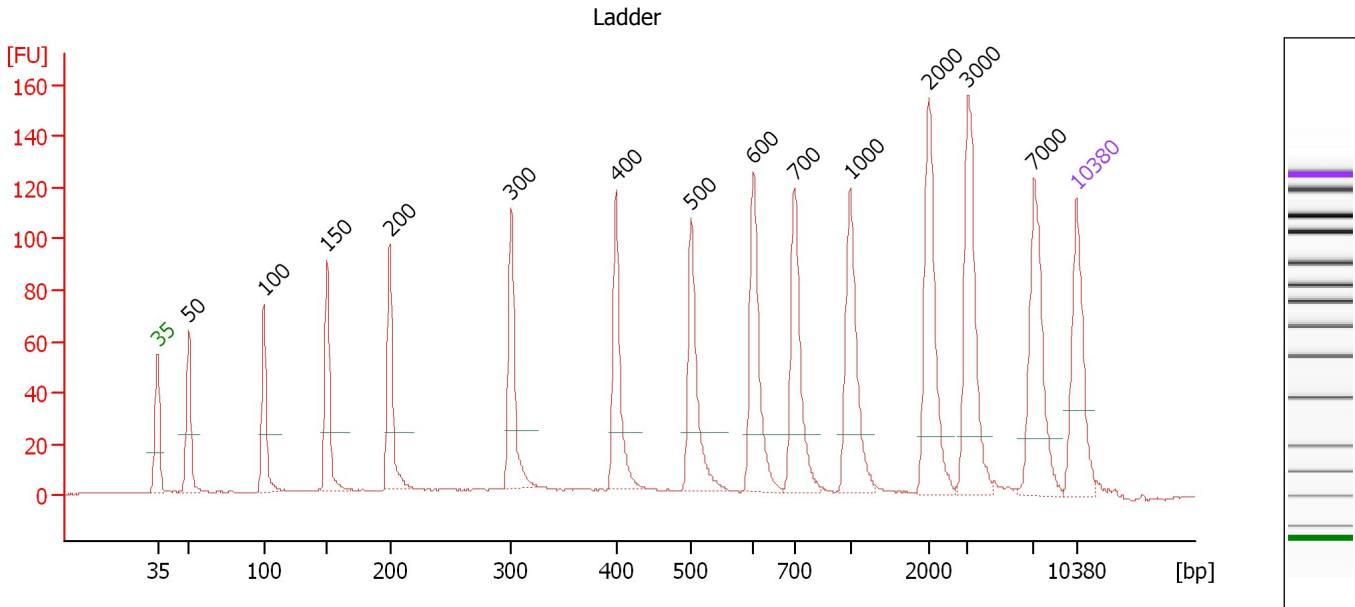
Ladder

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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Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

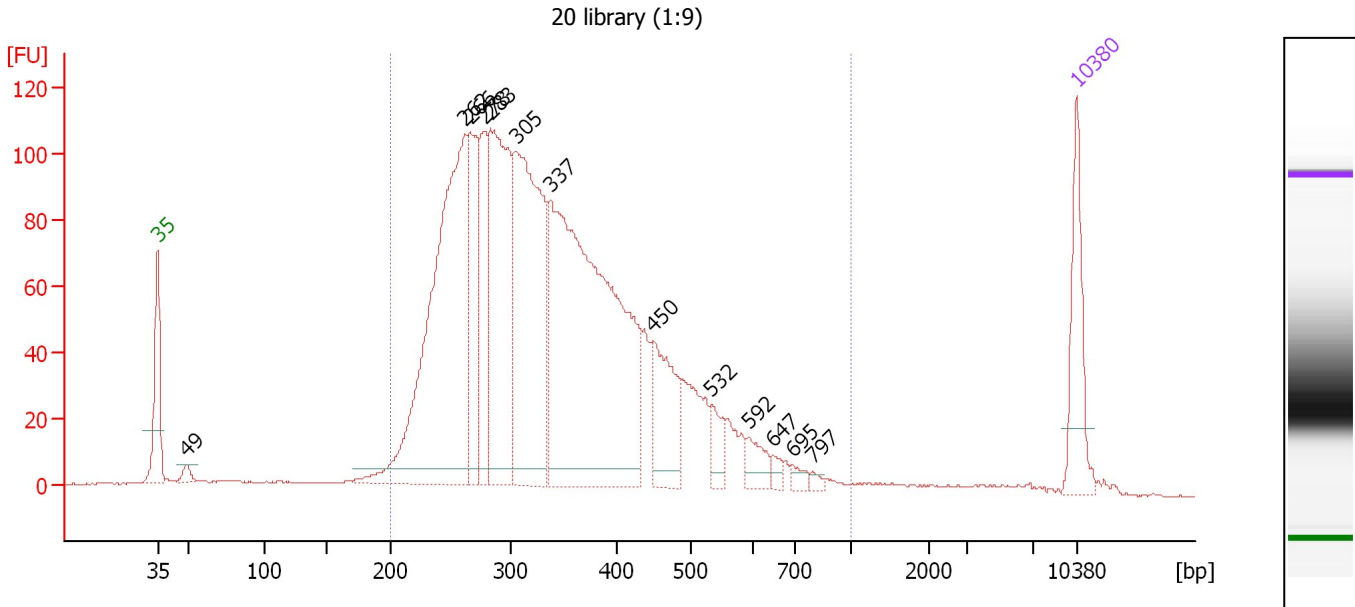
Peak table for Ladder

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	45.38
3	100	150.00	2,272.7	Ladder Peak	51.11
4	150	150.00	1,515.2	Ladder Peak	55.92
5	200	150.00	1,136.4	Ladder Peak	60.69
6	300	150.00	757.6	Ladder Peak	69.94
7	400	150.00	568.2	Ladder Peak	77.90
8	500	150.00	454.5	Ladder Peak	83.63
9	600	150.00	378.8	Ladder Peak	88.40
10	700	150.00	324.7	Ladder Peak	91.49
11	1,000	150.00	227.3	Ladder Peak	95.74
12	2,000	150.00	113.6	Ladder Peak	101.75
13	3,000	150.00	75.8	Ladder Peak	104.70
14	7,000	150.00	32.5	Ladder Peak	109.76
15	10,380	75.00	10.9	Upper Marker	113.00

