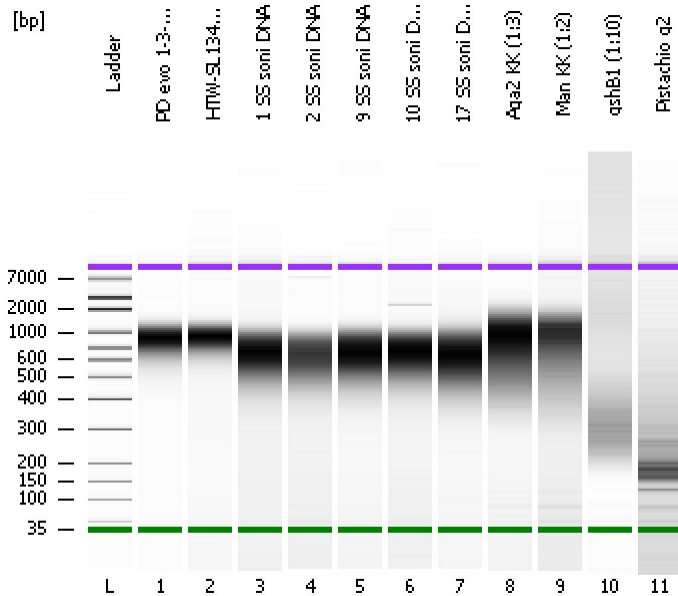


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2017-01-18\2017-01-18\_001.xad

Created: 1/18/2017 1:39:26 PM  
Modified: 1/18/2017 2:56:19 PM

**Electrophoresis File Run Summary**



Instrument Information:

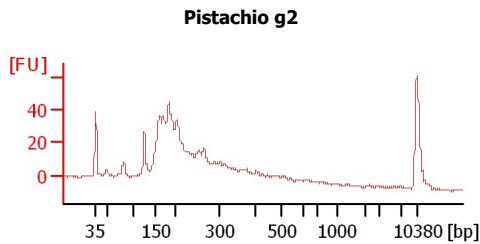
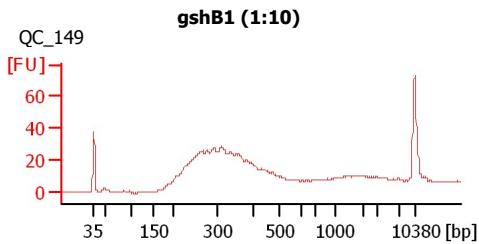
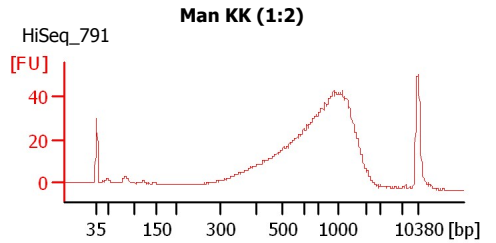
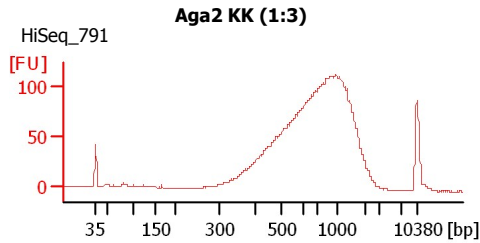
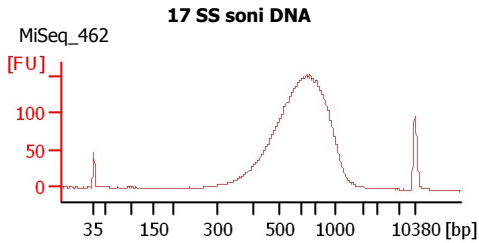
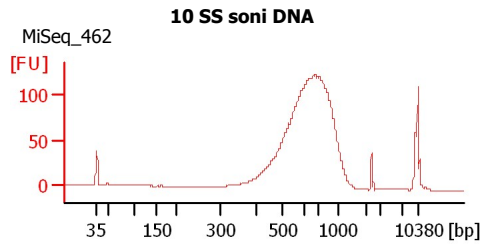
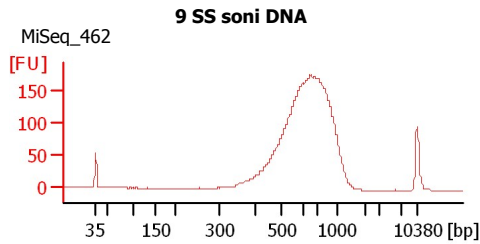
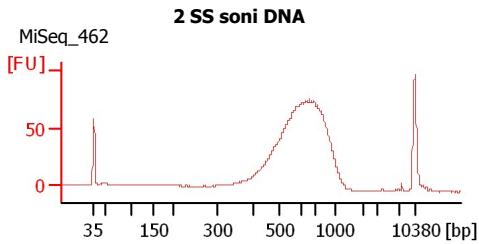
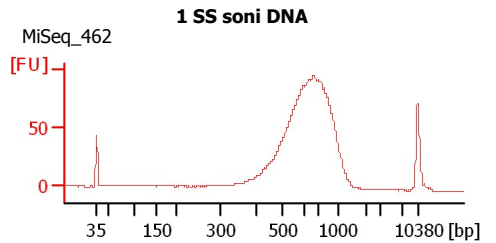
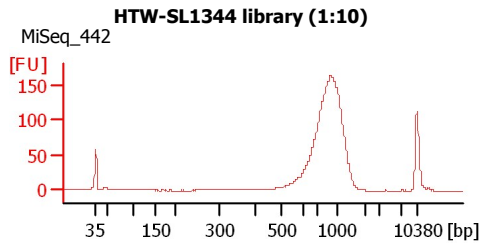
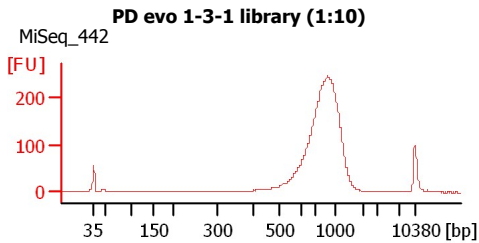
Instrument Name: DE13701086      Firmware: C.01.069  
Serial#: DE13701086      Type: G2938B

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:



