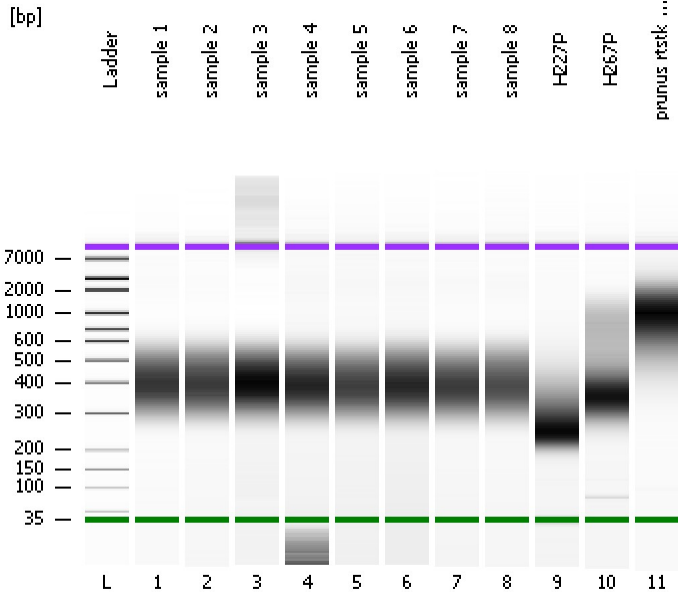


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-21\2015-10-21\_001.xad

Created: 10/21/2015 10:39:31 AM  
Modified: 10/21/2015 11:21:09 AM

Electrophoresis File Run Summary



Instrument Information:

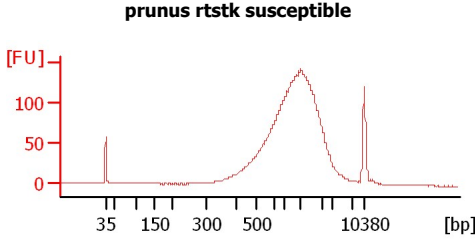
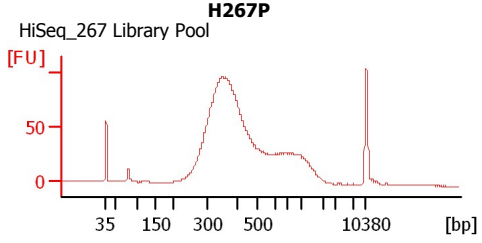
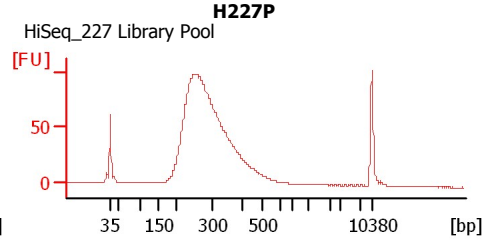
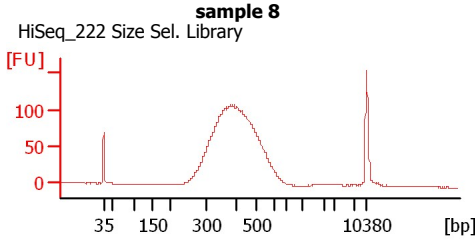
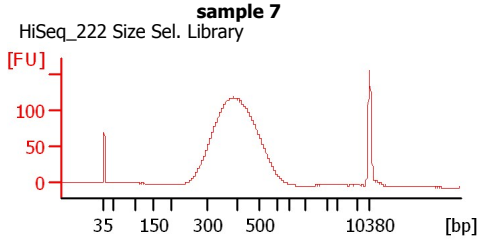
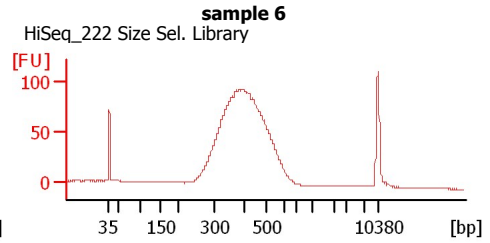
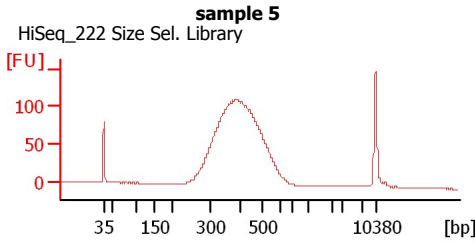
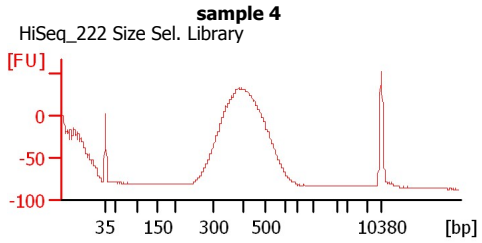
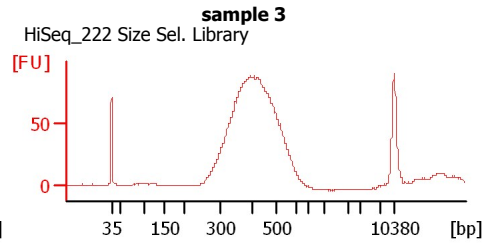
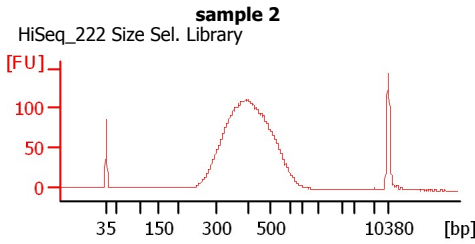
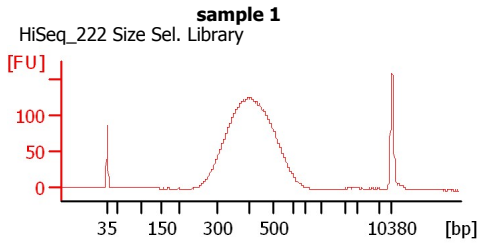
Instrument Name: DE13701086      Firmware: C.01.069  
Serial#: DE13701086      Type: G2938B

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:



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-21\2015-10-21\_001.xad

Created: 10/21/2015 10:39:31 AM  
 Modified: 10/21/2015 11:21:09 AM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
sample 1	HiSeq_222 Size Sel. Library	<input type="checkbox"/>	✓			
sample 2	HiSeq_222 Size Sel. Library	<input type="checkbox"/>	✓			
sample 3	HiSeq_222 Size Sel. Library	<input type="checkbox"/>	✓			
sample 4	HiSeq_222 Size Sel. Library	<input type="checkbox"/>	✓			
sample 5	HiSeq_222 Size Sel. Library	<input type="checkbox"/>	✓			
sample 6	HiSeq_222 Size Sel. Library	<input type="checkbox"/>	✓			
sample 7	HiSeq_222 Size Sel. Library	<input type="checkbox"/>	✓			
sample 8	HiSeq_222 Size Sel. Library	<input type="checkbox"/>	✓			
H227P	HiSeq_227 Library Pool	<input type="checkbox"/>	✓			
H267P	HiSeq_267 Library Pool	<input type="checkbox"/>	✓			
prunus rtstk susceptible		<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\2015-10-21\2015-10-21\_001.xad

