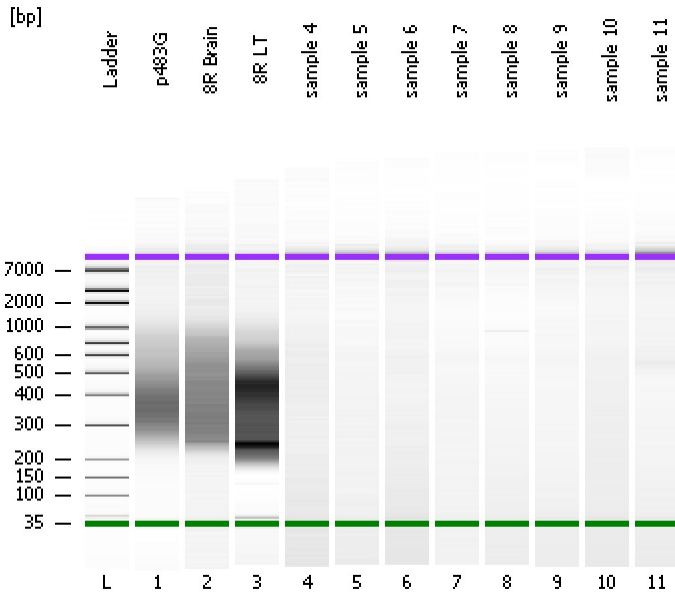


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2017-03-03\2017-03-03\_001.xad

Created: 3/3/2017 10:02:42 AM  
Modified: 3/3/2017 10:43:59 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

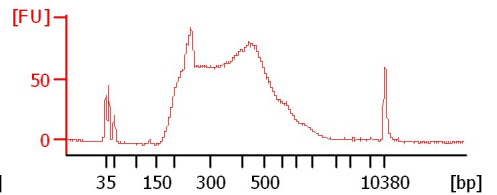
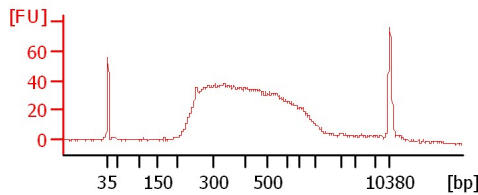
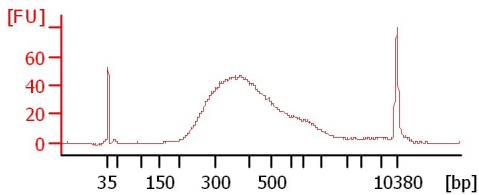
#### Chip Information:

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

p483G

8R Brain

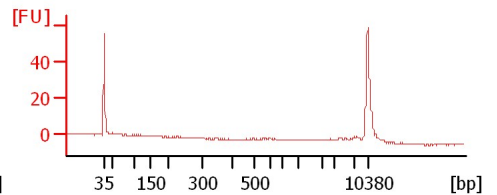
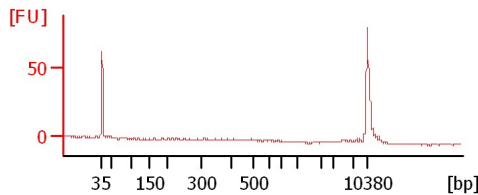
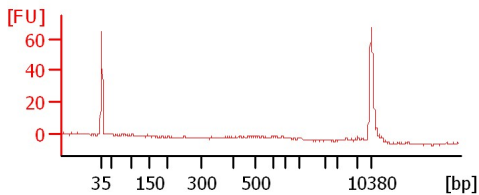
8R LT



sample 4

sample 5

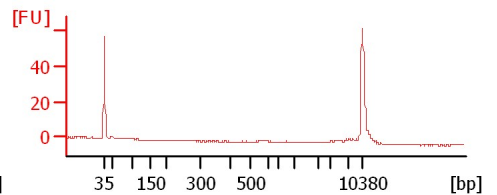
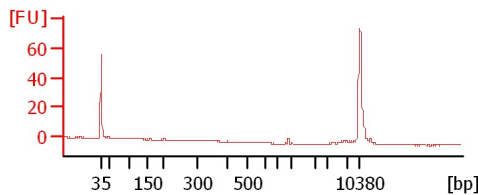
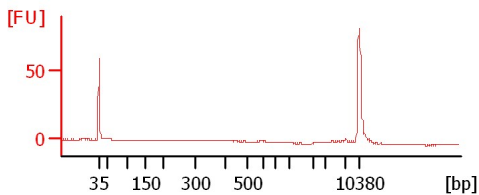
sample 6



sample 7

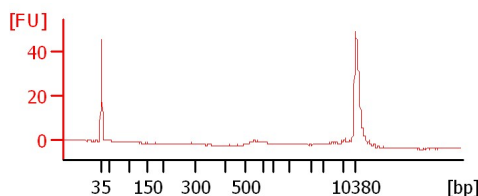
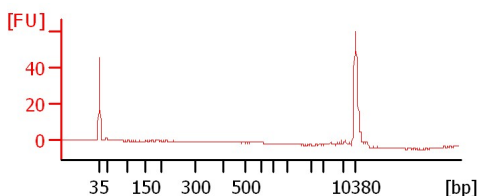
sample 8

sample 9



sample 10

sample 11



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2017-03-03\2017-03-03\_001.xad

Created: 3/3/2017 10:02:42 AM  
Modified: 3/3/2017 10:43:59 AM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
p483G		<input type="checkbox"/>	✓			
8R Brain		<input type="checkbox"/>	✓			
8R LT		<input type="checkbox"/>	✓			
sample 4		<input type="checkbox"/>	✓			
sample 5		<input type="checkbox"/>	✓			
sample 6		<input type="checkbox"/>	✓			
sample 7		<input type="checkbox"/>	✓			
sample 8		<input type="checkbox"/>	✓			
sample 9		<input type="checkbox"/>	✓			
sample 10		<input type="checkbox"/>	✓			
sample 11		<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\2017-03-03\2017-03-03\_001.xad

Created: 3/3/2017 10:02:42 AM  
Modified: 3/3/2017 10:43:59 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