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Electropherogram Summary Continued ...



Overall Results for sample 1 : 20 library (1:9)

Number of peaks found: 13 Corr. Area 1: 2,466.5
 Noise: 0.2

Peak table for sample 1 : 20 library (1:9)

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	49	12.23	379.4		45.20
3	262	628.39	3,633.6		66.43
4	266	173.05	985.1		66.81
5	278	131.49	717.9		67.86
6	283	354.50	1,899.9		68.34
7	305	429.04	2,134.6		70.30
8	337	763.63	3,433.8		72.88
9	450	114.86	386.6		80.77
10	532	32.33	92.0		85.17
11	592	27.76	71.1		87.99
12	647	10.31	24.1		89.86
13	695	10.38	22.6		91.34
14	797	5.60	10.6		92.87
15	10,380	75.00	10.9	Upper Marker	113.00

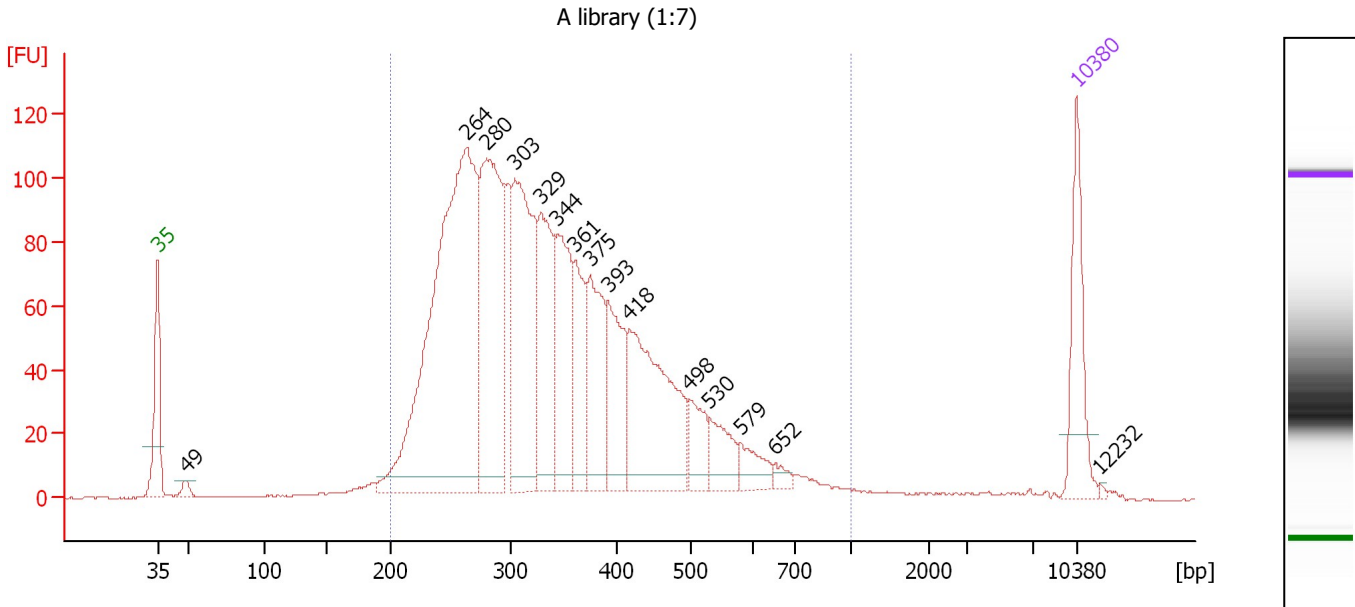
Region table for sample 1 : 20 library (1:9)

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	353	2,466.5	13,745.3	2,881.93	94	31.2

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Electropherogram Summary Continued ...



Overall Results for sample 2 : A library (1:7)

Number of peaks found: 15 Corr. Area 1: 2,377.0
 Noise: 0.2

Peak table for sample 2 : A library (1:7)

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	49	12.90	402.2		45.16
3	264	735.73	4,229.0		66.57
4	280	329.88	1,787.1		68.06
5	303	297.23	1,486.7		70.17
6	329	164.47	757.8		72.24
7	344	157.19	692.5		73.44
8	361	97.00	406.7		74.83
9	375	127.51	514.8		75.94
10	393	112.36	433.5		77.33
11	418	232.17	840.7		78.96
12	498	46.95	142.8		83.52
13	530	46.84	133.9		85.06
14	579	30.71	80.3		87.41
15	652	10.80	25.1		90.00
16	10,380	75.00	10.9	Upper Marker	113.00
17	12,232	0.00	0.0		114.78