Created: 10/21/2015 10:39:31 AM  
Modified: 10/21/2015 11:21:09 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

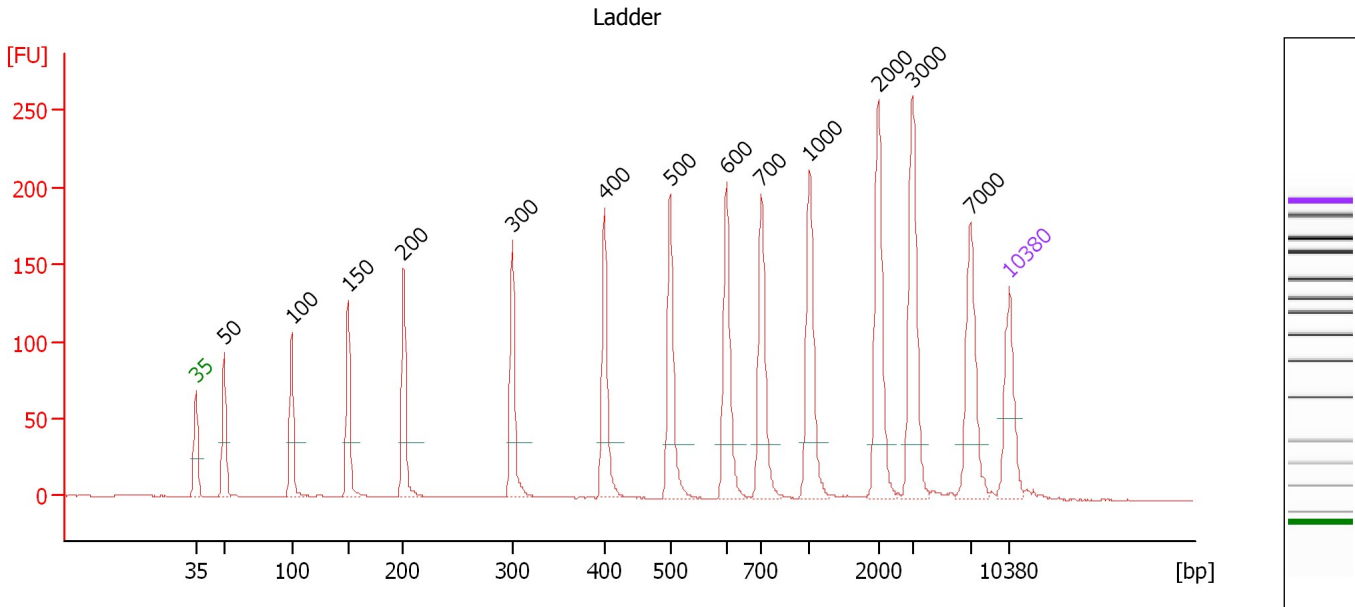
**Ladder**

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\2015-10-21\2015-10-21\_001.xad

Created: 10/21/2015 10:39:31 AM  
 Modified: 10/21/2015 11:21:09 AM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.2

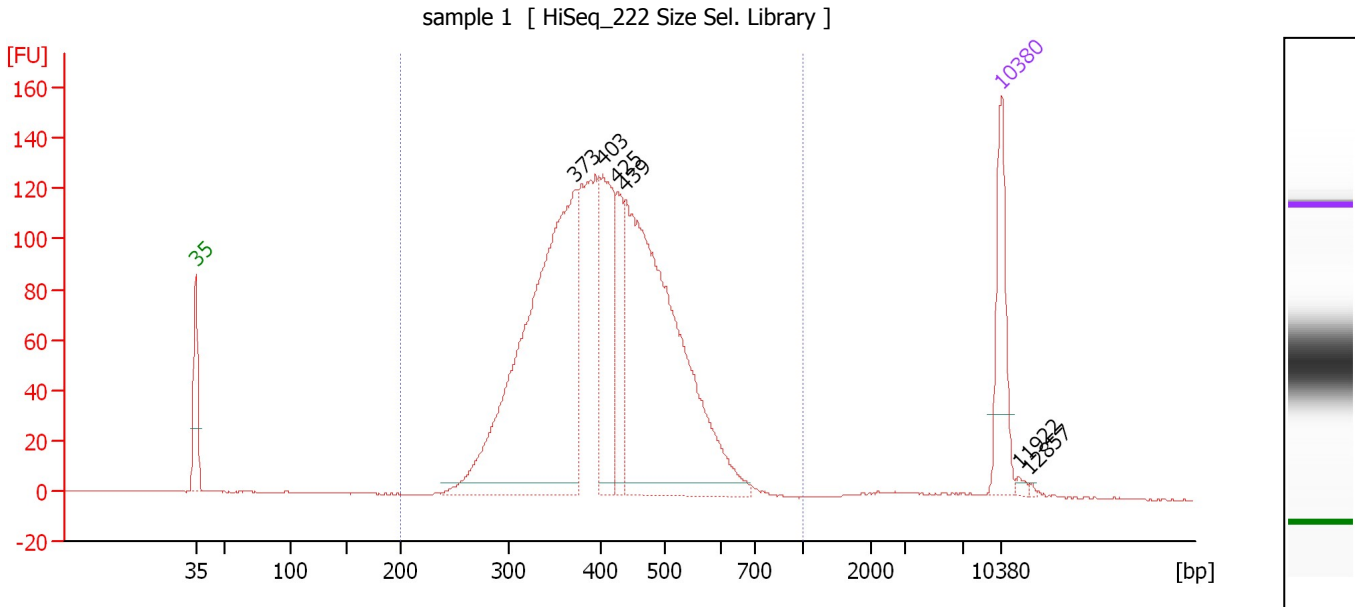
**Peak table for Ladder**

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	45.43
3	100	150.00	2,272.7	Ladder Peak	51.22
4	150	150.00	1,515.2	Ladder Peak	56.08
5	200	150.00	1,136.4	Ladder Peak	60.86
6	300	150.00	757.6	Ladder Peak	70.22
7	400	150.00	568.2	Ladder Peak	78.16
8	500	150.00	454.5	Ladder Peak	83.81
9	600	150.00	378.8	Ladder Peak	88.67
10	700	150.00	324.7	Ladder Peak	91.66
11	1,000	150.00	227.3	Ladder Peak	95.79
12	2,000	150.00	113.6	Ladder Peak	101.71
13	3,000	150.00	75.8	Ladder Peak	104.65
14	7,000	150.00	32.5	Ladder Peak	109.65
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-21\2015-10-21\_001.xad

Created: 10/21/2015 10:39:31 AM  
 Modified: 10/21/2015 11:21:09 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : sample 1**

Number of peaks found: 6                      Corr. Area 1: 2,301.6  
 Noise: 0.2

**Peak table for sample 1 : sample 1**

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	373	672.48	2,734.6		75.98
3	403	178.93	672.2		78.35
4	425	87.11	310.2		79.60
5	439	604.62	2,088.7		80.34
6	10,380	75.00	10.9	Upper Marker	113.00
7	11,922	0.00	0.0		114.53
8	12,857	0.00	0.0		115.46