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-01-18\2017-01-18\_001.xad

Created: 1/18/2017 1:39:26 PM  
 Modified: 1/18/2017 2:56:19 PM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
PD evo 1-3-1 library (1:10)	MiSeq_442	<input type="checkbox"/>	✓			
HTW-SL1344 library (1:10)	MiSeq_442	<input type="checkbox"/>	✓			
1 SS soni DNA	MiSeq_462	<input type="checkbox"/>	✓			
2 SS soni DNA	MiSeq_462	<input type="checkbox"/>	✓			
9 SS soni DNA	MiSeq_462	<input type="checkbox"/>	✓			
10 SS soni DNA	MiSeq_462	<input type="checkbox"/>	✓			
17 SS soni DNA	MiSeq_462	<input type="checkbox"/>	✓			
Aga2 KK (1:3)	HiSeq_791	<input type="checkbox"/>	✓			
Man KK (1:2)	HiSeq_791	<input type="checkbox"/>	✓			
gshB1 (1:10)	QC_149	<input type="checkbox"/>	✓			
Pistachio g2		<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\2017-01-18\2017-01-18\_001.xad

Created: 1/18/2017 1:39:26 PM  
Modified: 1/18/2017 2:56:19 PM

**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

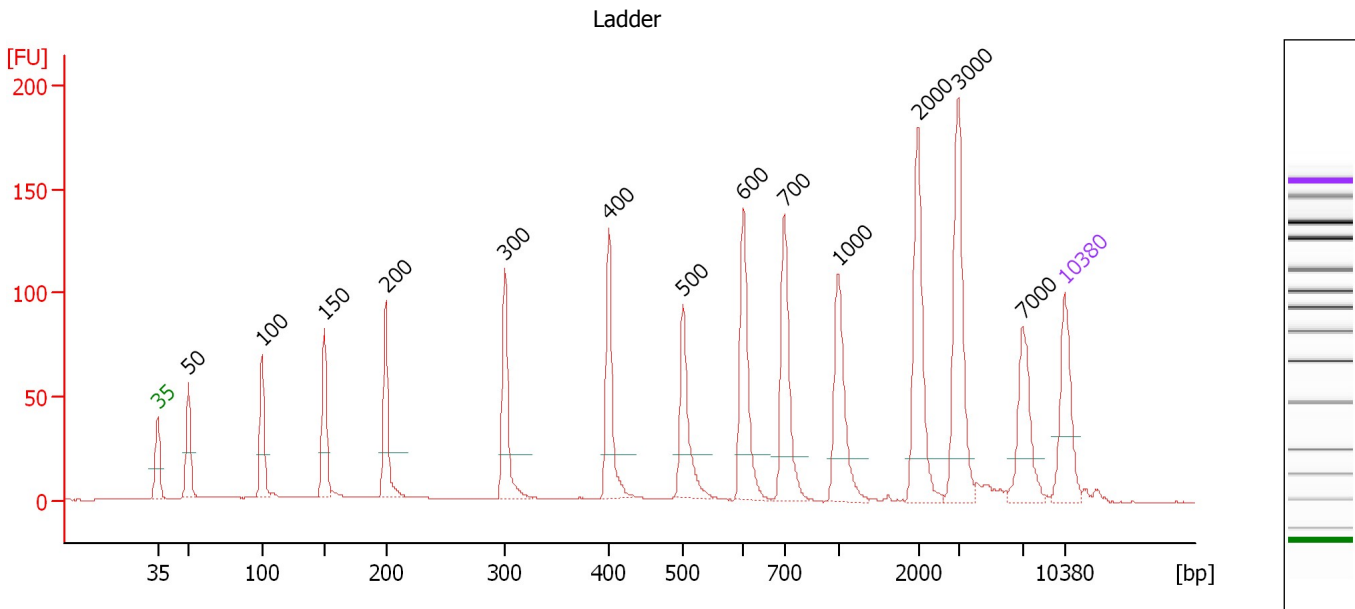
**Ladder**

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:\... bioanalyzer\2100 expert\data\2017-01-18\2017-01-18\_001.xad

Created: 1/18/2017 1:39:26 PM  
 Modified: 1/18/2017 2:56:19 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.2

**Peak table for Ladder**

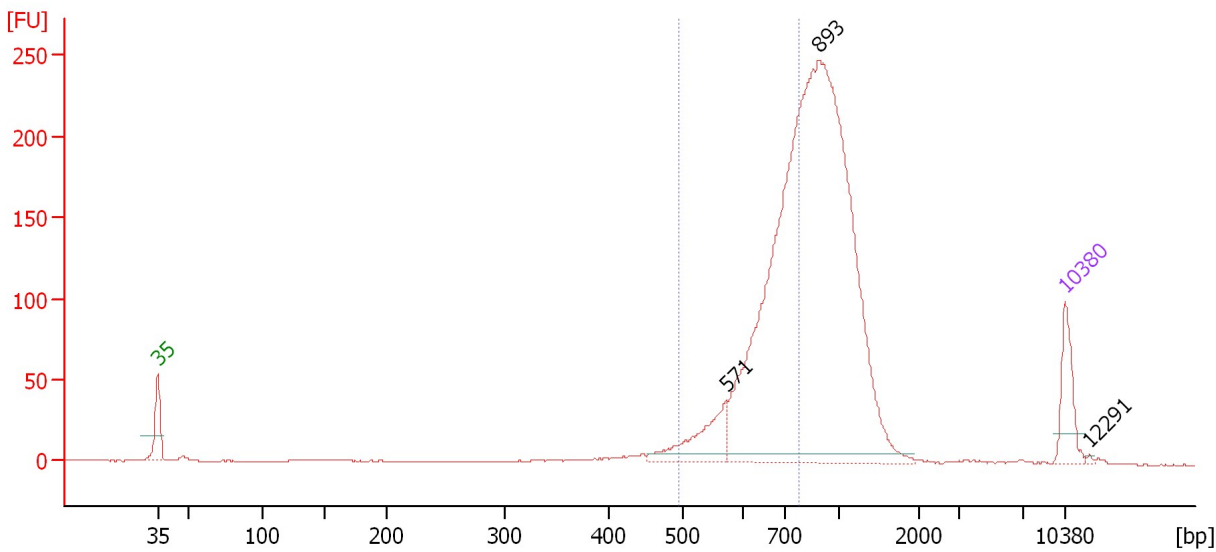
Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	50	150.00	4,545.5	Ladder Peak	45.41
3	100	150.00	2,272.7	Ladder Peak	51.06
4	150	150.00	1,515.2	Ladder Peak	55.87
5	200	150.00	1,136.4	Ladder Peak	60.59
6	300	150.00	757.6	Ladder Peak	69.77
7	400	150.00	568.2	Ladder Peak	77.78
8	500	150.00	454.5	Ladder Peak	83.53
9	600	150.00	378.8	Ladder Peak	88.19
10	700	150.00	324.7	Ladder Peak	91.34
11	1,000	150.00	227.3	Ladder Peak	95.51
12	2,000	150.00	113.6	Ladder Peak	101.65
13	3,000	150.00	75.8	Ladder Peak	104.75
14	7,000	150.00	32.5	Ladder Peak	109.76
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-01-18\2017-01-18\_001.xad