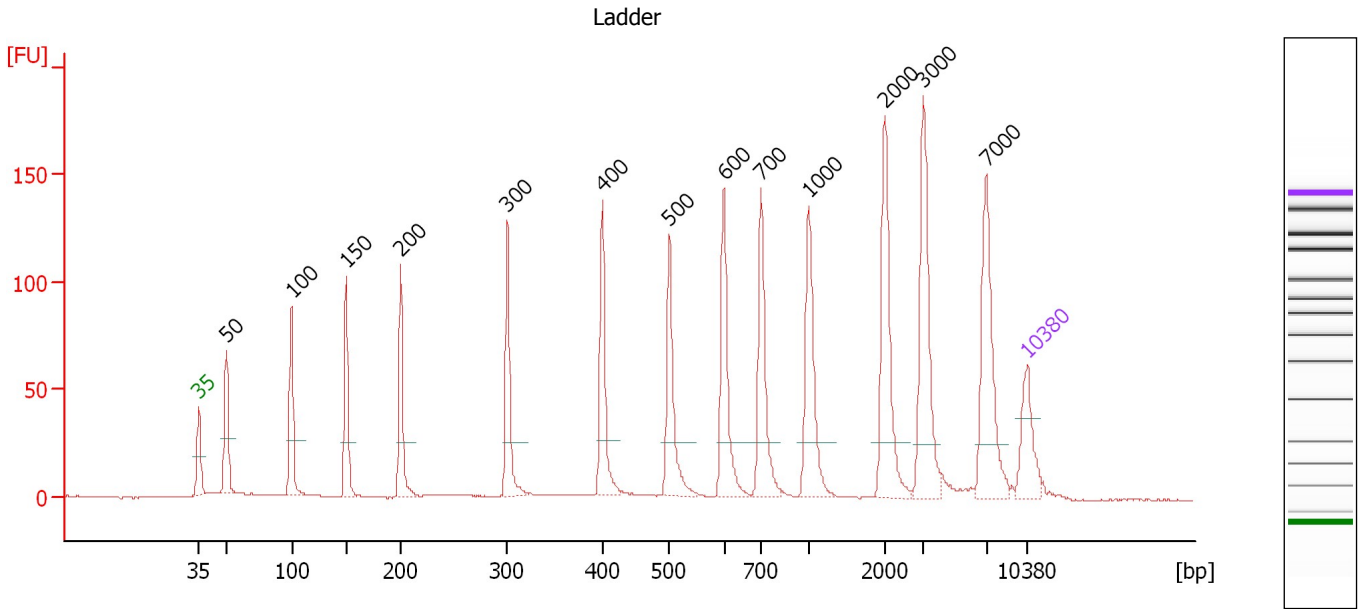
**Ladder**

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:\... bioanalyzer\2100 expert\data\2017-03-03\2017-03-03\_001.xad

Created: 3/3/2017 10:02:42 AM  
 Modified: 3/3/2017 10:43:59 AM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.2

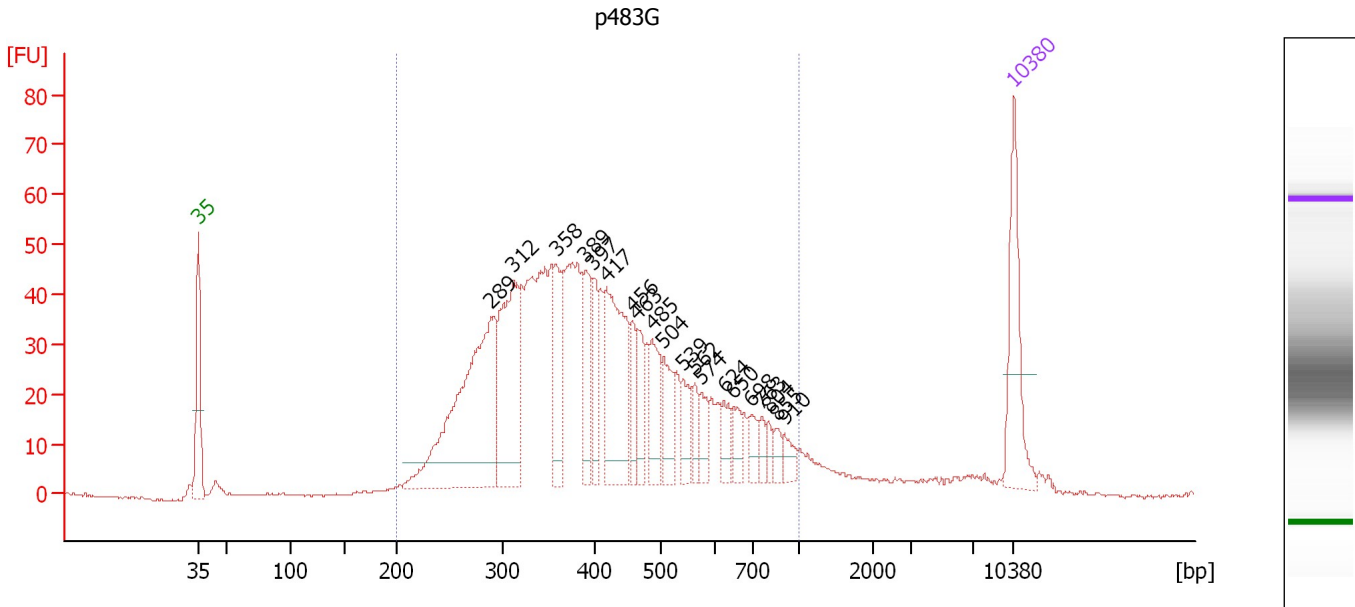
**Peak table for Ladder**

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	45.34
3	100	150.00	2,272.7	Ladder Peak	50.84
4	150	150.00	1,515.2	Ladder Peak	55.48
5	200	150.00	1,136.4	Ladder Peak	60.07
6	300	150.00	757.6	Ladder Peak	69.08
7	400	150.00	568.2	Ladder Peak	77.10
8	500	150.00	454.5	Ladder Peak	82.77
9	600	150.00	378.8	Ladder Peak	87.37
10	700	150.00	324.7	Ladder Peak	90.52
11	1,000	150.00	227.3	Ladder Peak	94.53
12	2,000	150.00	113.6	Ladder Peak	100.97
13	3,000	150.00	75.8	Ladder Peak	104.22
14	7,000	150.00	32.5	Ladder Peak	109.53
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-03-03\2017-03-03\_001.xad