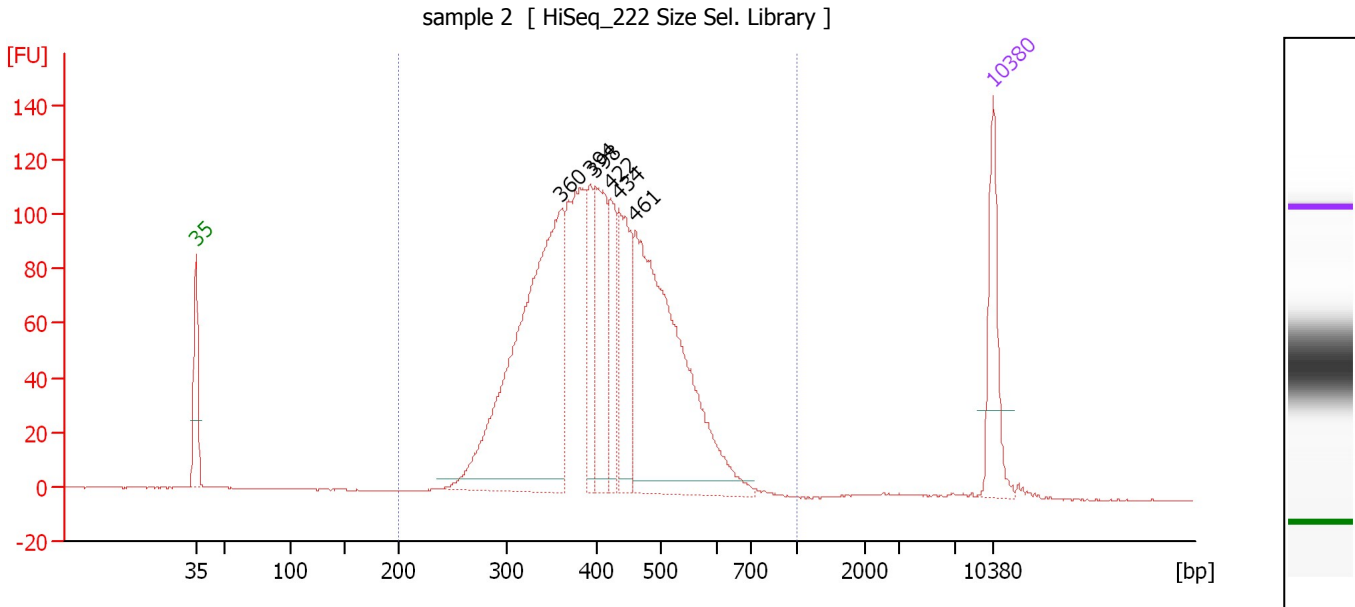
**Region table for sample 1 : sample 1**

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	415	2,301.5	6,999.4	1,819.44	98	19.7

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-21\2015-10-21\_001.xad

Created: 10/21/2015 10:39:31 AM  
 Modified: 10/21/2015 11:21:09 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : sample 2**

Number of peaks found: 6                      Corr. Area 1: 2,100.2  
 Noise: 0.1

**Peak table for sample 2 : sample 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	360	599.68	2,524.3		74.98
3	394	77.73	299.3		77.65
4	398	157.53	599.3		78.02
5	422	93.19	334.2		79.43
6	434	143.37	500.5		80.08
7	461	499.44	1,642.9		81.58
8	10,380	75.00	10.9	Upper Marker	113.00

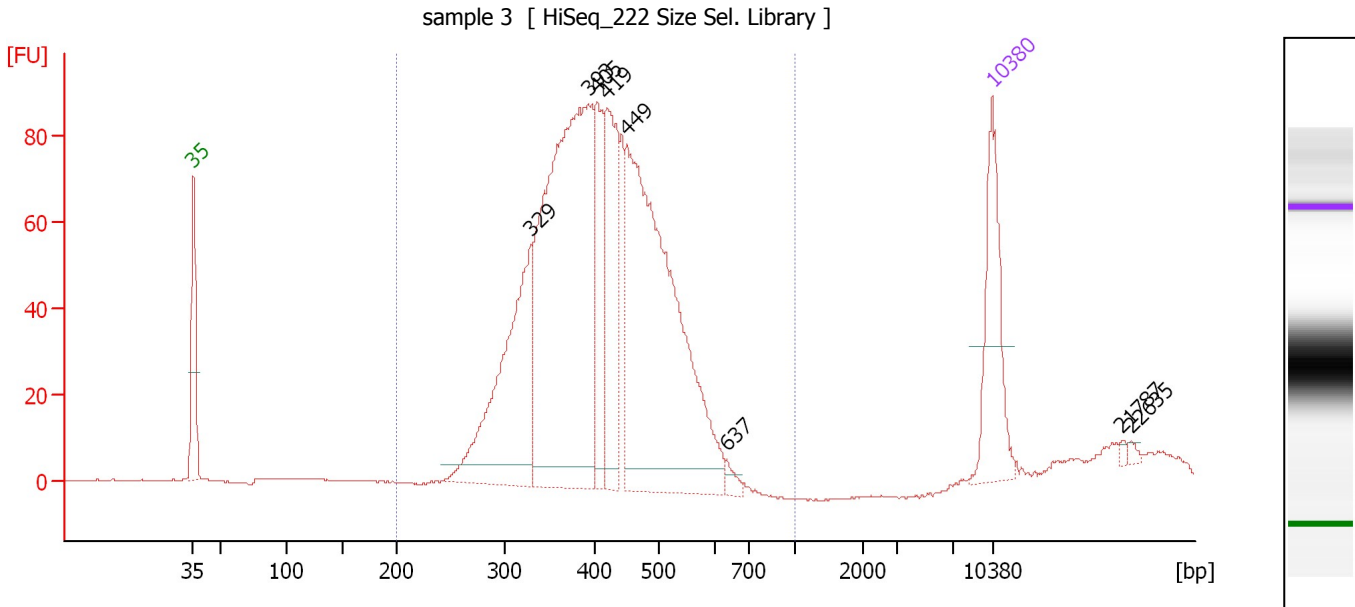
**Region table for sample 2 : sample 2**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	415	2,100.2	7,189.2	1,864.29	99	20.2

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-21\2015-10-21\_001.xad

Created: 10/21/2015 10:39:31 AM  
 Modified: 10/21/2015 11:21:09 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : sample 3**

Number of peaks found: 8                      Corr. Area 1: 1,486.5  
 Noise: 0.2

**Peak table for sample 3 : sample 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	329	239.68	1,103.4		72.53
3	393	517.50	1,996.8		77.58
4	405	89.49	335.1		78.42
5	419	133.69	483.8		79.21
6	449	462.60	1,560.0		80.94
7	637	7.79	18.5		89.78
8	10,380	75.00	10.9	Upper Marker	113.00
9	21,787	0.00	0.0		124.31
10	22,635	0.00	0.0		125.15