Created: 1/18/2017 1:39:26 PM  
 Modified: 1/18/2017 2:56:19 PM

**Electropherogram Summary Continued ...**

PD evo 1-3-1 library (1:10) [ MiSeq\_442 ]



**Overall Results for sample 1 : PD evo 1-3-1 library (1:10)**

Number of peaks found: 3                      Corr. Area 1: 764.9  
 Noise: 0.2

**Peak table for sample 1 : PD evo 1-3-1 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	571	130.82	347.1		86.84
3	893	2,006.60	3,403.7		94.03
4	10,380	75.00	10.9	Upper Marker	113.00
5	12,291	0.00	0.0		114.83

**Region table for sample 1 : PD evo 1-3-1 library (1:10)**

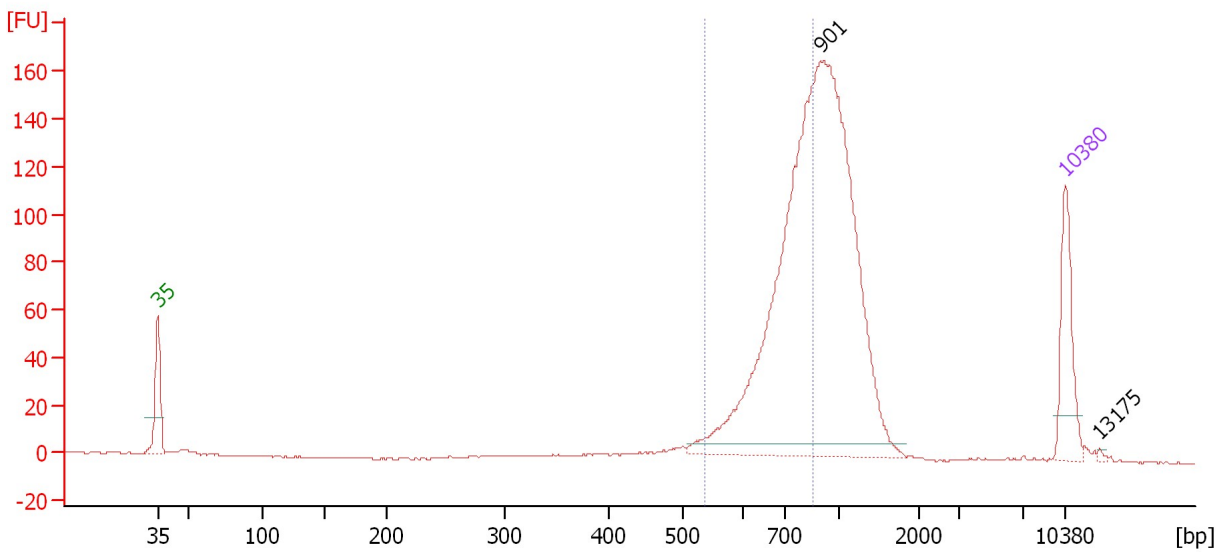
From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
494	781	663	764.9	2,056.7	887.98	37	10.4

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-01-18\2017-01-18\_001.xad

Created: 1/18/2017 1:39:26 PM  
 Modified: 1/18/2017 2:56:19 PM

**Electropherogram Summary Continued ...**

HTW-SL1344 library (1:10) [ MiSeq\_442 ]



**Overall Results for sample 2 : HTW-SL1344 library (1:10)**

Number of peaks found: 2                      Corr. Area 1: 554.5  
 Noise: 0.3

**Peak table for sample 2 : HTW-SL1344 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	901	1,051.72	1,768.6		94.13
3	10,380	75.00	10.9	Upper Marker	113.00
4	13,175	0.00	0.0		115.68

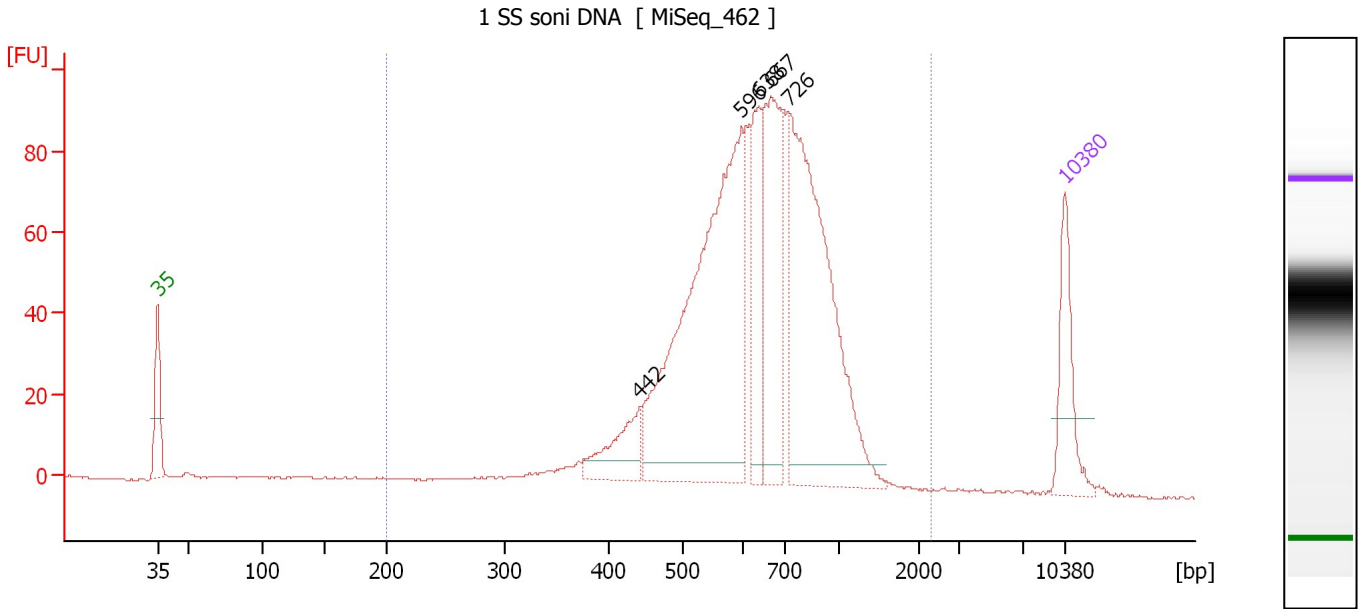
**Region table for sample 2 : HTW-SL1344 library (1:10)**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
537	863	724	554.5	1,130.6	531.63	44	11.7