Created: 3/3/2017 10:02:42 AM  
 Modified: 3/3/2017 10:43:59 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : p483G**

Number of peaks found: 20                      Corr. Area 1: 1,237.3  
 Noise: 0.2

**Peak table for sample 1 : p483G**

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	289	339.70	1,779.1		68.12
3	312	183.17	889.7		70.04
4	358	81.31	344.5		73.70
5	389	61.15	238.2		76.22
6	397	49.98	190.7		76.86
7	417	159.66	579.4		78.09
8	456	37.33	124.0		80.29
9	463	40.07	131.0		80.70
10	485	55.38	172.9		81.93
11	504	42.53	128.0		82.94
12	539	31.22	87.7		84.59
13	562	19.62	52.9		85.64
14	574	24.45	64.5		86.19
15	624	22.21	54.0		88.11
16	650	21.11	49.2		88.93
17	698	17.75	38.6		90.44
18	763	12.66	25.1		91.36
19	804	10.45	19.7		91.91
20	855	11.30	20.0		92.59
21	910	14.77	24.6		93.33
22	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2017-03-03\2017-03-03\_001.xad

Created: 3/3/2017 10:02:42 AM  
Modified: 3/3/2017 10:43:59 AM

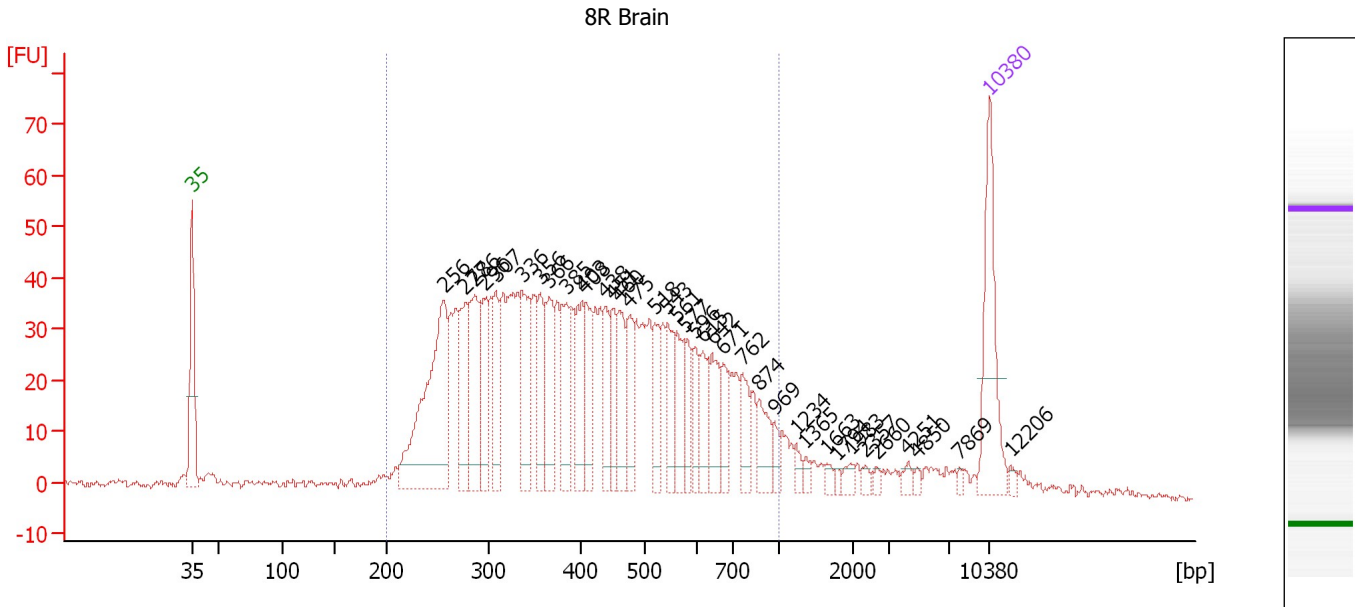
**Electropherogram Summary Continued ...****... Region table for sample 1 : p483G**

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	425	1,237.3	8,120.6	■ 1,985.02	93	34.5

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-03-03\2017-03-03\_001.xad

Created: 3/3/2017 10:02:42 AM  
 Modified: 3/3/2017 10:43:59 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : 8R Brain**

Number of peaks found: 37                      Corr. Area 1: 1,333.0  
 Noise: 0.8

**Peak table for sample 2 : 8R Brain**

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	256	225.77	1,336.4		65.12
3	277	71.75	392.8		66.99
4	286	94.26	499.1		67.83
5	296	54.34	278.6		68.68
6	307	53.70	264.8		69.66
7	336	73.97	333.7		71.96
8	356	51.19	217.7		73.60
9	366	63.43	262.8		74.35
10	385	56.12	220.9		75.89
11	403	50.86	191.4		77.25
12	408	44.14	164.1		77.53
13	438	39.51	136.6		79.27
14	451	41.65	139.8		80.01
15	460	46.38	152.9		80.48
16	475	39.39	125.6		81.37
17	518	36.22	105.9		83.62
18	543	41.46	115.7		84.75
19	561	35.91	96.9		85.59
20	577	27.51	72.3		86.29
21	596	27.52	70.0		87.18
22	615	33.94	83.6		87.84
23	642	38.04	89.8		88.68
24	671	27.69	62.5		89.62
25	762	29.57	58.8		91.35

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-03-03\2017-03-03\_001.xad

Created: 3/3/2017 10:02:42 AM  
 Modified: 3/3/2017 10:43:59 AM

**Electropherogram Summary Continued ...**

**... Peak table for sample 2 : 8R Brain**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	874	28.40	49.2		92.85
27	969	10.95	17.1		94.12
28	1,234	7.40	9.1		96.04
29	1,365	5.78	6.4		96.88
30	1,663	5.18	4.7		98.80
31	1,794	3.10	2.6		99.65
32	1,983	6.47	4.9		100.86
33	2,357	4.58	2.9		102.13
34	2,660	3.45	2.0		103.11
35	4,251	5.67	2.0		105.88
36	4,850	3.34	1.0		106.67
37	7,869	2.90	0.6		110.42
38	10,380	75.00	10.9	Upper Marker	113.00
39	12,206	0.00	0.0		114.87