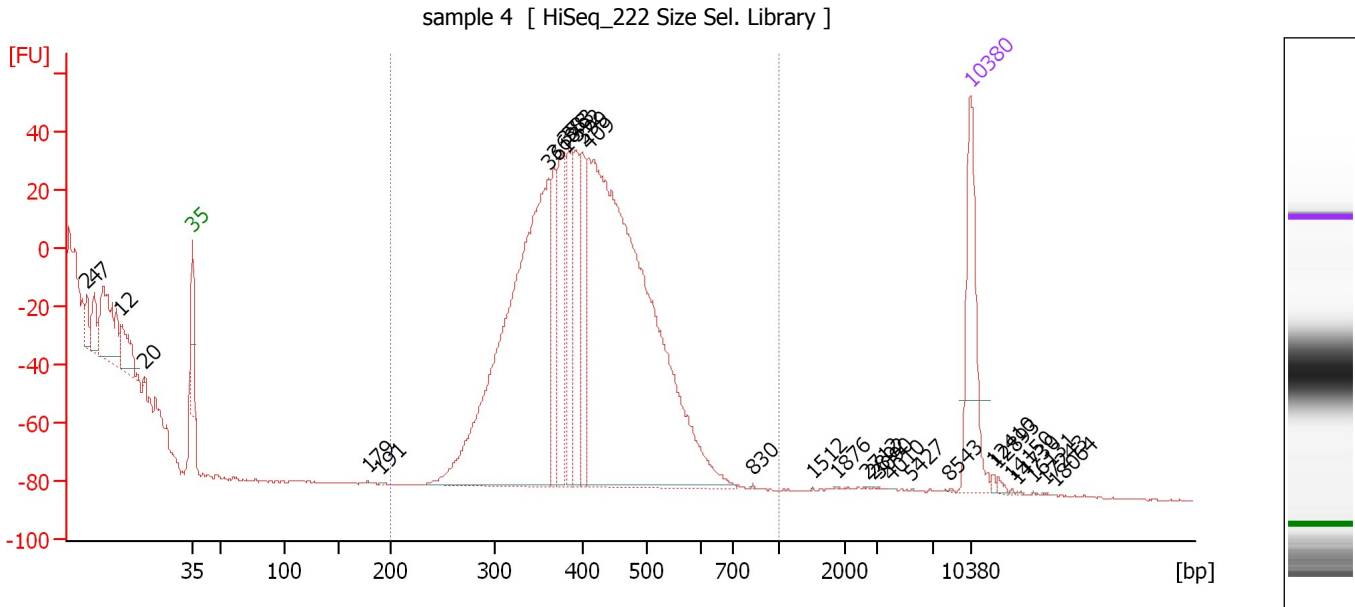
**Region table for sample 3 : sample 3**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	412	1,486.5	5,389.7	1,404.28	98	17.9

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-21\2015-10-21\_001.xad

Created: 10/21/2015 10:39:31 AM  
 Modified: 10/21/2015 11:21:09 AM

**Electropherogram Summary Continued ...**



**Setpoint Deviations for sample 4 : sample 4**

Height Threshold [FU] : 0.5                      Width Threshold [s] : 0.2

**Overall Results for sample 4 : sample 4**

Number of peaks found: 30                      Corr. Area 1: 970.5  
 Noise: 0.2

**Peak table for sample 4 : sample 4**

Pea k	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	2	0.00	0.0		33.47
2	4	0.00	0.0		34.14
3	7	0.00	0.0		34.95
4	12	0.00	0.0		36.53
5	20	0.00	0.0		38.59
6	35	125.00	5,411.3	Lower Marker	43.00
7	179	0.52	4.4		58.81
8	191	0.31	2.4		60.01
9	361	579.14	2,427.5		75.10
10	368	67.71	279.1		75.58
11	378	106.19	425.2		76.44
12	383	88.50	349.9		76.83
13	392	74.36	287.3		77.54
14	399	72.72	276.2		78.07
15	409	796.42	2,953.2		78.65
16	830	0.37	0.7		93.45
17	1,512	0.14	0.1		98.82
18	1,876	0.12	0.1		100.97
19	2,712	0.12	0.1		103.80
20	2,892	0.13	0.1		104.33
21	3,090	0.12	0.1		104.76
22	4,010	0.11	0.0		105.91



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-21\2015-10-21\_001.xad

Created: 10/21/2015 10:39:31 AM  
 Modified: 10/21/2015 11:21:09 AM

### Electropherogram Summary Continued ...

#### ... Peak table for sample 4 : sample 4

Peak	Size [bp]	Conc. [pg/ $\mu$ l]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
23	5,427	0.07	0.0		107.68
24	8,543	0.35	0.1		111.18
25	10,380	75.00	10.9	Upper Marker	113.00
26	12,410	0.00	0.0		115.01
27	12,893	0.00	0.0		115.49
28	14,150	0.00	0.0		116.74
29	14,730	0.00	0.0		117.31
30	16,131	0.00	0.0		118.70
31	17,243	0.00	0.0		119.80
32	18,064	0.00	0.0		120.62

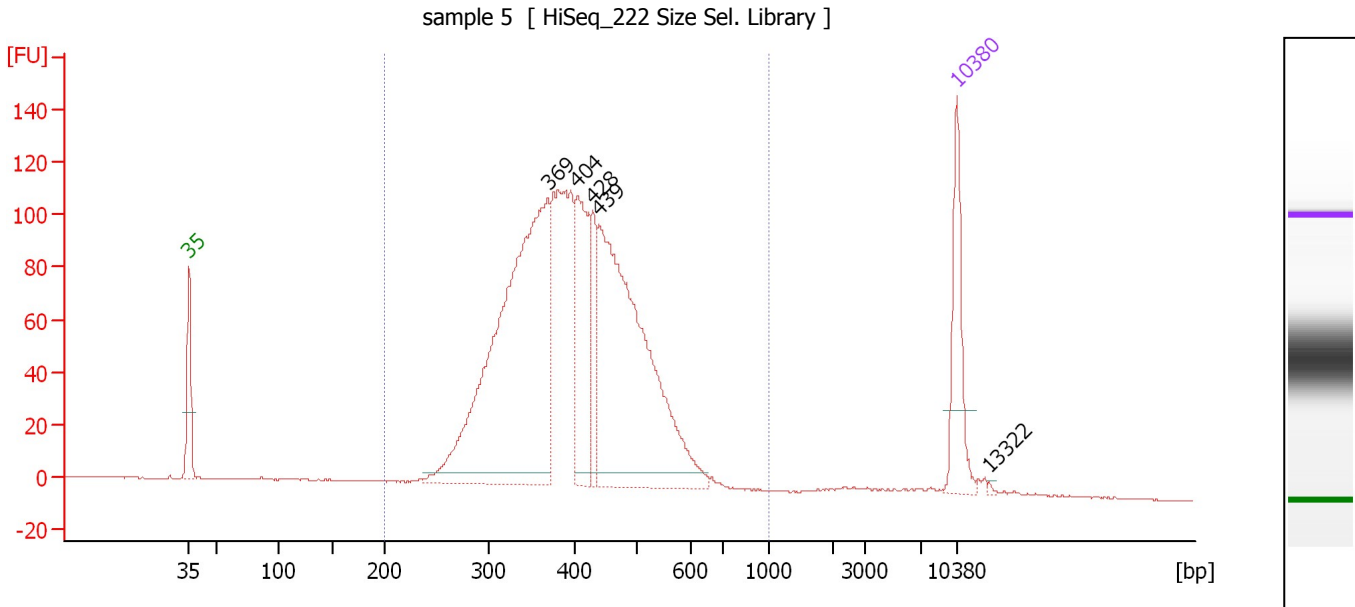
#### Region table for sample 4 : sample 4

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/ $\mu$ l]	% of Total	Size distribution in CV [%]
200	1,000	409	970.5	3,192.5	845.06	100	13.2