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-01-18\2017-01-18\_001.xad

Created: 1/18/2017 1:39:26 PM  
 Modified: 1/18/2017 2:56:19 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : 1 SS soni DNA**

Number of peaks found: 5                      Corr. Area 1: 1,296.3  
 Noise: 0.2

**Peak table for sample 3 : 1 SS soni DNA**

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	442	83.73	287.1		80.19
3	596	618.32	1,570.8		88.03
4	638	127.28	302.4		89.38
5	667	225.43	512.4		90.29
6	726	499.12	1,042.2		91.69
7	10,380	75.00	10.9	Upper Marker	113.00

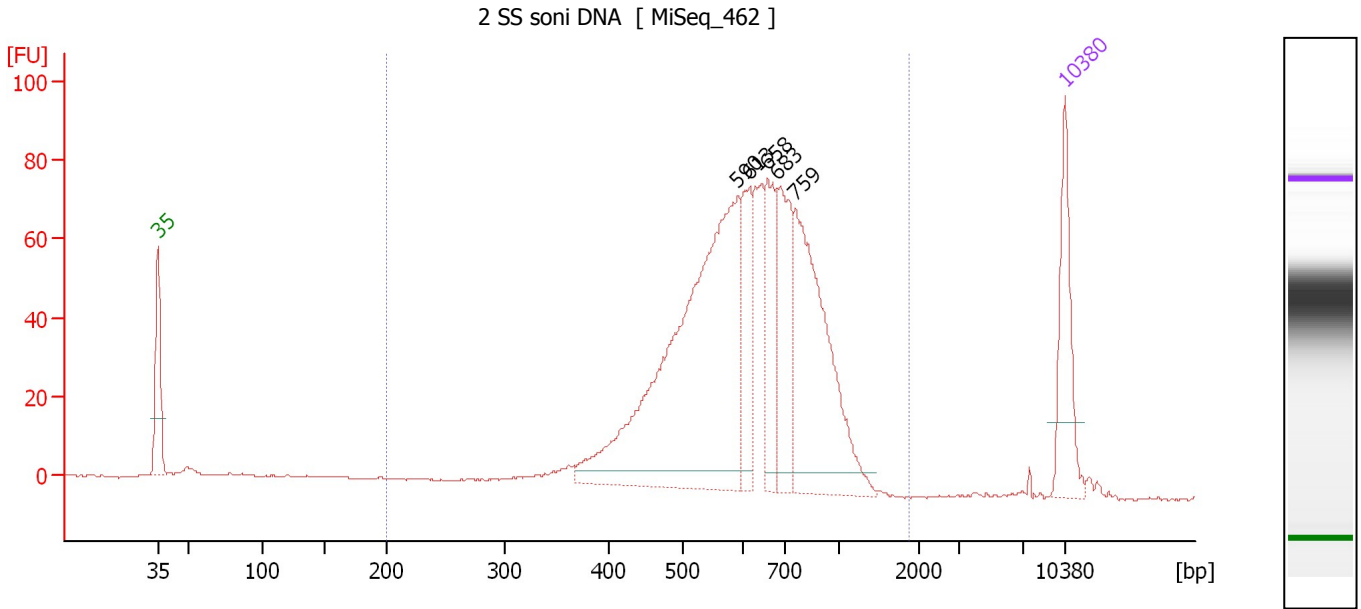
**Region table for sample 3 : 1 SS soni DNA**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	2,339	668	1,296.3	4,527.2	1,798.04	98	29.1

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-01-18\2017-01-18\_001.xad

Created: 1/18/2017 1:39:26 PM  
 Modified: 1/18/2017 2:56:19 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : 2 SS soni DNA**

Number of peaks found: 5                      Corr. Area 1: 1,105.2  
 Noise: 0.2

**Peak table for sample 4 : 2 SS soni DNA**

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	590	565.31	1,451.5		87.73
3	613	85.23	210.7		88.60
4	658	97.83	225.2		90.02
5	683	124.87	277.2		90.79
6	759	270.27	539.3		92.16
7	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 4 : 2 SS soni DNA**