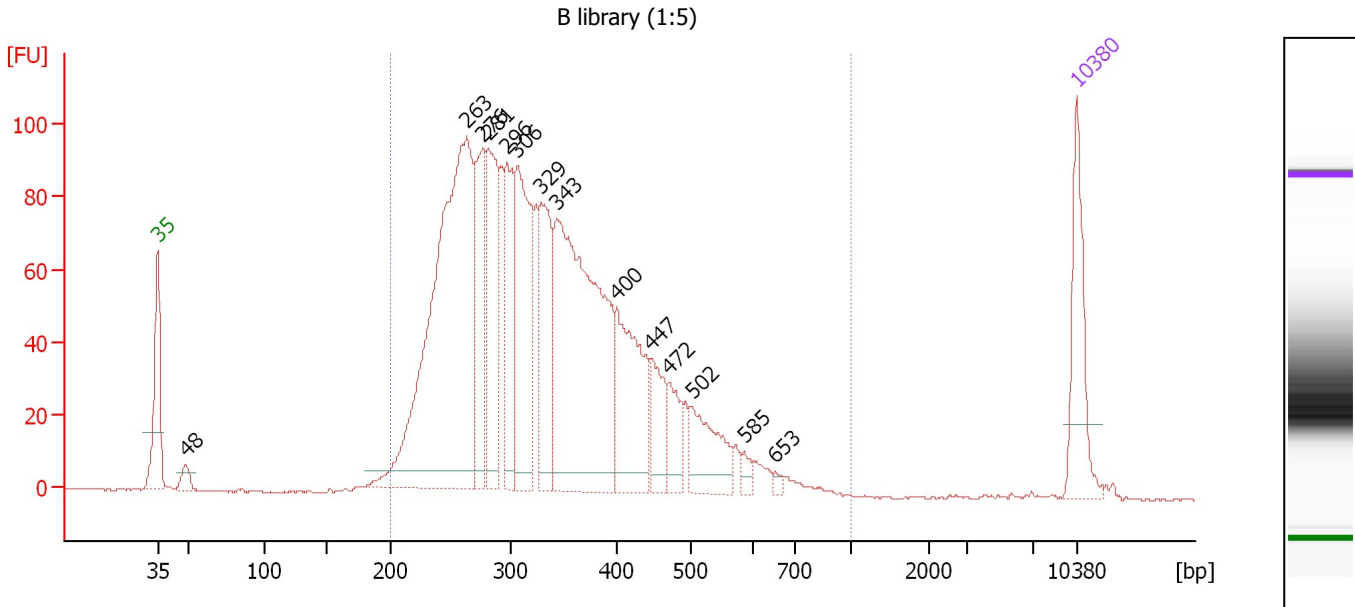
Region table for sample 2 : A library (1:7)

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	349	2,377.0	12,375.4	2,576.69	97	30.6

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Electropherogram Summary Continued ...



Overall Results for sample 3 : B library (1:5)

Number of peaks found: 14 Corr. Area 1: 2,031.9
 Noise: 0.3

Peak table for sample 3 : B 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	48	17.78	555.7		45.14
3	263	668.09	3,844.9		66.54
4	276	127.22	697.3		67.76
5	281	167.25	901.3		68.20
6	296	124.15	634.6		69.61
7	306	214.74	1,064.7		70.39
8	329	143.60	661.7		72.24
9	343	468.53	2,066.8		73.40
10	400	156.99	594.1		77.93
11	447	57.99	196.5		80.60
12	472	42.03	135.0		82.01
13	502	77.55	234.1		83.72
14	585	10.60	27.5		87.66
15	653	4.77	11.1		90.04
16	10,380	75.00	10.9	Upper Marker	113.00

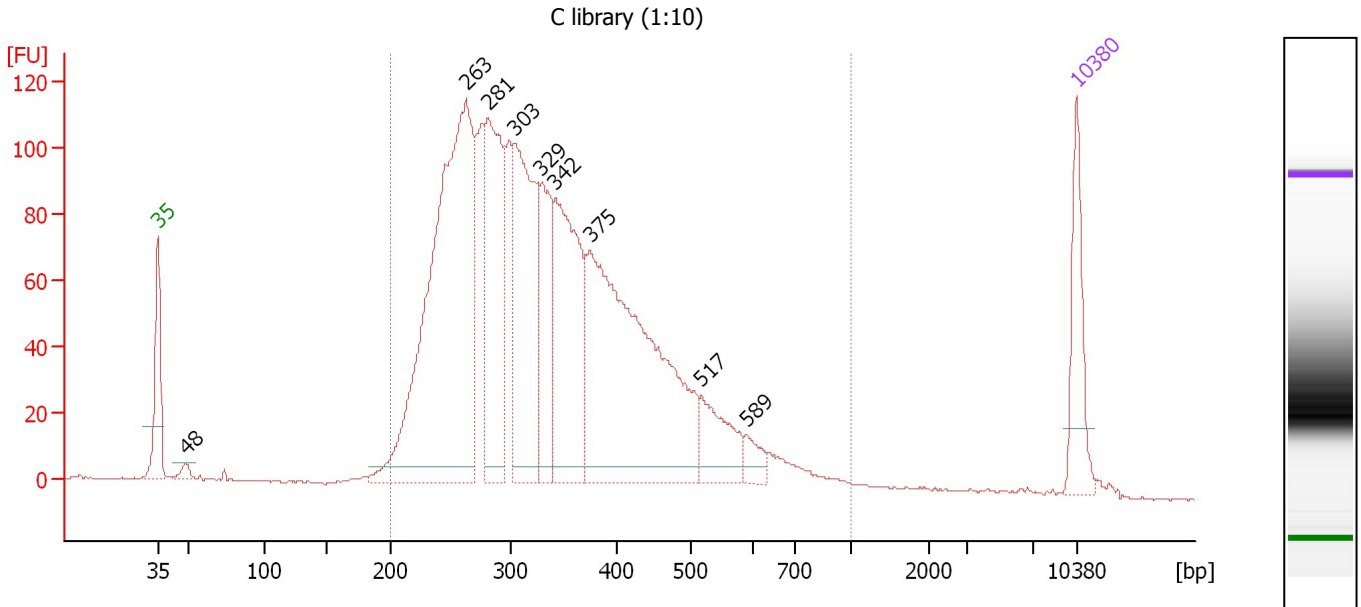
Region table for sample 3 : B library (1:5)