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-21\2015-10-21\_001.xad

Created: 10/21/2015 10:39:31 AM  
 Modified: 10/21/2015 11:21:09 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : sample 5**

Number of peaks found: 5                      Corr. Area 1: 2,047.8  
 Noise: 0.2

**Peak table for sample 5 : sample 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	369	679.50	2,788.5		75.72
3	404	162.52	609.4		78.39
4	428	68.39	242.0		79.75
5	439	524.81	1,809.9		80.38
6	10,380	75.00	10.9	Upper Marker	113.00
7	13,322	0.00	0.0		115.92

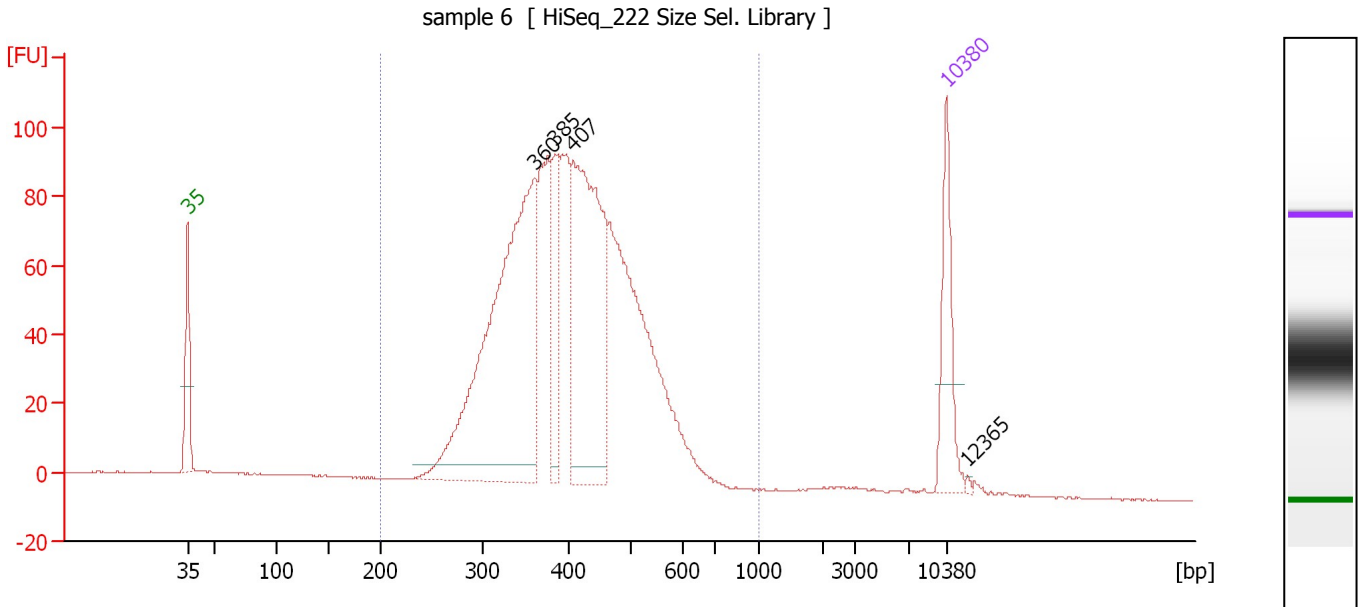
**Region table for sample 5 : sample 5**

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	406	2,047.8	7,021.8	1,783.99	96	20.2

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-21\2015-10-21\_001.xad

Created: 10/21/2015 10:39:31 AM  
 Modified: 10/21/2015 11:21:09 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : sample 6**

Number of peaks found: 4                      Corr. Area 1: 1,753.6  
 Noise: 0.2

**Peak table for sample 6 : sample 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	360	612.50	2,574.3		75.02
3	385	102.18	402.5		76.94
4	407	386.73	1,439.1		78.57
5	10,380	75.00	10.9	Upper Marker	113.00
6	12,365	0.00	0.0		114.97

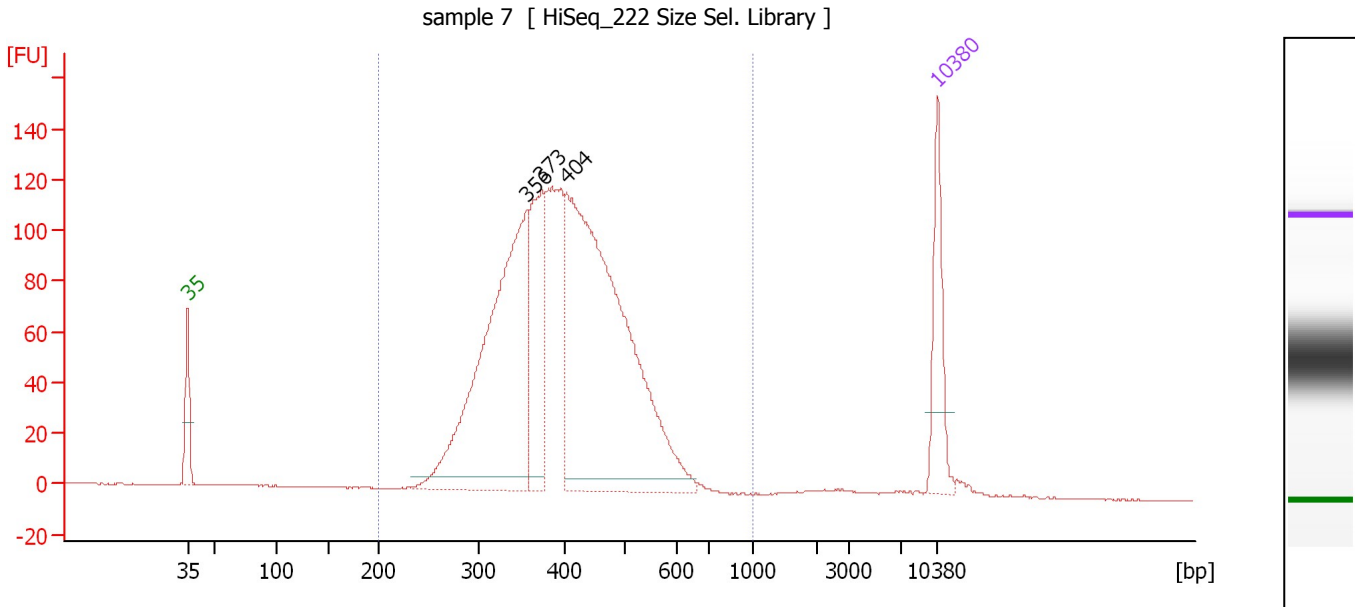
**Region table for sample 6 : sample 6**

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	411	1,753.6	7,276.6	1,867.62	97	20.1

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-21\2015-10-21\_001.xad

Created: 10/21/2015 10:39:31 AM  
 Modified: 10/21/2015 11:21:09 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : sample 7**

Number of peaks found: 3                      Corr. Area 1: 2,125.5  
 Noise: 0.1

**Peak table for sample 7 : sample 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	356	572.67	2,435.2		74.69
3	373	187.51	761.2		76.03
4	404	767.40	2,879.7		78.37
5	10,380	75.00	10.9	Upper Marker	113.00