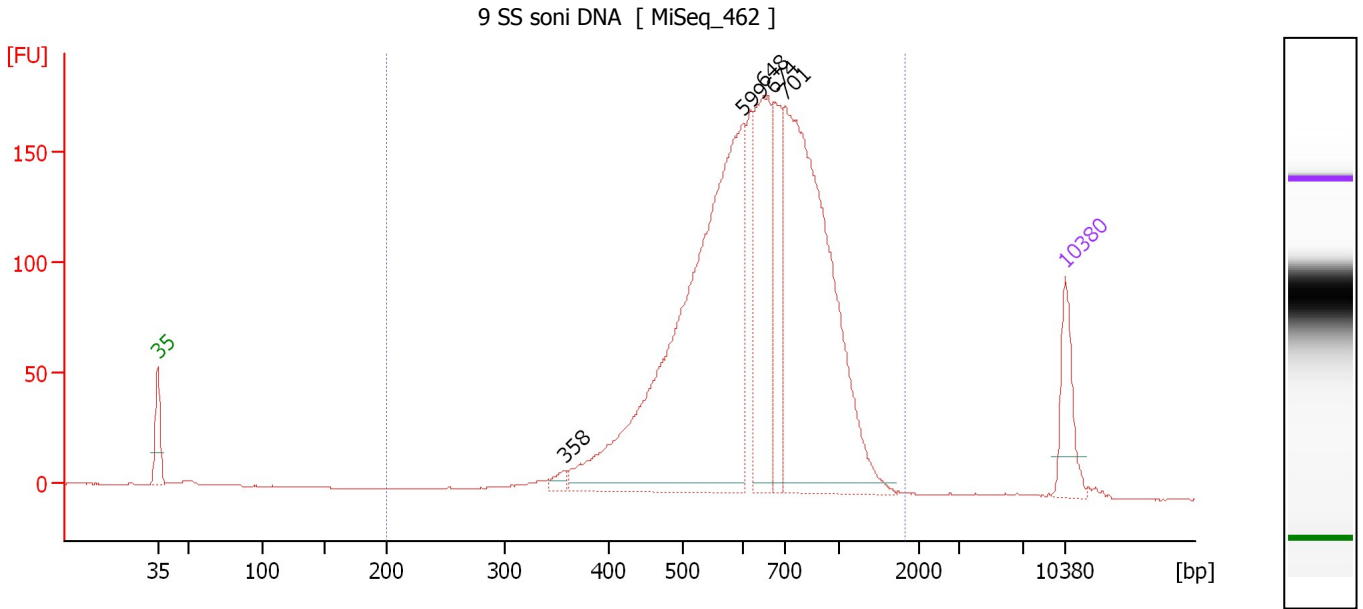
From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,873	639	1,105.2	3,382.4	1,303.34	97	26.2



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-01-18\2017-01-18\_001.xad

Created: 1/18/2017 1:39:26 PM  
 Modified: 1/18/2017 2:56:19 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : 9 SS soni DNA**

Number of peaks found: 5                      Corr. Area 1: 2,436.2  
 Noise: 0.2

**Peak table for sample 5 : 9 SS soni DNA**

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	358	17.65	74.7		74.41
3	599	1,121.66	2,836.7		88.15
4	648	307.53	719.1		89.70
5	674	164.30	369.2		90.53
6	701	890.30	1,923.6		91.35
7	10,380	75.00	10.9	Upper Marker	113.00

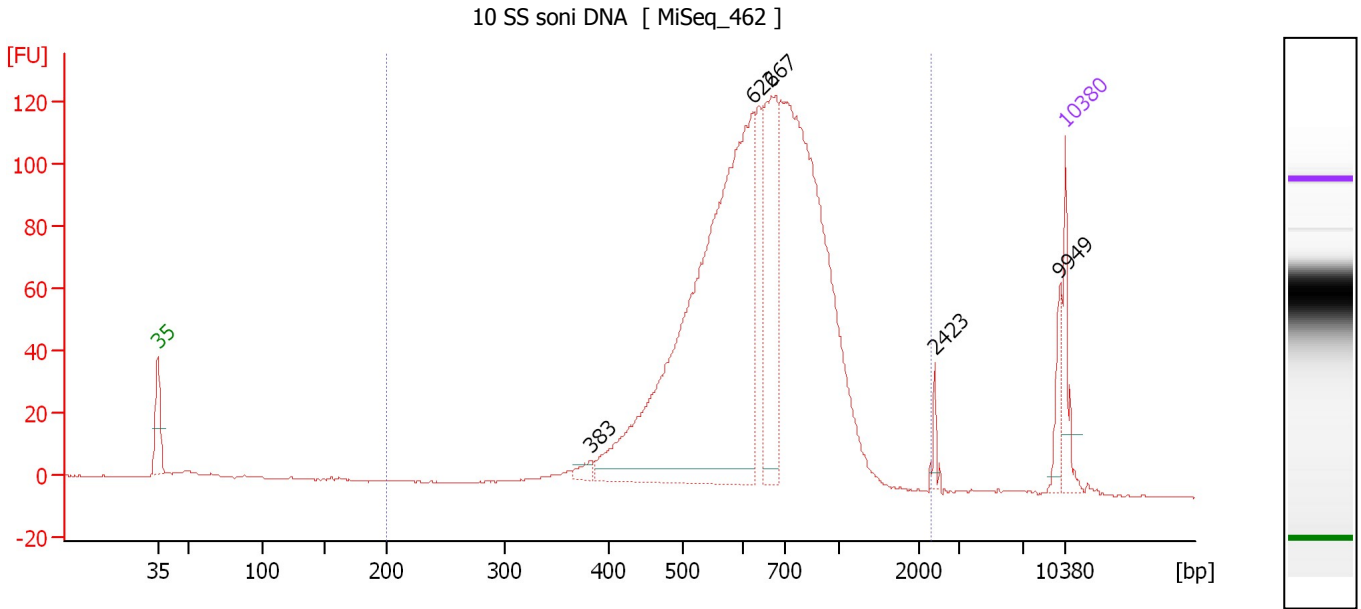
**Region table for sample 5 : 9 SS soni DNA**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,823	672	2,436.2	6,530.8	2,648.30	100	28.2

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-01-18\2017-01-18\_001.xad

Created: 1/18/2017 1:39:26 PM  
 Modified: 1/18/2017 2:56:19 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : 10 SS soni DNA**

Number of peaks found: 5                      Corr. Area 1: 1,641.0  
 Noise: 0.2

**Peak table for sample 6 : 10 SS soni DNA**

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	383	22.92	90.7		76.42
3	622	1,531.64	3,729.8		88.89
4	667	379.80	863.2		90.29
5	2,423	20.12	12.6		102.96
6	9,949	44.96	6.8		112.59
7	10,380	75.00	10.9	Upper Marker	113.00