**Region table for sample 2 : 8R Brain**

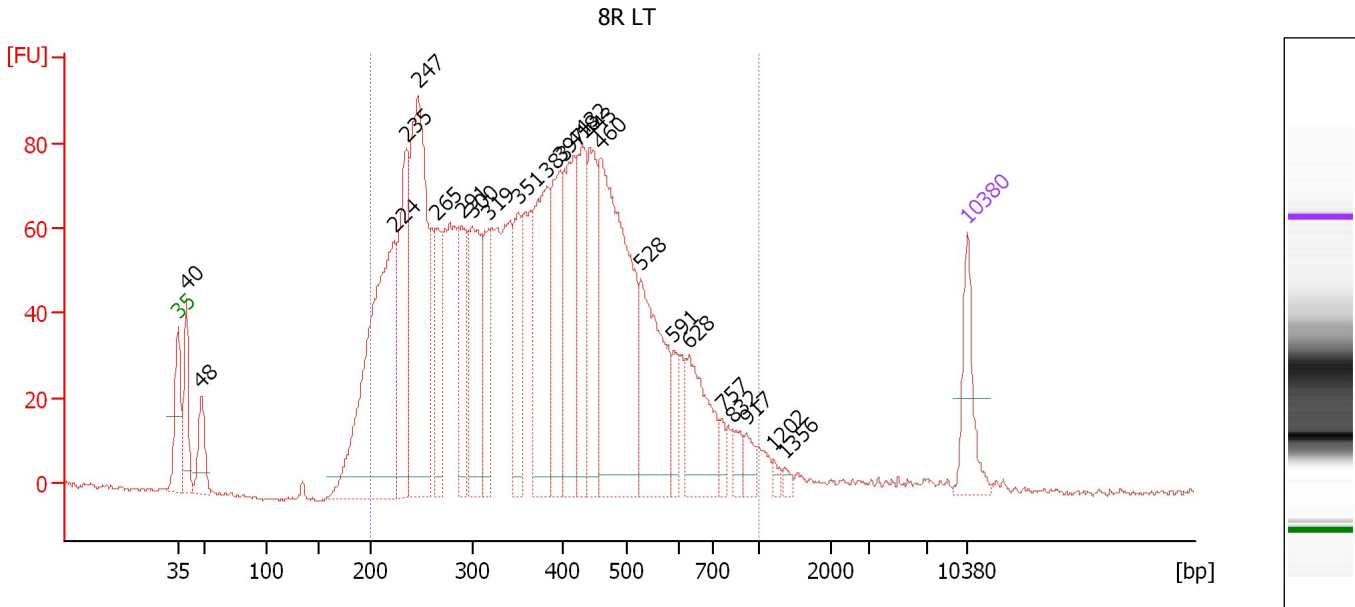
From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	438	1,333.0	8,135.2	1,974.15	91	37.2



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-03-03\2017-03-03\_001.xad

Created: 3/3/2017 10:02:42 AM  
 Modified: 3/3/2017 10:43:59 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : 8R LT**

Number of peaks found: 24                      Corr. Area 1: 2,571.3  
 Noise: 0.5

**Peak table for sample 3 : 8R LT**

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	133.42	5,112.3		43.71
3	48	97.81	3,066.7		45.08
4	224	646.23	4,378.0		62.20
5	235	292.56	1,884.7		63.24
6	247	523.60	3,208.3		64.33
7	265	127.42	728.2		65.94
8	291	138.78	722.9		68.26
9	300	215.31	1,086.2		69.11
10	319	145.37	691.3		70.57
11	351	141.48	610.6		73.18
12	383	282.03	1,115.9		75.73
13	397	188.09	717.7		76.86
14	418	226.73	821.1		78.14
15	432	170.31	597.7		78.90
16	443	175.79	600.7		79.56
17	460	537.01	1,768.6		80.51
18	528	255.13	732.3		84.05
19	591	40.20	103.1		86.94
20	628	145.99	352.0		88.26
21	757	20.09	40.2		91.29
22	832	24.17	44.0		92.28
23	917	25.50	42.1		93.42
24	1,202	9.25	11.7		95.83
25	1,356	9.02	10.1		96.82

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-03-03\2017-03-03\_001.xad

Created: 3/3/2017 10:02:42 AM  
 Modified: 3/3/2017 10:43:59 AM

### Electropherogram Summary Continued ...

#### ... Peak table for sample 3 : 8R LT

Peak	Size [bp]	Conc. [pg/ $\mu$ l]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	10,380	75.00	10.9	Upper Marker	113.00