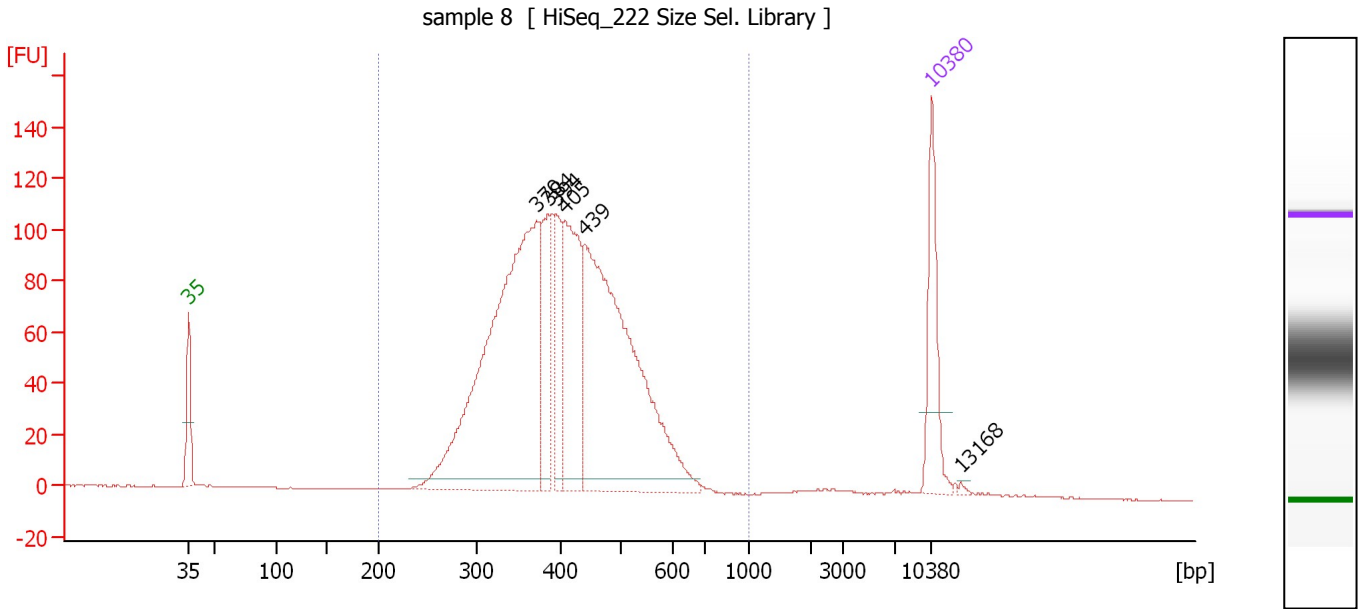
**Region table for sample 7 : sample 7**

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	405	2,125.5	6,961.9	1,768.94	98	19.5

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-21\2015-10-21\_001.xad

Created: 10/21/2015 10:39:31 AM  
 Modified: 10/21/2015 11:21:09 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : sample 8**

Number of peaks found: 6                      Corr. Area 1: 1,973.4  
 Noise: 0.1

**Peak table for sample 8 : sample 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	370	650.03	2,663.2		75.76
3	384	110.18	435.0		76.87
4	394	79.70	306.6		77.67
5	405	197.45	739.2		78.43
6	439	543.30	1,877.1		80.34
7	10,380	75.00	10.9	Upper Marker	113.00
8	13,168	0.00	0.0		115.76

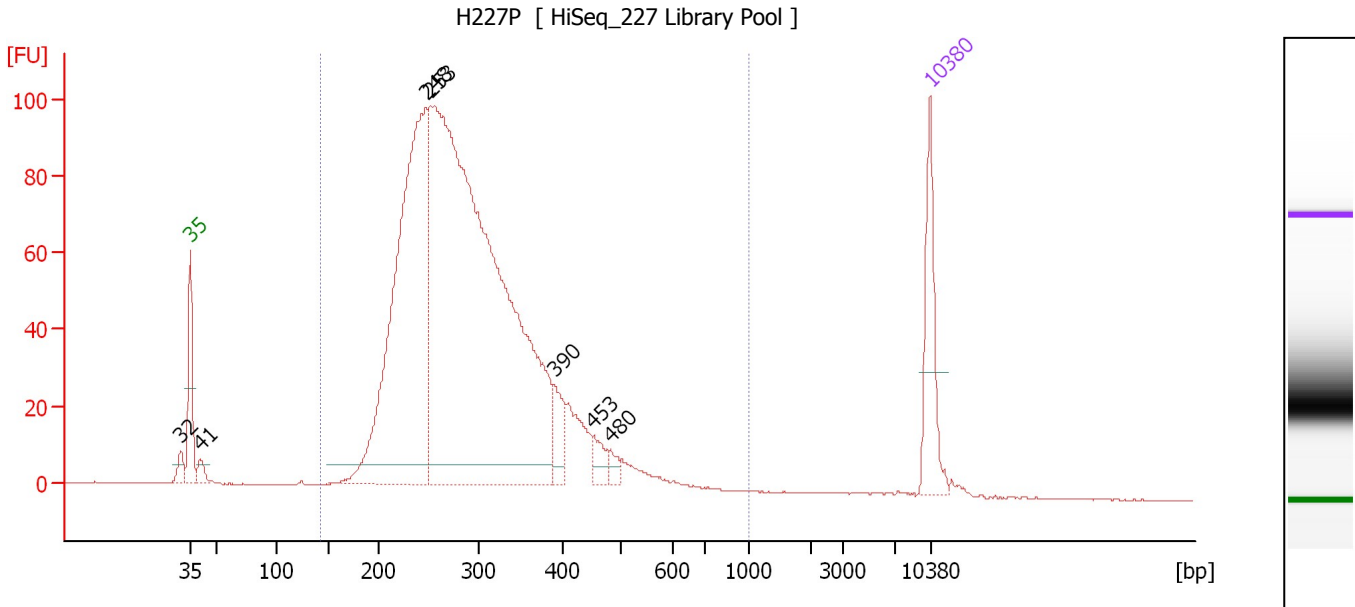
**Region table for sample 8 : sample 8**

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	411	1,973.4	6,551.0	1,680.62	97	20.4

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-21\2015-10-21\_001.xad

Created: 10/21/2015 10:39:31 AM  
 Modified: 10/21/2015 11:21:09 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : H227P**

Number of peaks found: 7                      Corr. Area 1: 1,772.9  
 Noise: 0.1

**Peak table for sample 9 : H227P**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	32	0.00	0.0		42.09
2	35	125.00	5,411.3	Lower Marker	43.00
3	41	19.34	716.5		43.96
4	248	738.12	4,511.3		65.34
5	253	1,581.58	9,481.0		65.80
6	390	42.56	165.2		77.39
7	453	23.21	77.7		81.13
8	480	12.02	37.9		82.69
9	10,380	75.00	10.9	Upper Marker	113.00