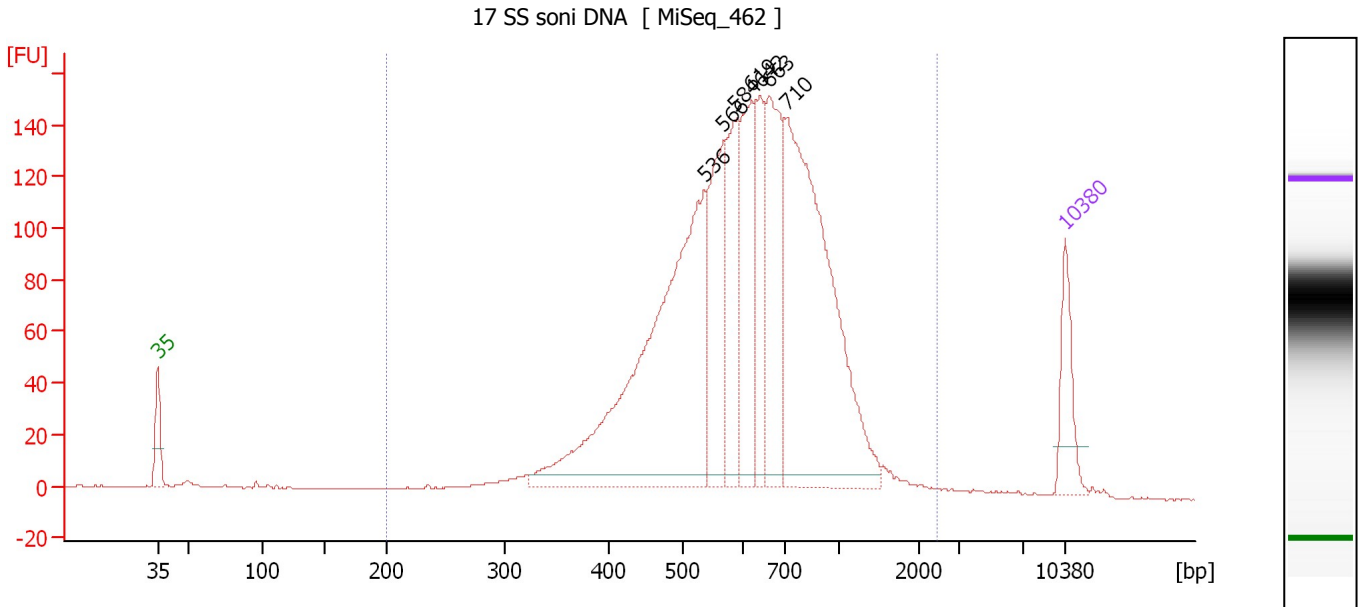
**Region table for sample 6 : 10 SS soni DNA**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	2,329	674	1,641.0	8,649.8	3,520.31	96	28.0

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-01-18\2017-01-18\_001.xad

Created: 1/18/2017 1:39:26 PM  
 Modified: 1/18/2017 2:56:19 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : 17 SS soni DNA**

Number of peaks found: 7                      Corr. Area 1: 2,372.3  
 Noise: 0.2

**Peak table for sample 7 : 17 SS soni DNA**

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	536	846.06	2,392.2		85.20
3	566	239.71	641.3		86.62
4	584	181.78	471.2		87.47
5	619	236.27	578.4		88.79
6	642	142.24	335.5		89.53
7	663	269.73	616.8		90.16
8	710	752.91	1,606.4		91.48
9	10,380	75.00	10.9	Upper Marker	113.00

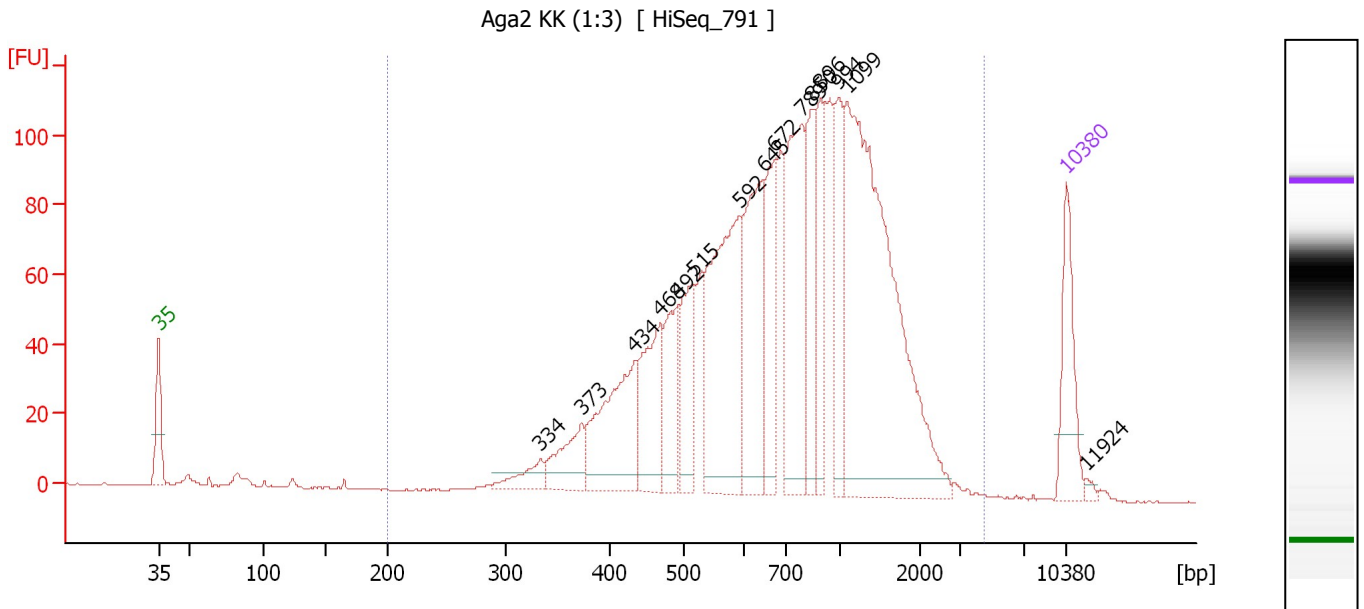
**Region table for sample 7 : 17 SS soni DNA**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
200	2,479	659	2,372.3	7,250.8	2,796.10	99	34.6

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-01-18\2017-01-18\_001.xad

Created: 1/18/2017 1:39:26 PM  
 Modified: 1/18/2017 2:56:19 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : Aga2 KK (1:3)**

Number of peaks found: 15                      Corr. Area 1: 2,095.6  
 Noise: 0.2