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	340	2,031.9	11,902.0	2,452.09	99	27.0

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Electropherogram Summary Continued ...



Overall Results for sample 4 : C library (1:10)

Number of peaks found: 9 Corr. Area 1: 2,482.6
 Noise: 0.3

Peak table for sample 4 : C library (1:10)

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	48	14.66	459.3		45.12
3	263	833.43	4,802.3		66.51
4	281	289.89	1,562.4		68.19
5	303	336.71	1,681.0		70.22
6	329	143.36	660.3		72.24
7	342	308.35	1,366.3		73.28
8	375	600.73	2,424.2		75.95
9	517	84.60	247.8		84.45
10	589	24.12	62.1		87.86
11	10,380	75.00	10.9	Upper Marker	113.00

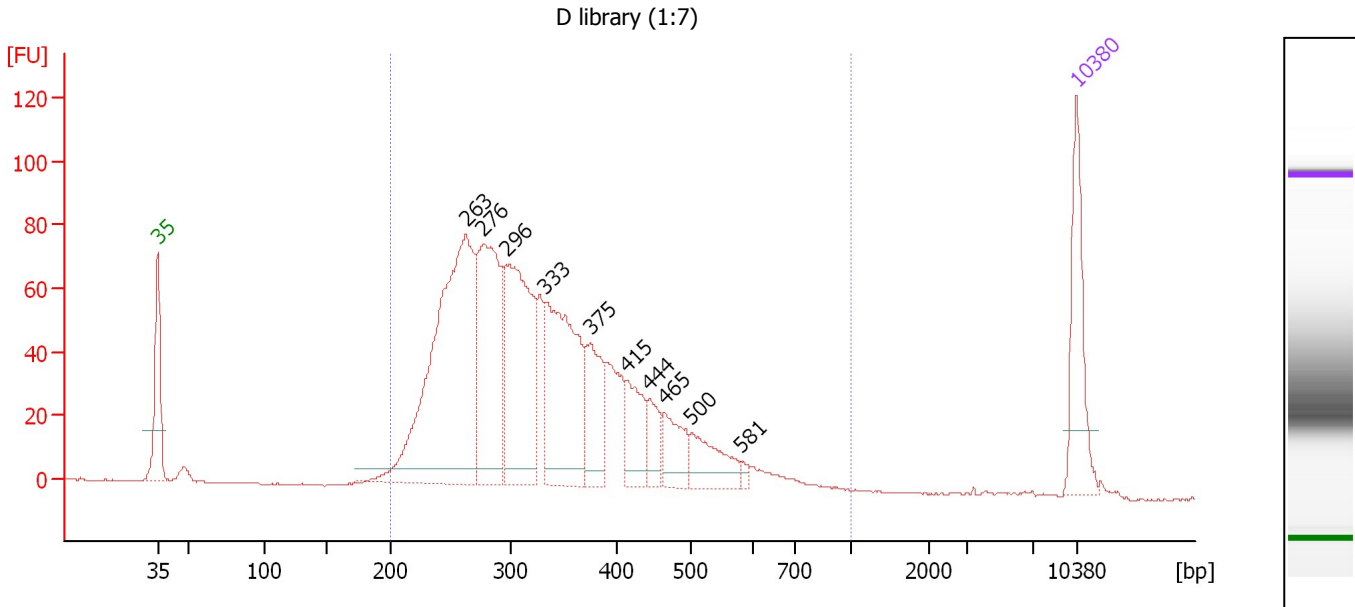
Region table for sample 4 : C library (1:10)

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	347	2,482.6	14,195.7	2,940.01	97	30.6

Assay Class: High Sensitivity DNA Assay
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Electropherogram Summary Continued ...



Overall Results for sample 5 : D library (1:7)

Number of peaks found: 10 Corr. Area 1: 1,570.3
 Noise: 0.2

Peak table for sample 5 : D library (1:7)

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	263	486.46	2,802.8		66.52
3	276	231.18	1,266.9		67.76
4	296	257.87	1,318.0		69.61
5	333	225.64	1,027.1		72.56
6	375	80.93	326.6		75.95
7	415	60.48	221.0		78.75
8	444	34.17	116.5		80.45
9	465	49.31	160.6		81.64
10	500	57.80	175.0		83.64
11	581	5.47	14.3		87.49
12	10,380	75.00	10.9	Upper Marker	113.00