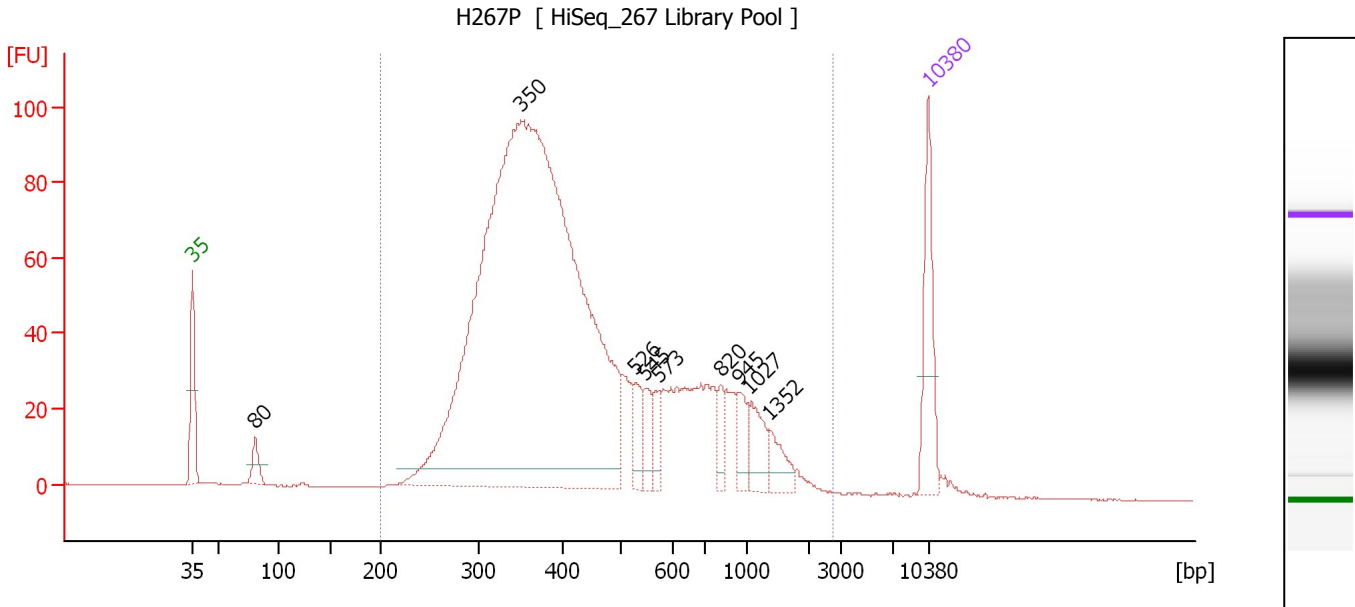
**Region table for sample 9 : H227P**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
143	1,000	299	1,772.9	13,269.0	2,436.18	98	26.9

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-21\2015-10-21\_001.xad

Created: 10/21/2015 10:39:31 AM  
 Modified: 10/21/2015 11:21:09 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : H267P**

Number of peaks found: 9                      Corr. Area 1: 1,888.0  
 Noise: 0.1

**Peak table for sample 10 : H267P**

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	80	30.24	570.6		48.94
3	350	1,849.26	7,997.3		74.22
4	526	36.67	105.6		85.08
5	545	32.31	89.8		85.99
6	573	25.54	67.5		87.37
7	820	22.58	41.7		93.30
8	945	30.51	48.9		95.03
9	1,027	40.23	59.4		95.94
10	1,352	28.14	31.5		97.87
11	10,380	75.00	10.9	Upper Marker	113.00

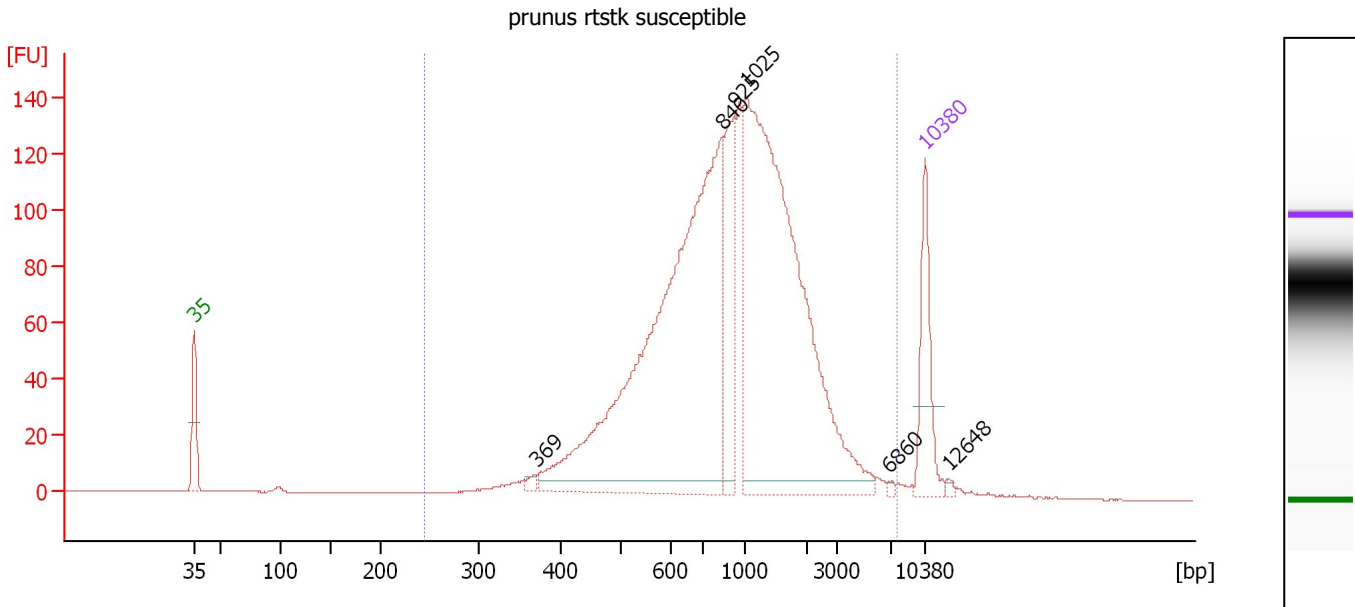
**Region table for sample 10 : H267P**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	2,744	490	1,888.0	9,110.2	2,368.93	97	56.7

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-21\2015-10-21\_001.xad

Created: 10/21/2015 10:39:31 AM  
 Modified: 10/21/2015 11:21:09 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : prunus rtstk susceptible**

Number of peaks found: 6                      Corr. Area 1: 2,206.4  
 Noise: 0.1

**Peak table for sample 11 : prunus rtstk susceptible**

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	369	8.00	32.8		75.70
3	840	827.80	1,493.1		93.58
4	925	127.16	208.2		94.76
5	1,025	712.13	1,052.8		95.93
6	6,860	2.47	0.5		109.47
7	10,380	75.00	10.9	Upper Marker	113.00
8	12,648	0.00	0.0		115.25

