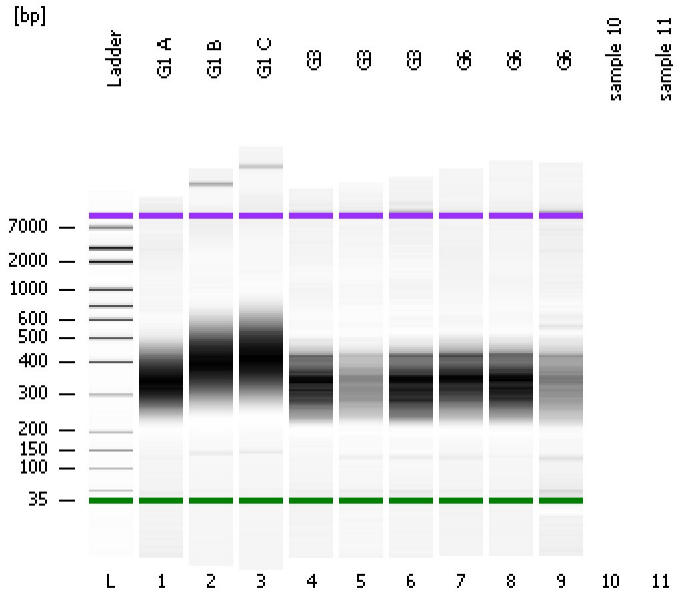
Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-04\2016-05-04_007.xad

Created: 5/4/2016 11:23:28 AM
Modified: 5/4/2016 11:59:00 AM

Electrophoresis File Run Summary



Instrument Information:

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

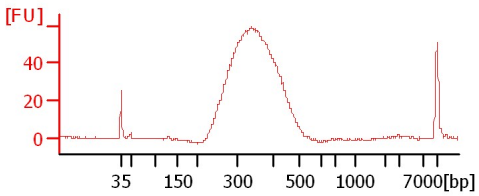
Assay Information:

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

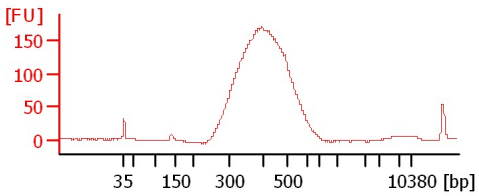
Chip Information:

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

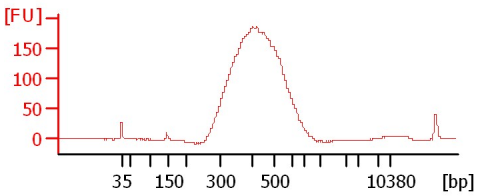
G1 A



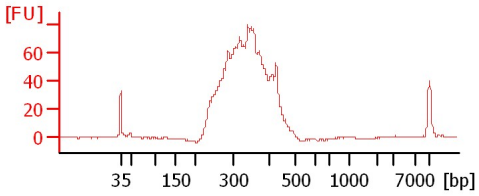
G1 B



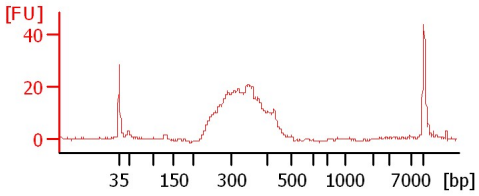
G1 C



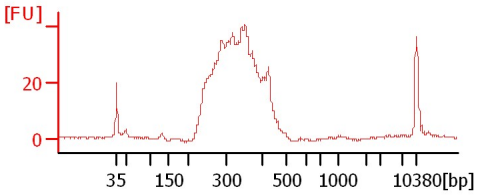
G3



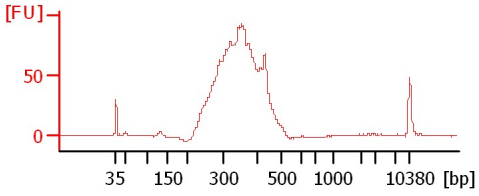
G3



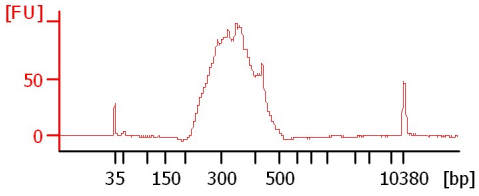
G3



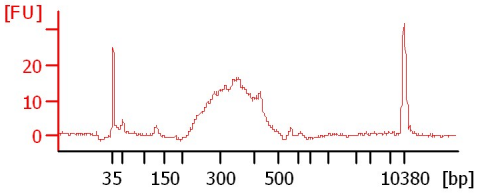
G6



G6



G6



Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-04\2016-05-04_007.xad

Created: 5/4/2016 11:23:28 AM
Modified: 5/4/2016 11:59:00 AM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
G1 A		☐	✔			
G1 B		☐	✔			
G1 C		☐	✔			
G3		☐	✔			
G3		☐	✔			
G3		☐	✔			
G6		☐	✔			
G6		☐	✔			
G6		☐	✔			
sample 10		☐				
sample 11		☐				
Ladder		☐	✔			

Chip Lot # **Reagent Kit Lot #**

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-04\2016-05-04_007.xad

Created: 5/4/2016 11:23:28 AM
Modified: 5/4/2016 11:59:00 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

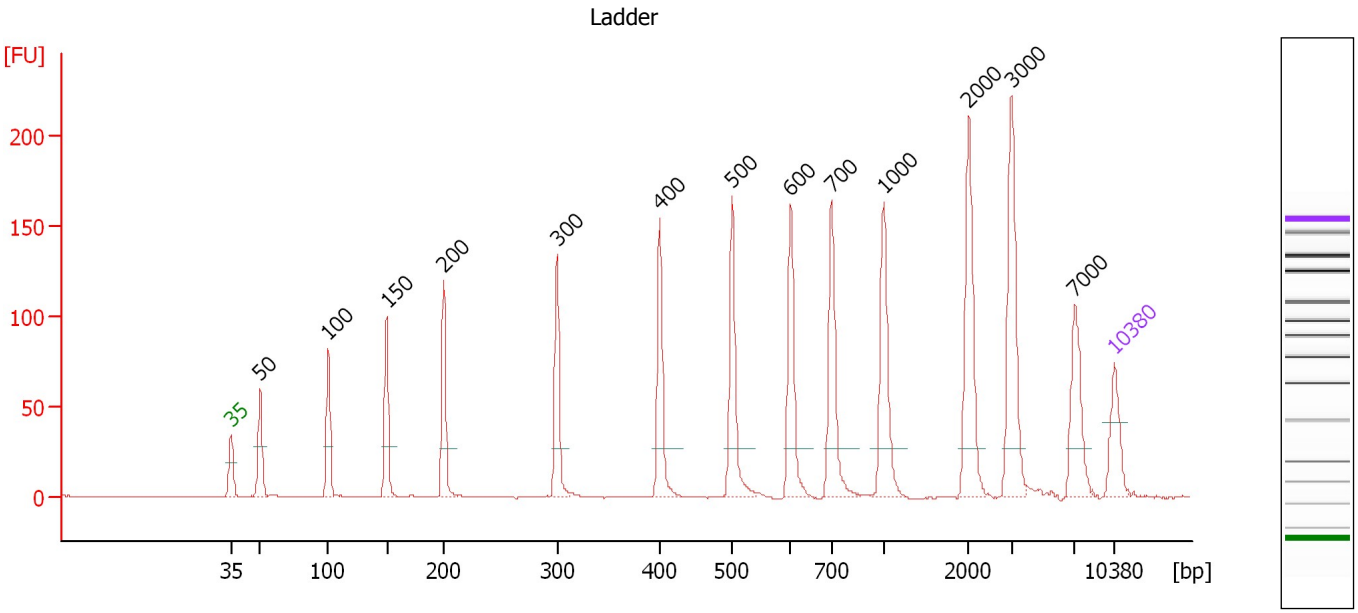
Ladder

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\2016-05-04\2016-05-04_007.xad