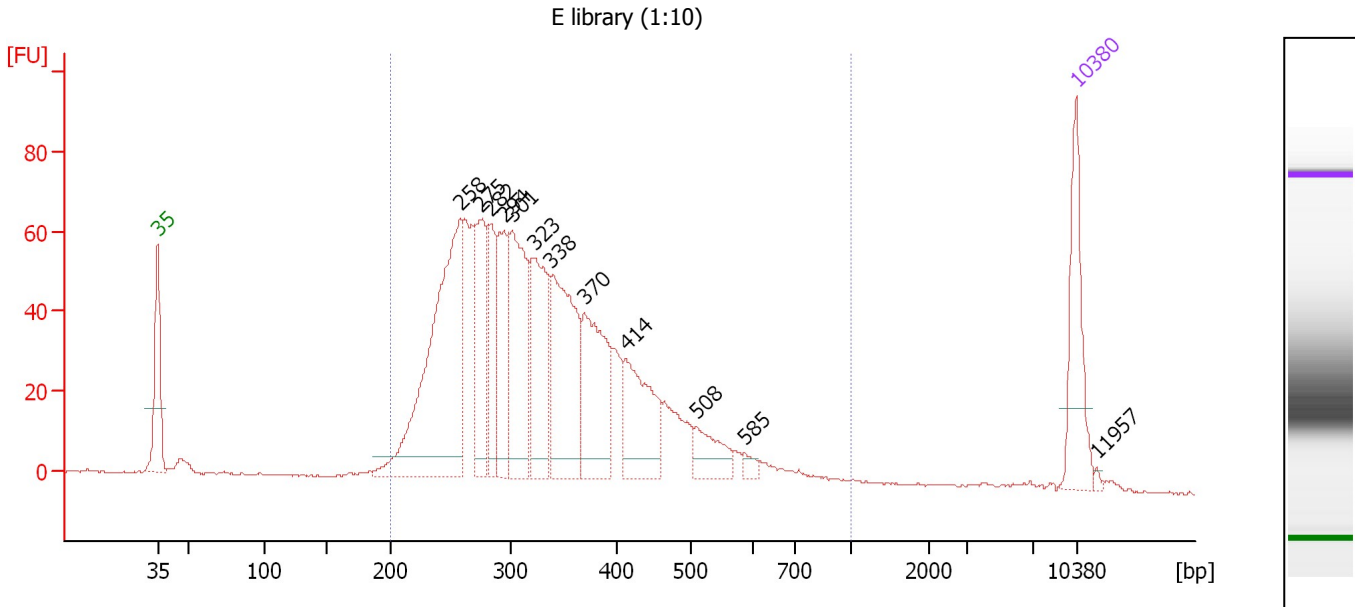
Region table for sample 5 : D library (1:7)

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	340	1,570.3	8,176.9	1,679.49	99	28.5

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Electropherogram Summary Continued ...



Overall Results for sample 6 : E library (1:10)

Number of peaks found: 12 Corr. Area 1: 1,392.1
 Noise: 0.2

Peak table for sample 6 : E library (1:10)

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	258	396.19	2,327.5		66.05
3	275	122.28	672.8		67.66
4	282	84.90	455.4		68.32
5	294	105.68	544.8		69.38
6	301	175.37	884.2		69.98
7	323	151.63	710.6		71.80
8	338	198.04	888.1		72.96
9	370	143.21	586.2		75.53
10	414	110.51	404.4		78.71
11	508	44.43	132.5		84.00
12	585	9.01	23.3		87.68
13	10,380	75.00	10.9	Upper Marker	113.00
14	11,957	0.00	0.0		114.51

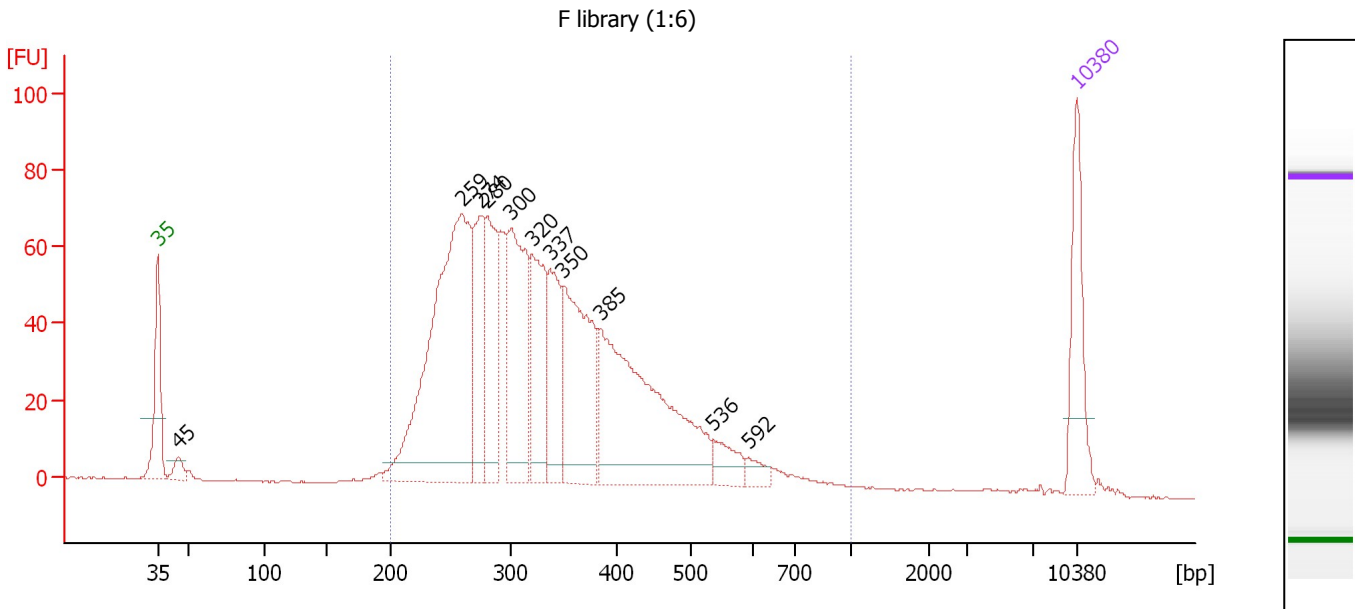
Region table for sample 6 : E library (1:10)

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	344	1,392.1	9,140.9	1,887.52	95	30.4

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Electropherogram Summary Continued ...