**Region table for sample 11 : prunus rtstk susceptible**

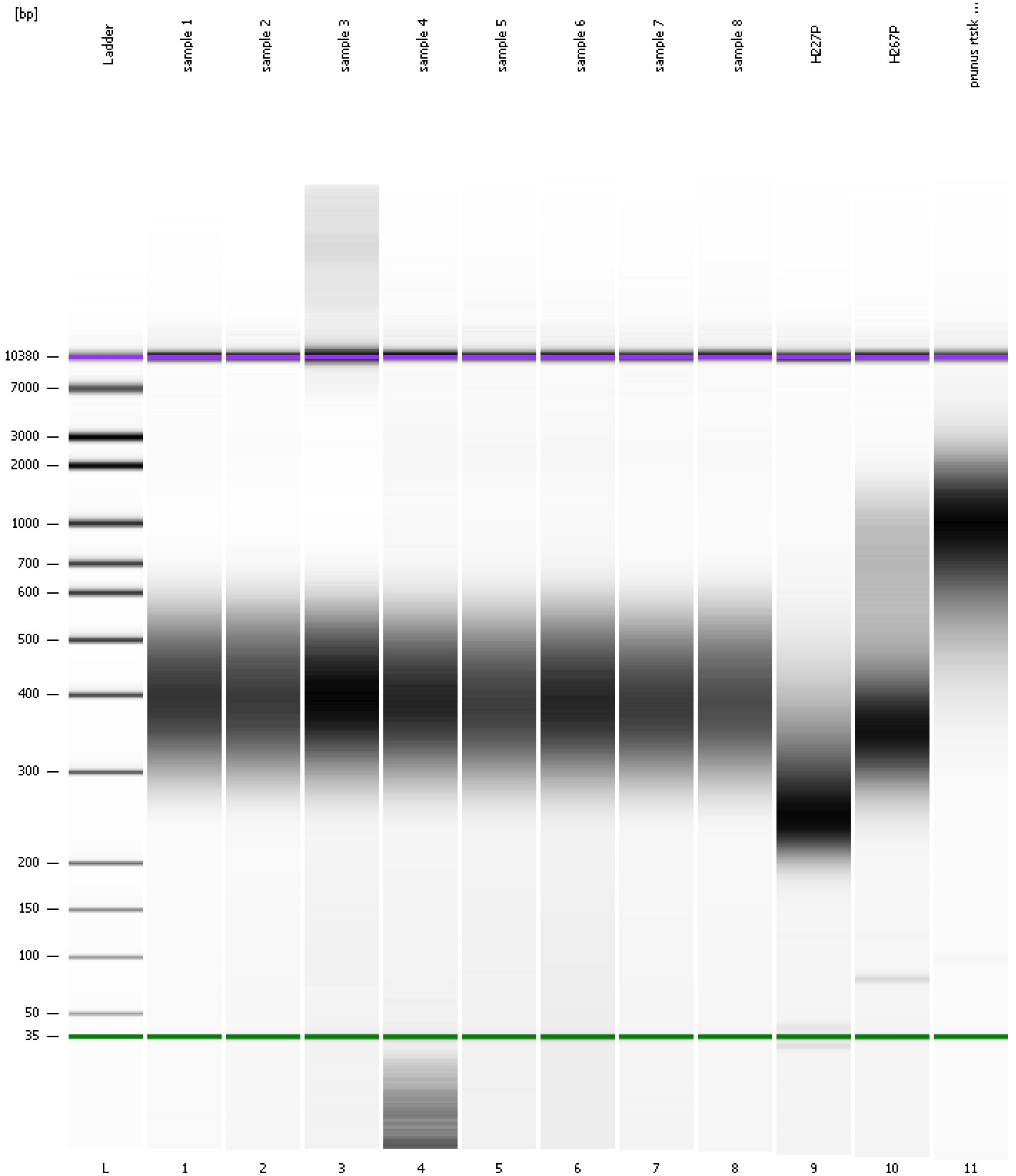
From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
246	7,629	1,146	2,206.4	3,577.0	1,863.92	98	73.0



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-21\2015-10-21\_001.xad

Created: 10/21/2015 10:39:31 AM  
Modified: 10/21/2015 11:21:09 AM

**Gel Image**

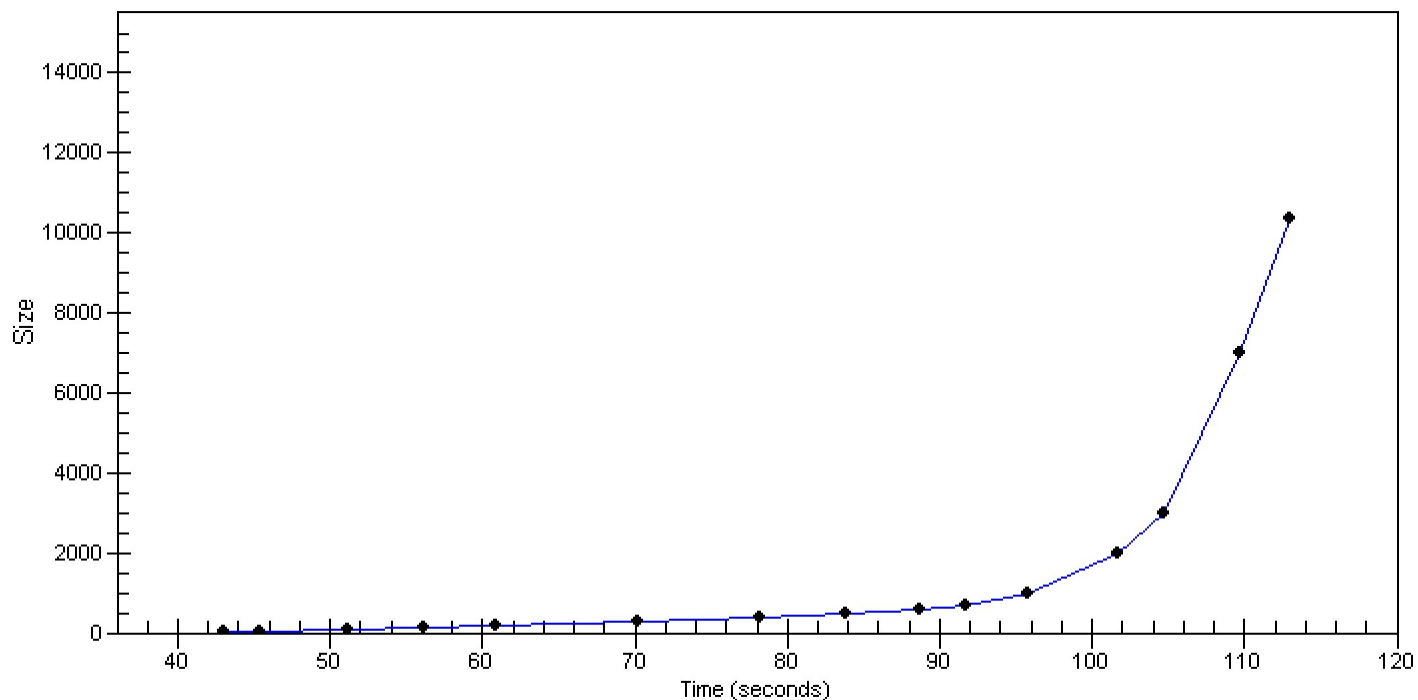


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-21\2015-10-21\_001.xad

Created: 10/21/2015 10:39:31 AM  
Modified: 10/21/2015 11:21:09 AM

**Curves**

**Standard Curve**



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-21\2015-10-21\_001.xad

Created: 10/21/2015 10:39:31 AM  
 Modified: 10/21/2015 11:21:09 AM

**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		10/21/2015 11:20:48 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2015-10-21\2015-10-21_001.xad)		Instrument	Run		10/21/2015 10:39:36 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		10/21/2015 10:39:36 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		10/21/2015 10:39:36 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		10/21/2015 10:39:36 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		10/21/2015 10:39:36 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		10/21/2015 10:39:36 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		10/21/2015 10:39:36 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1