Created: 5/4/2016 11:23:28 AM
Modified: 5/4/2016 11:59:00 AM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.3

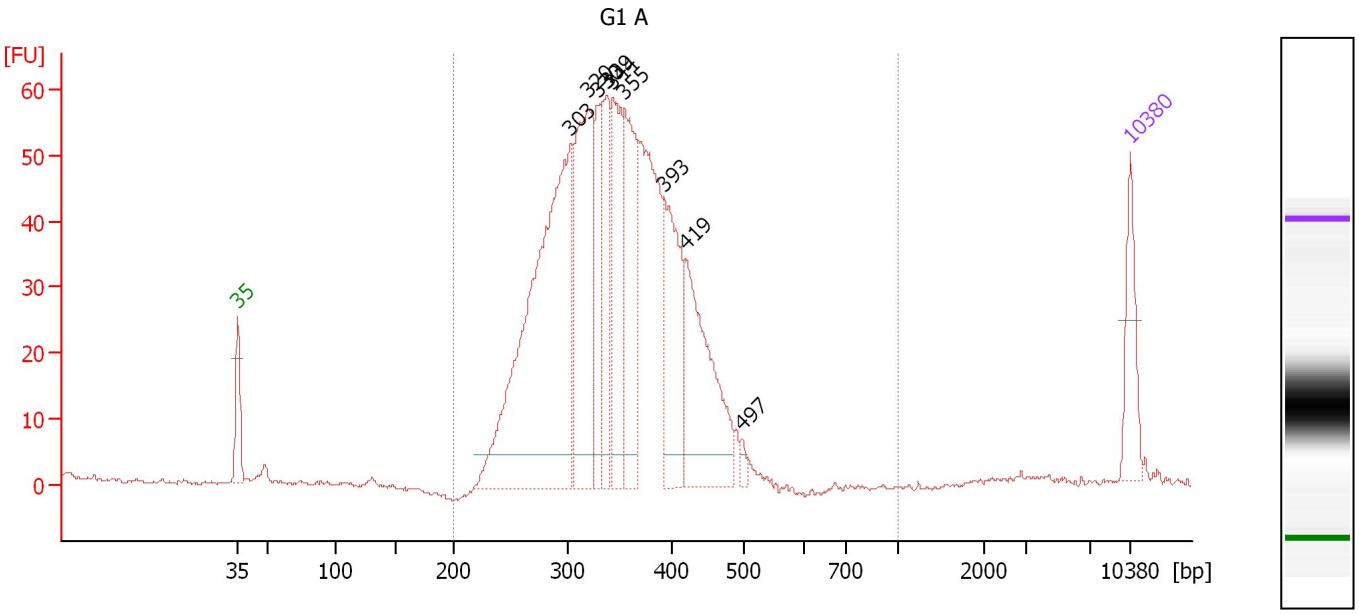
Peak table for Ladder

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	45.32
3		100	150.00	2,272.7	Ladder Peak	50.73
4		150	150.00	1,515.2	Ladder Peak	55.34
5		200	150.00	1,136.4	Ladder Peak	59.86
6		300	150.00	757.6	Ladder Peak	68.81
7		400	150.00	568.2	Ladder Peak	76.96
8		500	150.00	454.5	Ladder Peak	82.71
9		600	150.00	378.8	Ladder Peak	87.36
10		700	150.00	324.7	Ladder Peak	90.61
11		1,000	150.00	227.3	Ladder Peak	94.71
12		2,000	150.00	113.6	Ladder Peak	101.47
13		3,000	150.00	75.8	Ladder Peak	104.85
14		7,000	150.00	32.5	Ladder Peak	109.87
15		10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-04\2016-05-04_007.xad

Created: 5/4/2016 11:23:28 AM
Modified: 5/4/2016 11:59:00 AM

Electropherogram Summary Continued ...