Overall Results for sample 7 : F library (1:6)

Number of peaks found: 11 Corr. Area 1: 1,472.5
 Noise: 0.2

Peak table for sample 7 : F 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	45	19.40	653.3		44.59
3	259	509.86	2,980.9		66.16
4	274	121.23	670.1		67.55
5	280	138.83	750.7		68.11
6	300	202.94	1,024.4		69.95
7	320	134.41	636.2		71.54
8	337	106.68	479.9		72.88
9	350	211.26	915.3		73.90
10	385	340.75	1,340.6		76.72
11	536	32.56	92.1		85.33
12	592	15.15	38.8		87.99
13	10,380	75.00	10.9	Upper Marker	113.00

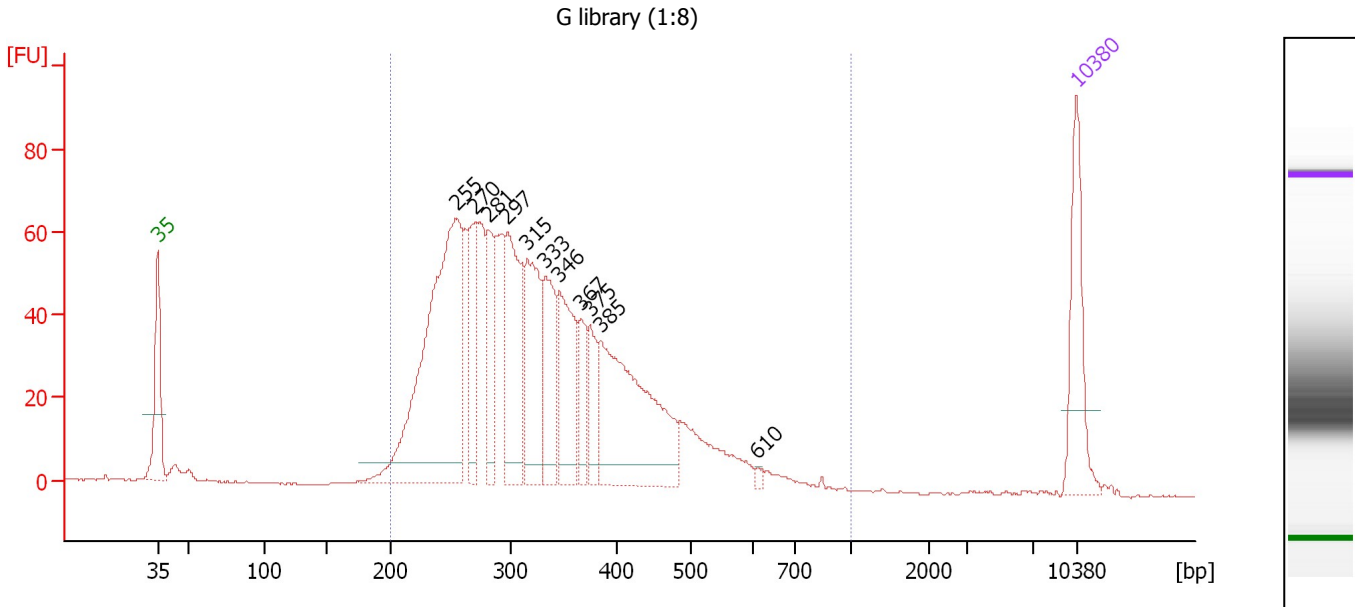
Region table for sample 7 : F library (1:6)

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	342	1,472.5	9,474.4	1,953.28	98	29.1

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Electropherogram Summary Continued ...



Overall Results for sample 8 : G library (1:8)

Number of peaks found: 11 Corr. Area 1: 1,341.3
 Noise: 0.2

Peak table for sample 8 : G 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	255	450.19	2,676.1		65.77
3	270	88.00	493.0		67.21
4	281	83.22	448.7		68.18
5	297	161.87	827.0		69.62
6	315	137.69	661.5		71.16
7	333	95.77	436.0		72.55
8	346	113.59	497.9		73.58
9	367	44.12	182.2		75.28
10	375	46.64	188.3		75.94
11	385	244.53	962.2		76.72
12	610	3.97	9.9		88.69
13	10,380	75.00	10.9	Upper Marker	113.00