**Peak table for sample 8 : Aga2 KK (1:3)**

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	334	33.68	152.9		72.47
3	373	70.53	286.2		75.65
4	434	180.82	631.6		79.72
5	468	119.61	387.4		81.68
6	492	103.62	319.3		83.05
7	515	95.57	281.3		84.22
8	592	280.14	717.1		87.81
9	645	198.86	467.0		89.61
10	672	112.28	253.1		90.46
11	789	214.74	412.3		92.58
12	850	92.11	164.2		93.42
13	896	92.33	156.2		94.06
14	994	94.47	143.9		95.43
15	1,099	534.52	736.8		96.12
16	10,380	75.00	10.9	Upper Marker	113.00
17	11,924	0.00	0.0		114.48

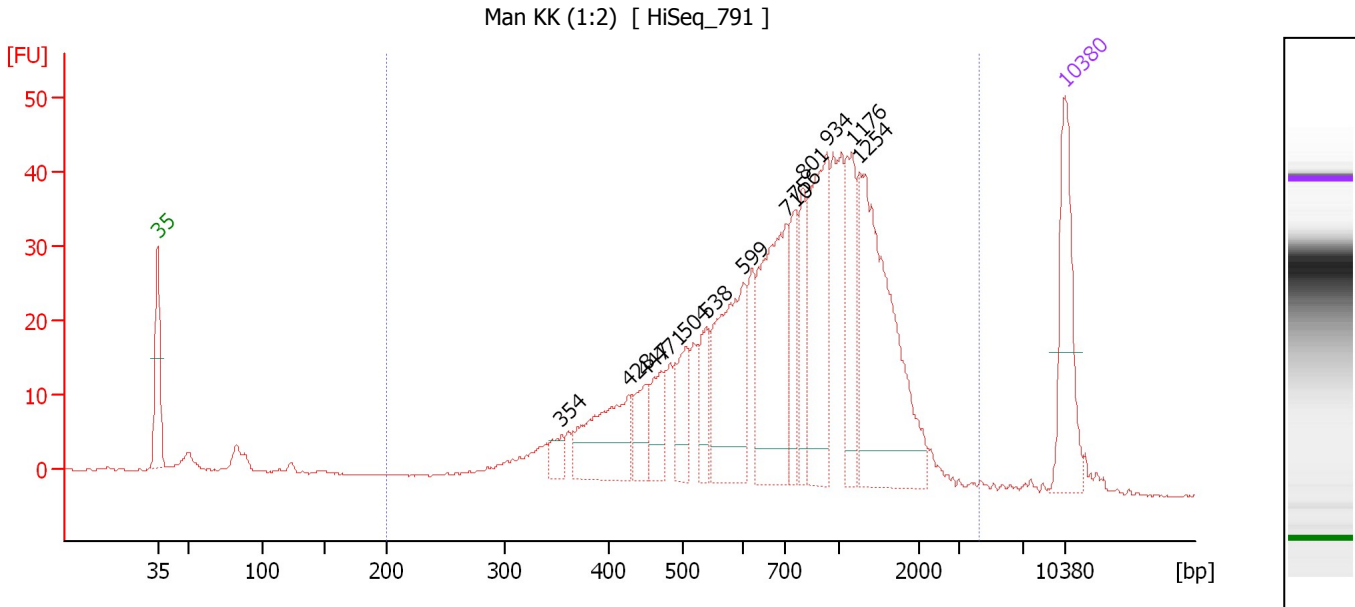
**Region table for sample 8 : Aga2 KK (1:3)**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	4,468	866	2,095.6	5,678.6	2,479.31	99	51.2

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-01-18\2017-01-18\_001.xad

Created: 1/18/2017 1:39:26 PM  
 Modified: 1/18/2017 2:56:19 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : Man KK (1:2)**

Number of peaks found: 13                      Corr. Area 1: 758.1  
 Noise: 0.2

**Peak table for sample 9 : Man KK (1:2)**

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	354	17.46	74.6		74.12
3	428	95.15	336.7		79.40
4	447	35.48	120.1		80.51
5	471	40.13	129.0		81.88
6	504	45.54	136.8		83.72
7	538	38.87	109.5		85.31
8	599	131.81	333.3		88.15
9	710	161.19	343.9		91.48
10	756	48.65	97.6		92.11
11	801	50.02	94.6		92.74
12	934	128.04	207.8		94.59
13	1,176	68.11	87.7		96.59
14	1,254	207.55	250.9		97.07
15	10,380	75.00	10.9	Upper Marker	113.00

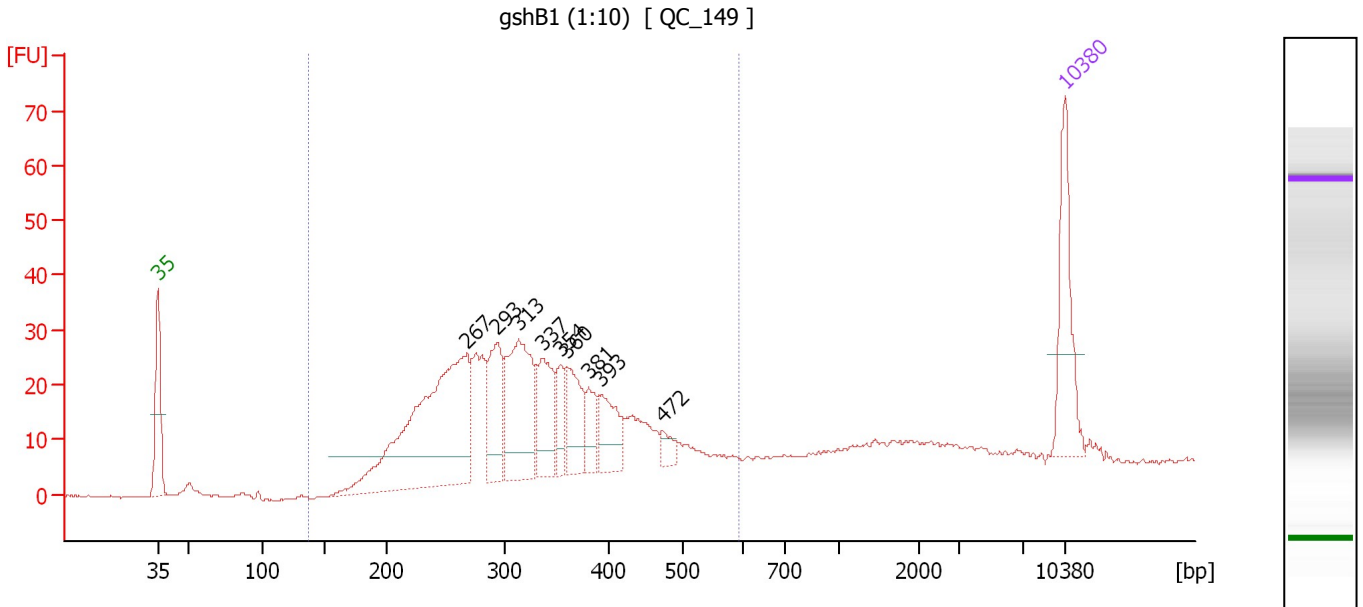
**Region table for sample 9 : Man KK (1:2)**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	4,235	878	758.1	3,135.1	1,351.12	96	51.2