Overall Results for sample 1 : G1 A

Number of peaks found:	9	Corr. Area 1:	1,018.0
Noise:	0.3		

Peak table for sample 1 : G1 A

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	303	930.80	4,647.5		69.09
3	320	396.43	1,874.8		70.47
4	330	140.45	644.6		71.27
5	339	194.55	869.9		71.98
6	344	231.68	1,020.5		72.40
7	355	273.25	1,165.4		73.32
8	393	257.55	993.7		76.37
9	419	310.26	1,120.7		78.08
10	497	11.93	36.4		82.52
11	10,380	75.00	10.9	Upper Marker	113.00

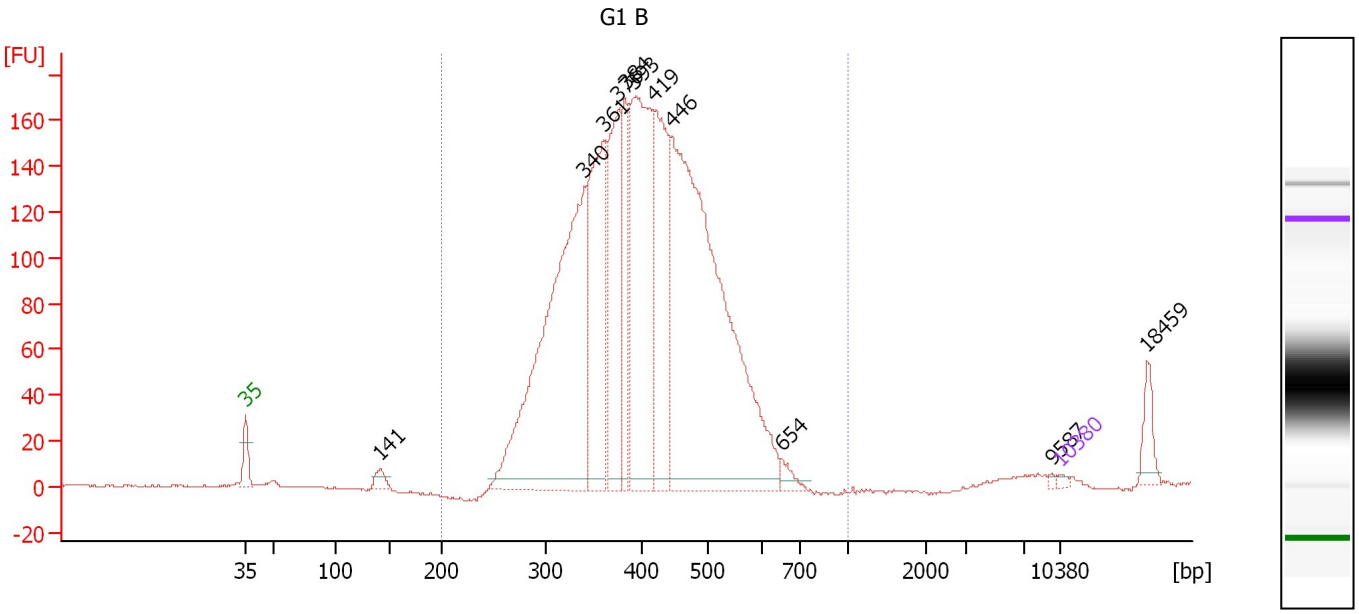
Region table for sample 1 : G1 A

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	1,018.0	14,091.3	3,113.92	99	16.4

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-04\2016-05-04_007.xad

Created: 5/4/2016 11:23:28 AM
Modified: 5/4/2016 11:59:00 AM

Electropherogram Summary Continued ...