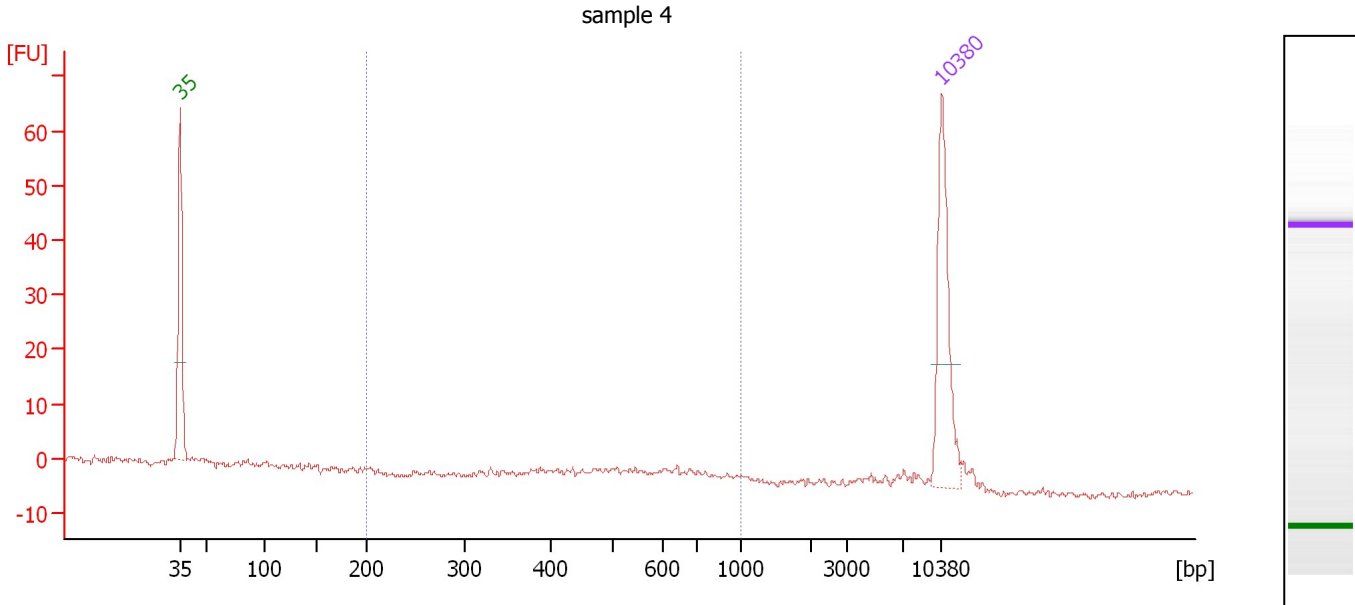
#### Region table for sample 3 : 8R LT

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	390	2,571.3	22,525.1	4,924.57	93	35.8

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-03-03\2017-03-03\_001.xad

Created: 3/3/2017 10:02:42 AM  
 Modified: 3/3/2017 10:43:59 AM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 0                      Corr. Area 1: 10.9  
 Noise: 0.6

**Peak table for sample 4 : sample 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	10,380	75.00	10.9	Upper Marker	113.00

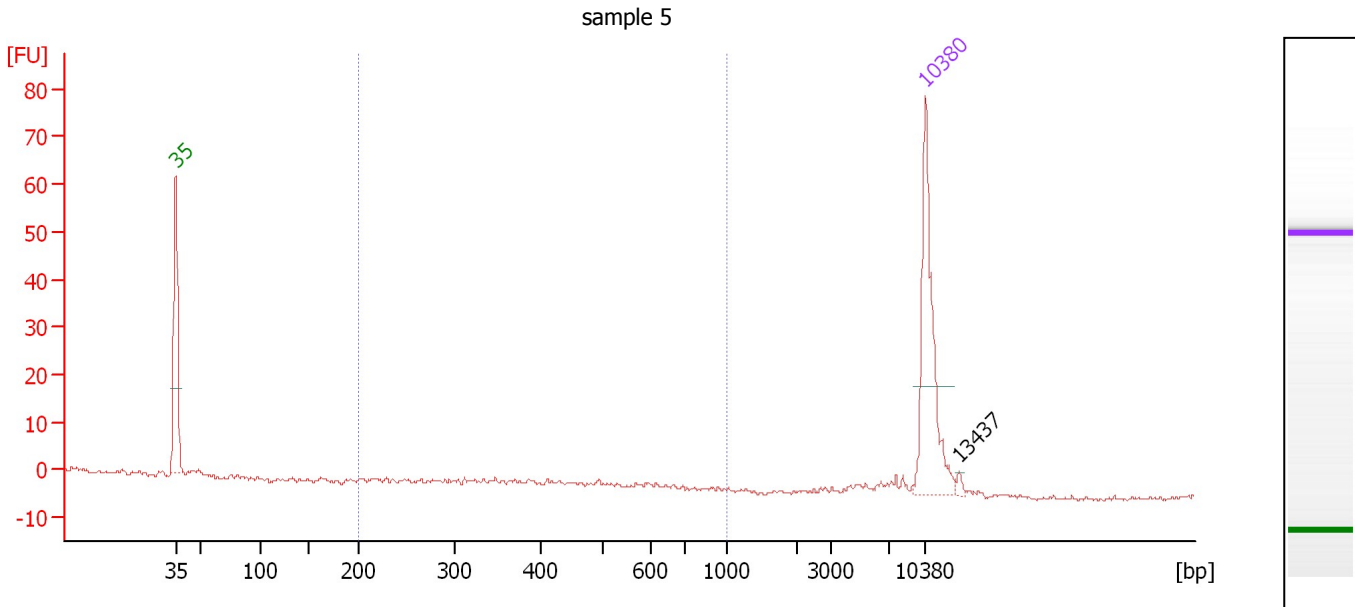
**Region table for sample 4 : sample 4**

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	581	10.9	40.6	14.72	47	21.3

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-03-03\2017-03-03\_001.xad

Created: 3/3/2017 10:02:42 AM  
 Modified: 3/3/2017 10:43:59 AM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 1                      Corr. Area 1: 0.5  
 Noise: 0.5

**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	10,380	75.00	10.9	Upper Marker	113.00
3	13,437	0.00	0.0		116.14

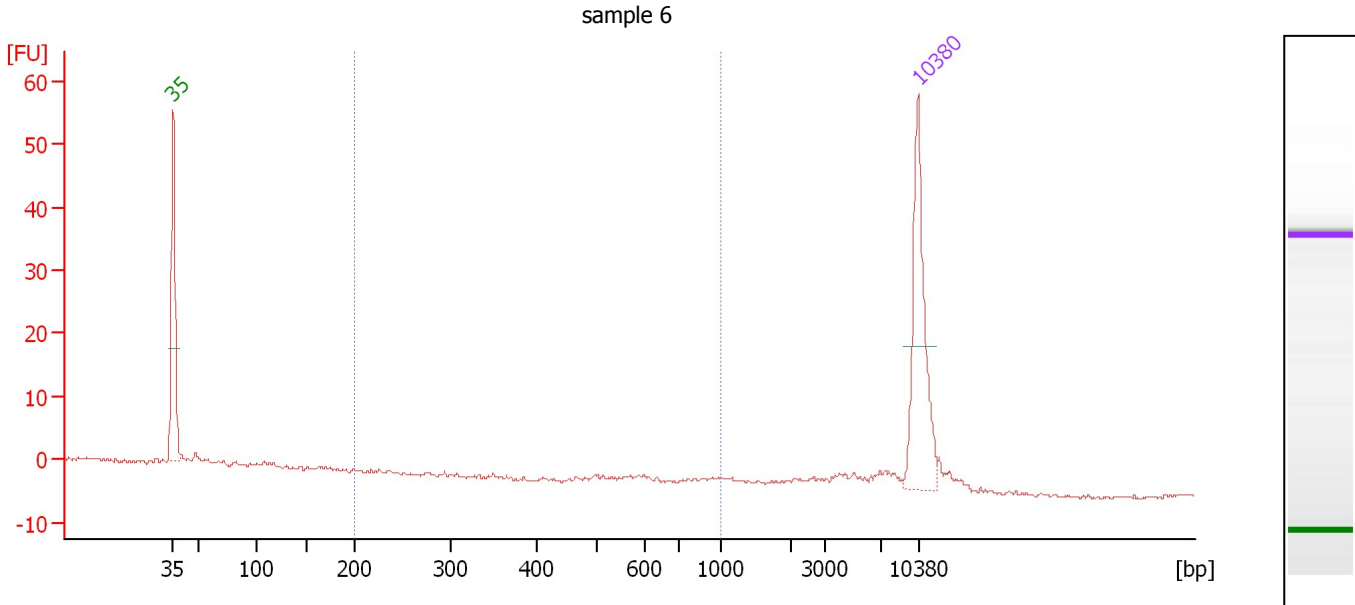
**Region table for sample 5 : sample 5**