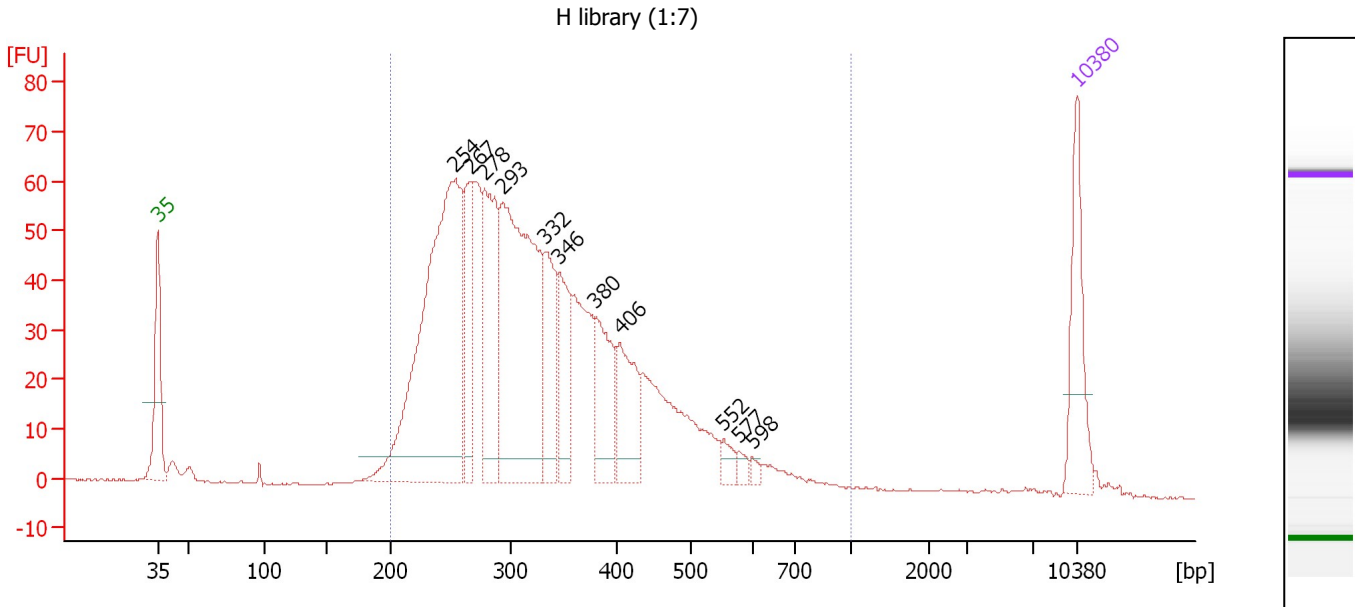
Region table for sample 8 : G library (1:8)

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	337	1,341.3	9,062.0	1,839.79	97	28.7

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Electropherogram Summary Continued ...



Overall Results for sample 9 : H library (1:7)

Number of peaks found: 11 Corr. Area 1: 1,269.6
 Noise: 0.2

Peak table for sample 9 : H library (1:7)

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	254	570.84	3,405.8		65.68
3	267	112.82	639.5		66.92
4	278	187.38	1,021.8		67.89
5	293	411.65	2,125.6		69.33
6	332	103.50	472.7		72.47
7	346	80.91	354.3		73.60
8	380	100.85	402.6		76.28
9	406	89.59	334.6		78.23
10	552	15.17	41.6		86.10
11	577	8.24	21.6		87.28
12	598	5.96	15.1		88.31
13	10,380	75.00	10.9	Upper Marker	113.00

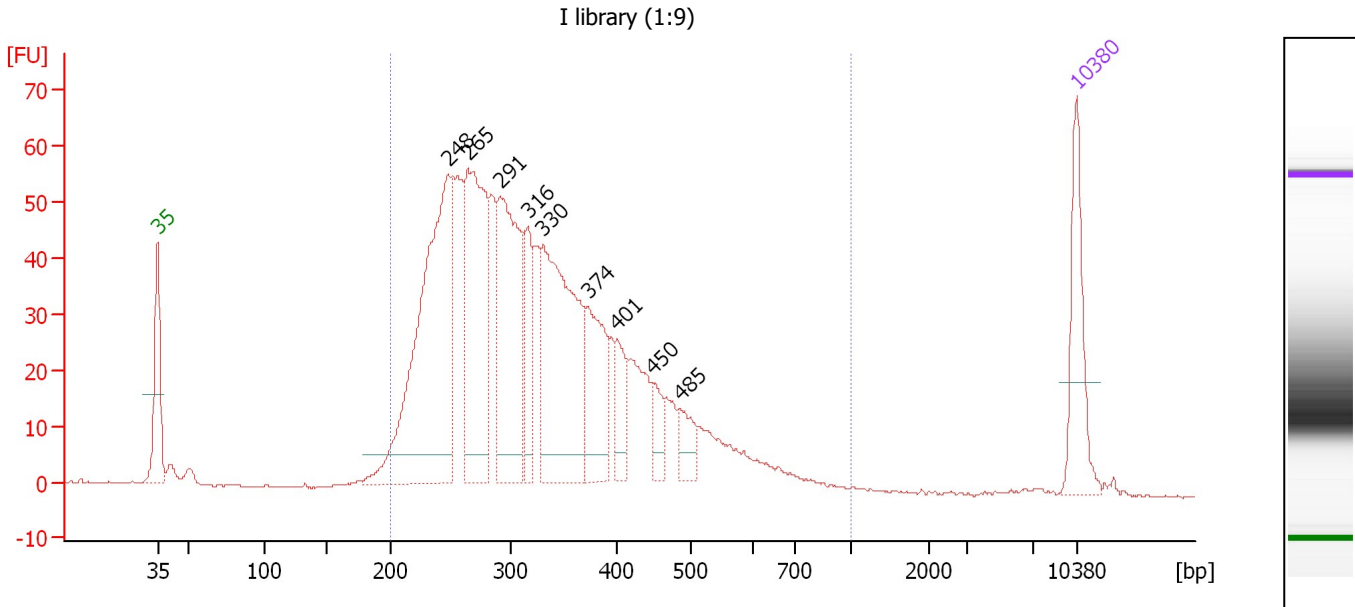
Region table for sample 9 : H library (1:7)