Overall Results for sample 2 : G1 B

Number of peaks found:	11	Corr. Area 1:	3,070.7
Noise:	0.3		

Peak table for sample 2 : G1 B

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	141	400.93	4,293.3		54.55
3	340	15,162.19	67,479.2		72.11
4	361	6,454.49	27,113.6		73.76
5	376	4,990.80	20,088.3		75.04
6	384	2,583.90	10,202.2		75.64
7	393	8,754.67	33,726.8		76.42
8	419	5,410.32	19,554.4		78.07
9	446	19,307.16	65,540.3		79.63
10	654	358.52	830.5		89.12
11	9,587	41.75	6.6		112.27
12	10,380	75.00	10.9	Upper Marker	113.00
13	18,459	0.00	0.0		120.47

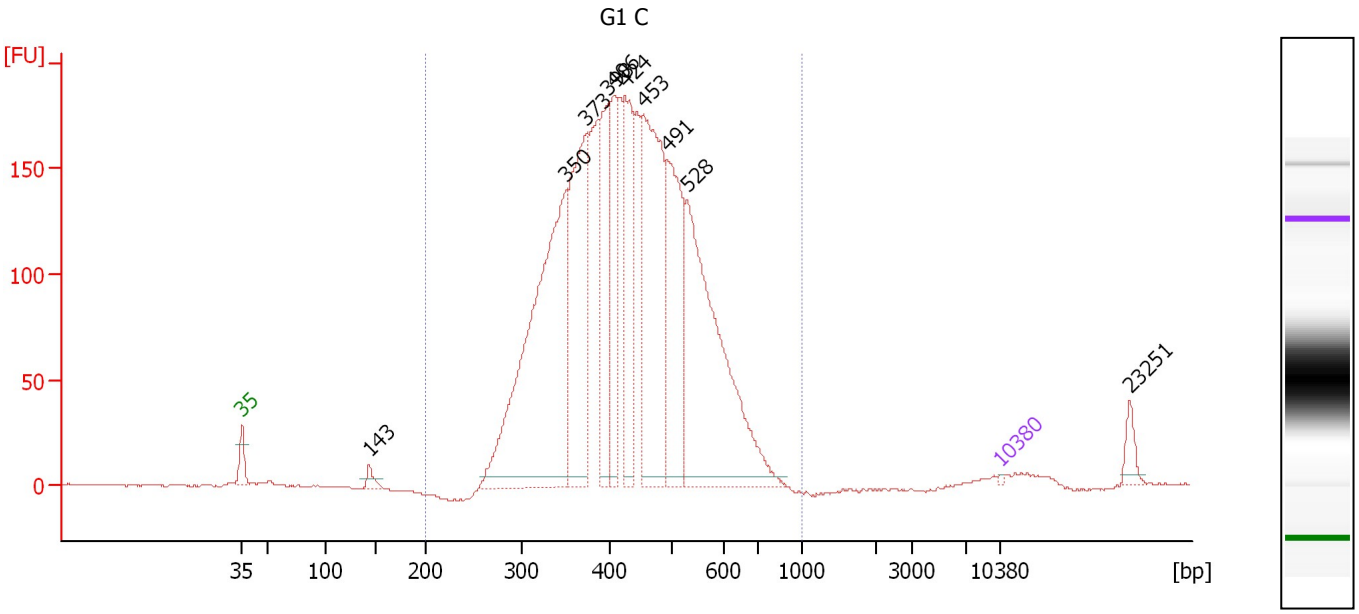
Region table for sample 2 : G1 B

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	411	3,070.7	240,119.3	61,913.74	98	19.5

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-04\2016-05-04_007.xad

Created: 5/4/2016 11:23:28 AM
Modified: 5/4/2016 11:59:00 AM

Electropherogram Summary Continued ...



Overall Results for sample 3 : G1 C

Number of peaks found:	10	Corr. Area 1:	3,379.4
Noise:	0.4		

Peak table for sample 3 : G1 C

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	143	751.61	7,953.5		54.71
3	350	30,615.50	132,440.3		72.91
4	373	14,859.58	60,332.2		74.78
5	398	8,293.72	31,580.4		76.79
6	406	6,232.17	23,231.7		77.34
7	424	9,113.53	32,599.2		78.32
8	453	18,010.13	60,279.6		79.99
9	491	11,719.13	36,147.2		82.21
10	528	22,593.04	64,794.7		84.03
11	10,380	75.00	10.9	Upper Marker	113.00
12	23,251	0.00	0.0		124.90