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	426	0.5	2.4	0.64	6	18.4

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-03-03\2017-03-03\_001.xad

Created: 3/3/2017 10:02:42 AM  
 Modified: 3/3/2017 10:43:59 AM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 0                      Corr. Area 1: 1.0  
 Noise: 0.3

**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	10,380	75.00	10.9	Upper Marker	113.00

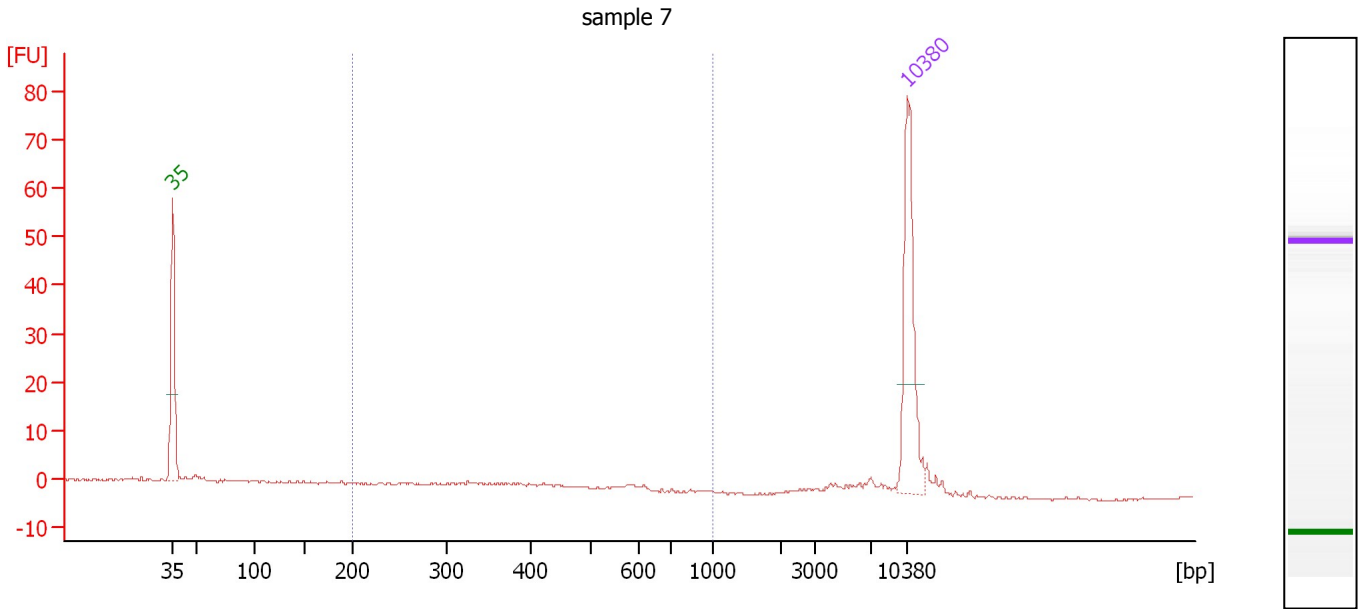
**Region table for sample 6 : sample 6**

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	745	1.0	3.1	1.39	4	24.3

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-03-03\2017-03-03\_001.xad

Created: 3/3/2017 10:02:42 AM  
 Modified: 3/3/2017 10:43:59 AM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 0                      Corr. Area 1: 12.5  
 Noise: 0.2

**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	10,380	75.00	10.9	Upper Marker	113.00

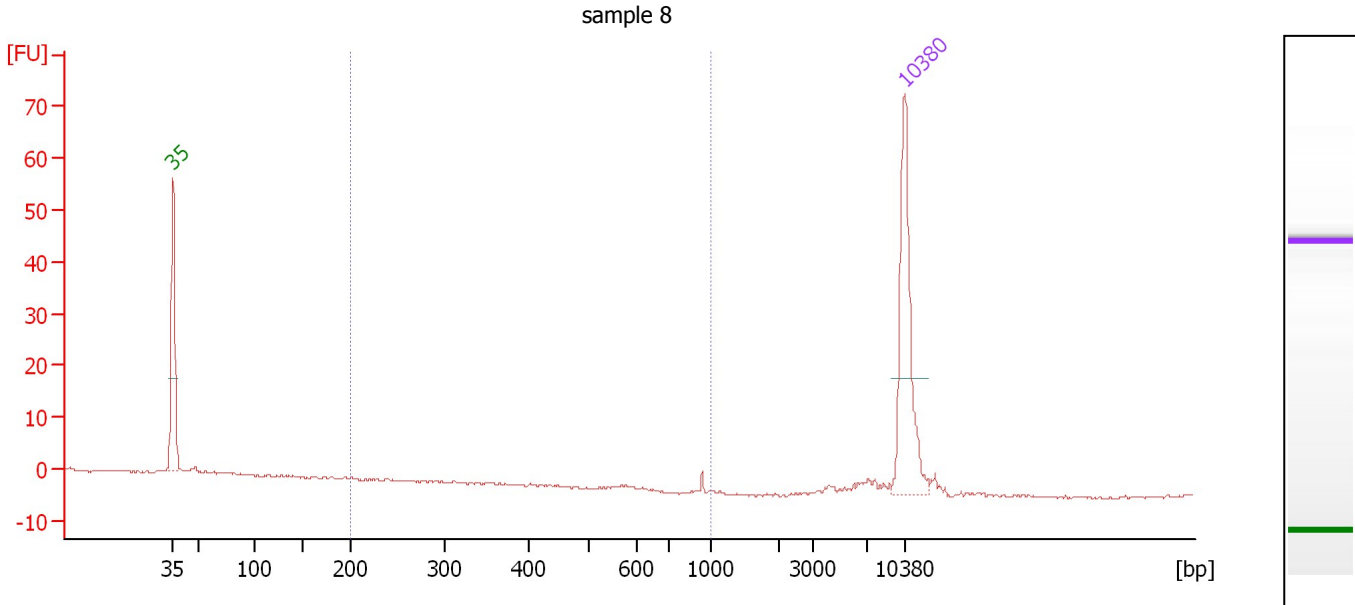
**Region table for sample 7 : sample 7**