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	335	1,269.6	10,694.3	2,155.60	98	29.1

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-10-19\2016-10-19_003.xad

Created: 10/19/2016 12:42:23 PM
 Modified: 10/19/2016 1:22:51 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : I library (1:9)

Number of peaks found: 9 Corr. Area 1: 1,170.6
 Noise: 0.1

Peak table for sample 10 : I library (1:9)

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	248	467.35	2,851.4		65.16
3	265	284.87	1,631.6		66.66
4	291	258.40	1,343.9		69.14
5	316	80.71	387.1		71.21
6	330	293.64	1,347.6		72.34
7	374	112.87	457.7		75.80
8	401	46.18	174.4		77.97
9	450	28.88	97.2		80.76
10	485	32.89	102.7		82.78
11	10,380	75.00	10.9	Upper Marker	113.00

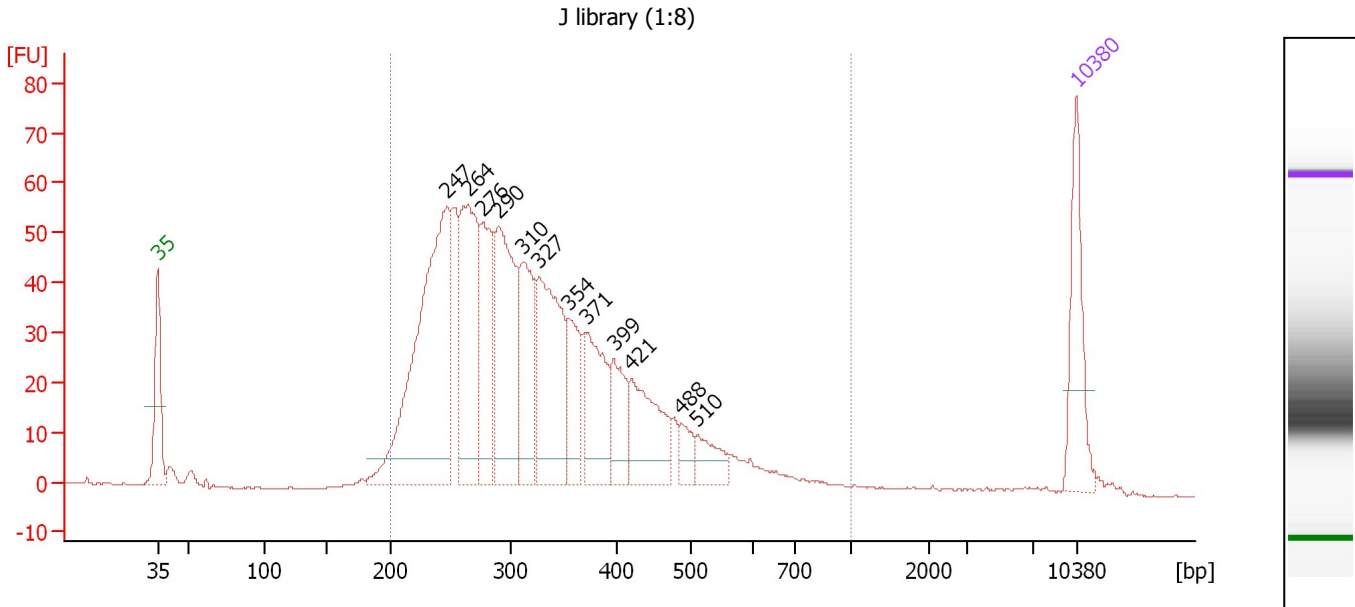
Region table for sample 10 : I library (1:9)

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	337	1,170.6	10,847.7	2,184.23	97	30.6

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-10-19\2016-10-19_003.xad

Created: 10/19/2016 12:42:23 PM
 Modified: 10/19/2016 1:22:51 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : J library (1:8)

Number of peaks found: 12 Corr. Area 1: 1,140.6
 Noise: 0.1

Peak table for sample 11 : J 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	247	443.37	2,719.9		65.04
3	264	225.07	1,289.9		66.64
4	276	137.66	755.4		67.73
5	290	218.04	1,140.8		68.98
6	310	133.21	651.0		70.74
7	327	198.87	921.6		72.09
8	354	74.92	320.4		74.27
9	371	114.29	466.5		75.61
10	399	60.56	230.2		77.79
11	421	104.04	374.7		79.09
12	488	23.20	72.1		82.93
13	510	35.40	105.1		84.12
14	10,380	75.00	10.9	Upper Marker	113.00

Region table for sample 11 : J library (1:8)

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	333	1,140.6	10,023.7	1,998.09	96	31.2

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-10-19\2016-10-19_003.xad

Created: 10/19/2016 12:42:23 PM
Modified: 10/19/2016 1:22:51 PM

Gel Image

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-10-19\2016-10-19_003.xad

Created: 10/19/2016 12:42:23 PM
 Modified: 10/19/2016 1:22:51 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 1:22:51 PM	(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_003.xad)		Instrument	Run		10/19/2016 12:42:29 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		10/19/2016 12:42:29 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		10/19/2016 12:42:29 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		10/19/2016 12:42:29 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		10/19/2016 12:42:29 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		10/19/2016 12:42:29 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		10/19/2016 12:42:29 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1