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-01-18\2017-01-18\_001.xad

Created: 1/18/2017 1:39:26 PM  
 Modified: 1/18/2017 2:56:19 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : gshB1 (1:10)**

Number of peaks found: 9                      Corr. Area 1: 543.6  
 Noise: 0.2

**Peak table for sample 10 : gshB1 (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	267	372.91	2,113.2		66.77
3	293	88.37	456.5		69.16
4	313	154.29	745.7		70.85
5	337	74.79	336.6		72.70
6	354	34.50	147.7		74.08
7	360	62.98	265.2		74.56
8	381	33.55	133.4		76.25
9	393	50.78	195.9		77.21
10	472	14.77	47.4		81.92
11	10,380	75.00	10.9	Upper Marker	113.00

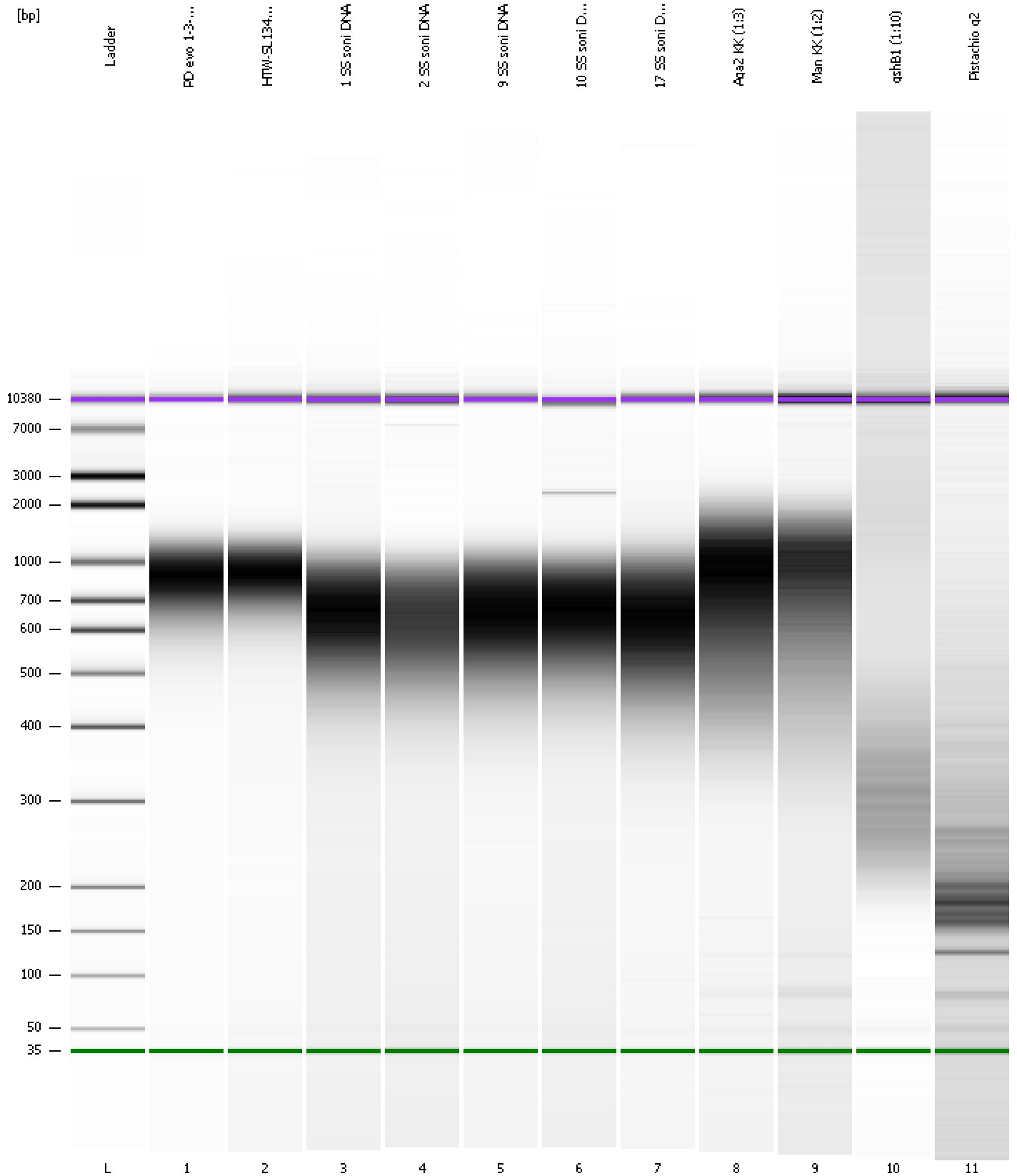
**Region table for sample 10 : gshB1 (1:10)**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
138	591	329	543.6	5,507.6	1,102.96	85	25.0

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2017-01-18\2017-01-18\_001.xad

Created: 1/18/2017 1:39:26 PM  
Modified: 1/18/2017 2:56:19 PM

**Gel Image**



Assay Class: High Sensitivity DNA Assay Created: 1/18/2017 1:39:26 PM  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-01-18\2017-01-18\_001.xad Modified: 1/18/2017 2:56:19 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		1/18/2017 2:20:45 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\data\2017-01-18\2017-01-18_001.xad)		Instrument	Run		1/18/2017 1:39:32 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		1/18/2017 1:39:32 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		1/18/2017 1:39:32 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		1/18/2017 1:39:32 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		1/18/2017 1:39:32 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		1/18/2017 1:39:32 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		1/18/2017 1:39:32 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1