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	392	12.5	76.1	17.76	31	27.1

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-03-03\2017-03-03\_001.xad

Created: 3/3/2017 10:02:42 AM  
 Modified: 3/3/2017 10:43:59 AM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 0                      Corr. Area 1: 0.4  
 Noise: 0.2

**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	10,380	75.00	10.9	Upper Marker	113.00

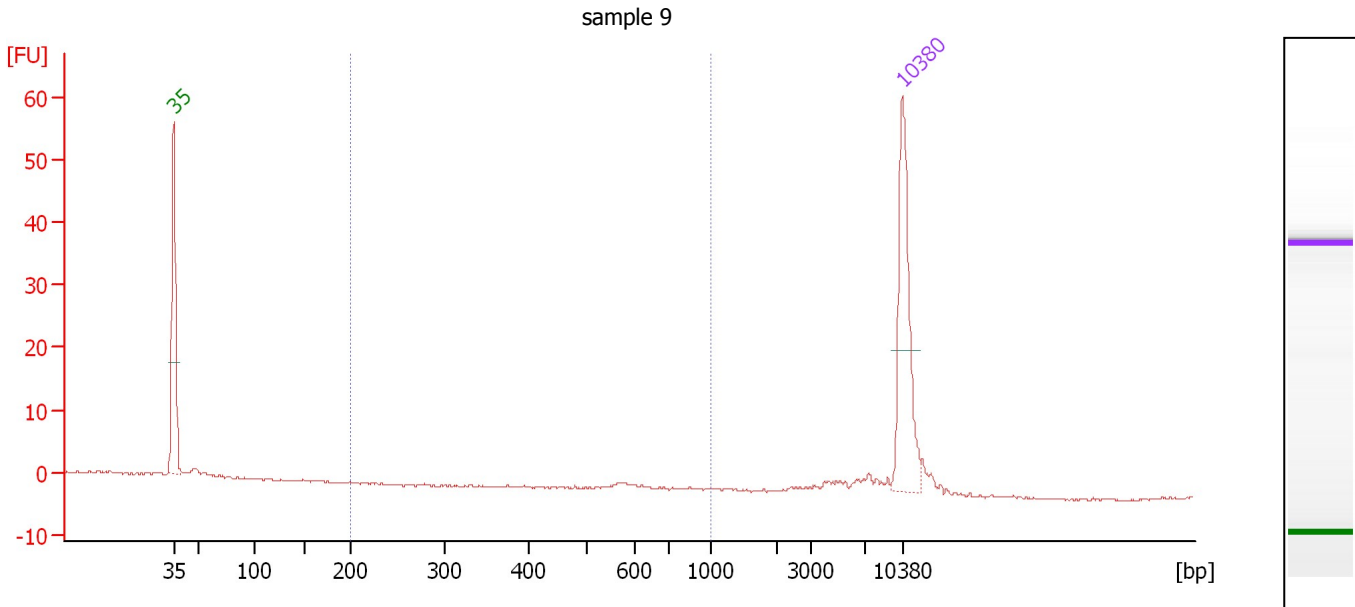
**Region table for sample 8 : sample 8**

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	934	0.4	0.7	0.46	6	0.5

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-03-03\2017-03-03\_001.xad

Created: 3/3/2017 10:02:42 AM  
 Modified: 3/3/2017 10:43:59 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : sample 9**

Number of peaks found: 0                      Corr. Area 1: 0.3  
 Noise: 0.2

**Peak table for sample 9 : sample 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	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 9 : sample 9**

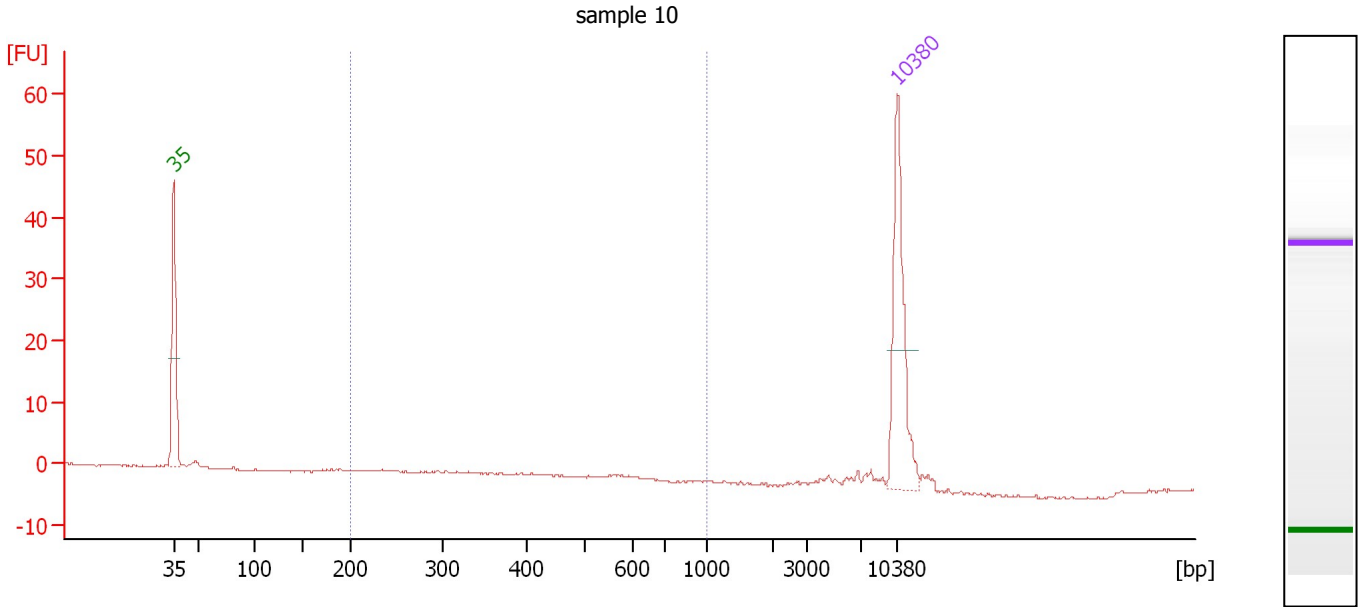
From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	575	0.3	1.3	0.49	2	4.1



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-03-03\2017-03-03\_001.xad

Created: 3/3/2017 10:02:42 AM  
 Modified: 3/3/2017 10:43:59 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : sample 10**

Number of peaks found: 0                      Corr. Area 1: 2.4  
 Noise: 0.1

**Peak table for sample 10 : sample 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	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 10 : sample 10**

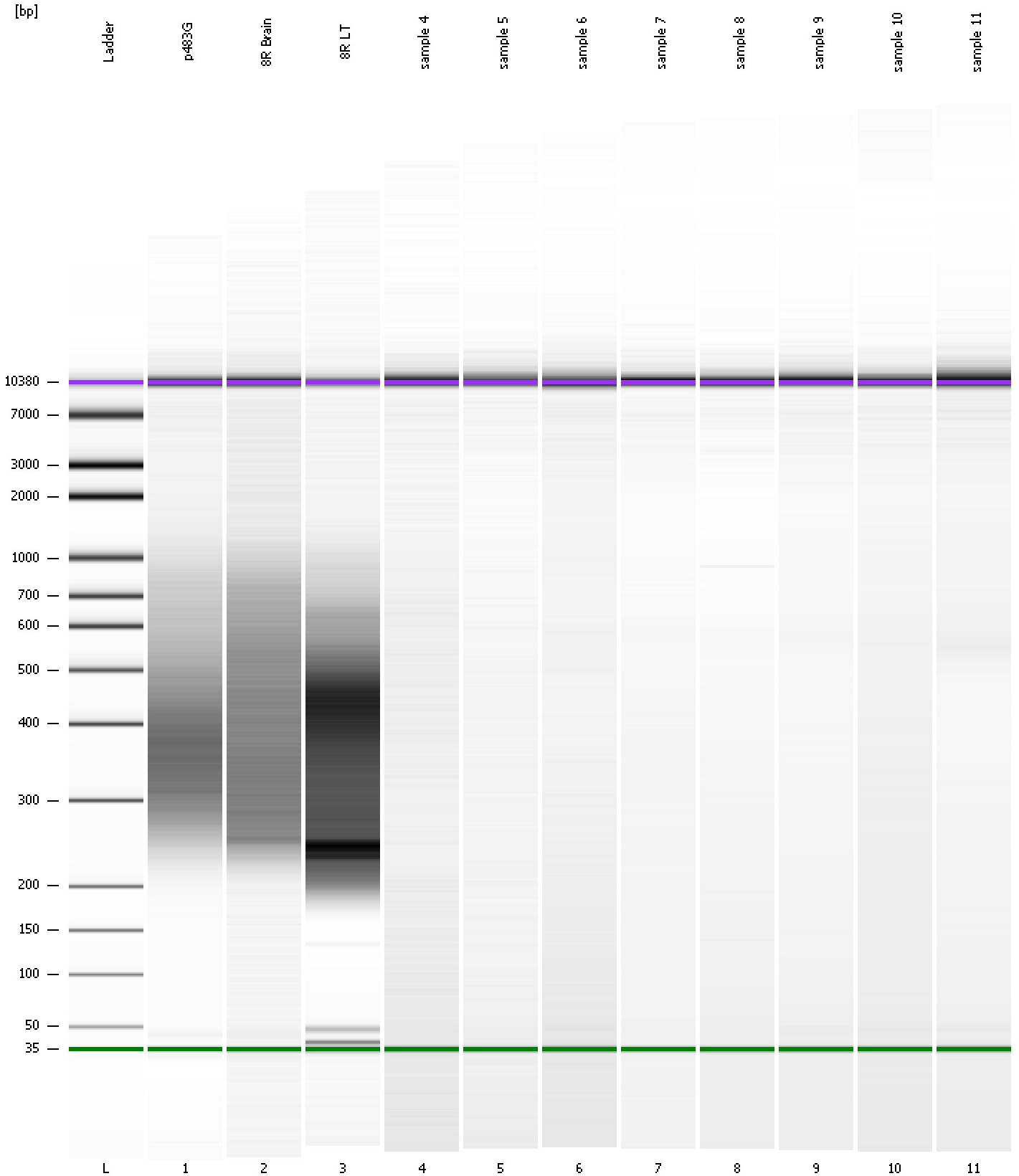
From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	383	2.4	18.7	4.11	24	31.8



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2017-03-03\2017-03-03\_001.xad

Created: 3/3/2017 10:02:42 AM  
Modified: 3/3/2017 10:43:59 AM

**Gel Image**



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-03-03\2017-03-03\_001.xad

Created: 3/3/2017 10:02:42 AM  
 Modified: 3/3/2017 10:43:59 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		3/3/2017 10:43:58 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\data\2017-03-03\2017-03-03_001.xad)		Instrument	Run		3/3/2017 10:02:47 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		3/3/2017 10:02:47 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		3/3/2017 10:02:47 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		3/3/2017 10:02:47 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		3/3/2017 10:02:47 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		3/3/2017 10:02:47 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		3/3/2017 10:02:47 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1