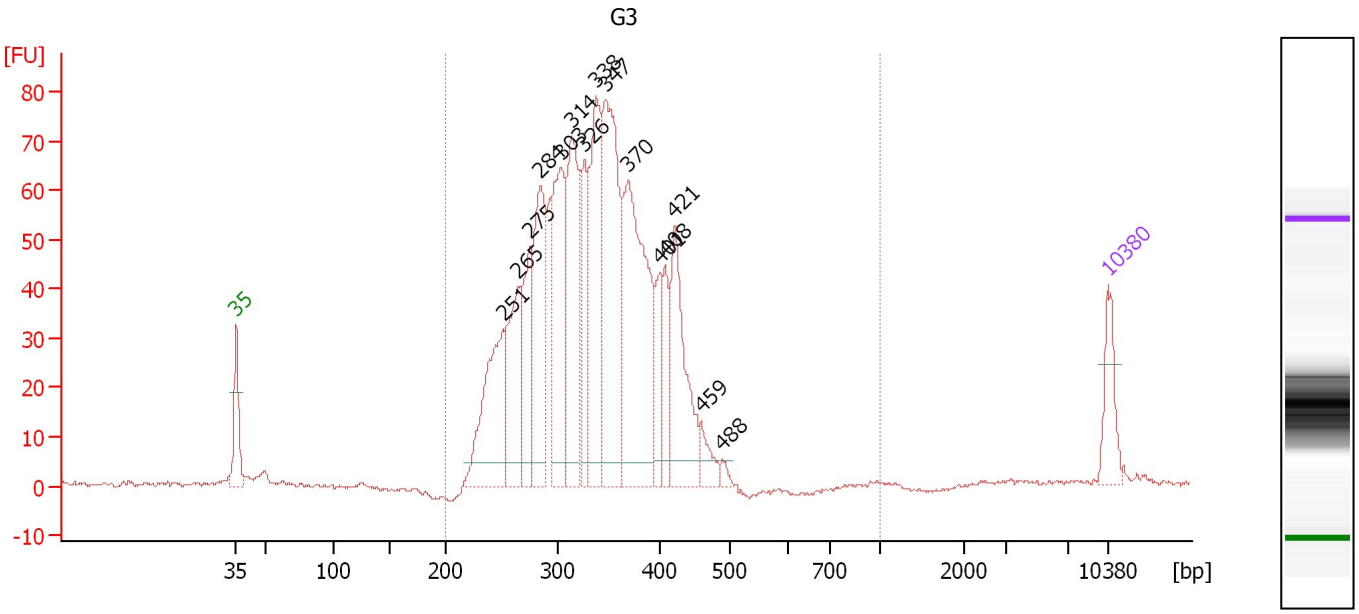
Region table for sample 3 : G1 C

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	435	3,379.4	515,118.9	139,528.11	98	21.1

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-04\2016-05-04_007.xad

Created: 5/4/2016 11:23:28 AM
Modified: 5/4/2016 11:59:00 AM

Electropherogram Summary Continued ...



Overall Results for sample 4 : G3

Number of peaks found:	15	Corr. Area 1:	1,271.0
Noise:	0.4		

Peak table for sample 4 : G3

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	251	362.86	2,187.9		64.45
3	265	257.88	1,476.2		65.65
4	275	211.79	1,168.1		66.55
5	284	353.77	1,885.5		67.40
6	303	372.30	1,860.4		69.07
7	314	360.17	1,739.6		69.93
8	326	175.37	814.3		70.96
9	338	372.74	1,671.6		71.90
10	347	517.02	2,258.9		72.63
11	370	577.45	2,365.3		74.51
12	401	111.16	420.5		76.99
13	408	97.07	360.5		77.42
14	421	294.10	1,057.5		78.19
15	459	47.68	157.5		80.33
16	488	13.69	42.5		82.05
17	10,380	75.00	10.9	Upper Marker	113.00

Region table for sample 4 : G3

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	336	1,271.0	20,129.2	4,287.08	98	17.0

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-04\2016-05-04_007.xad

Created: 5/4/2016 11:23:28 AM
Modified: 5/4/2016 11:59:00 AM

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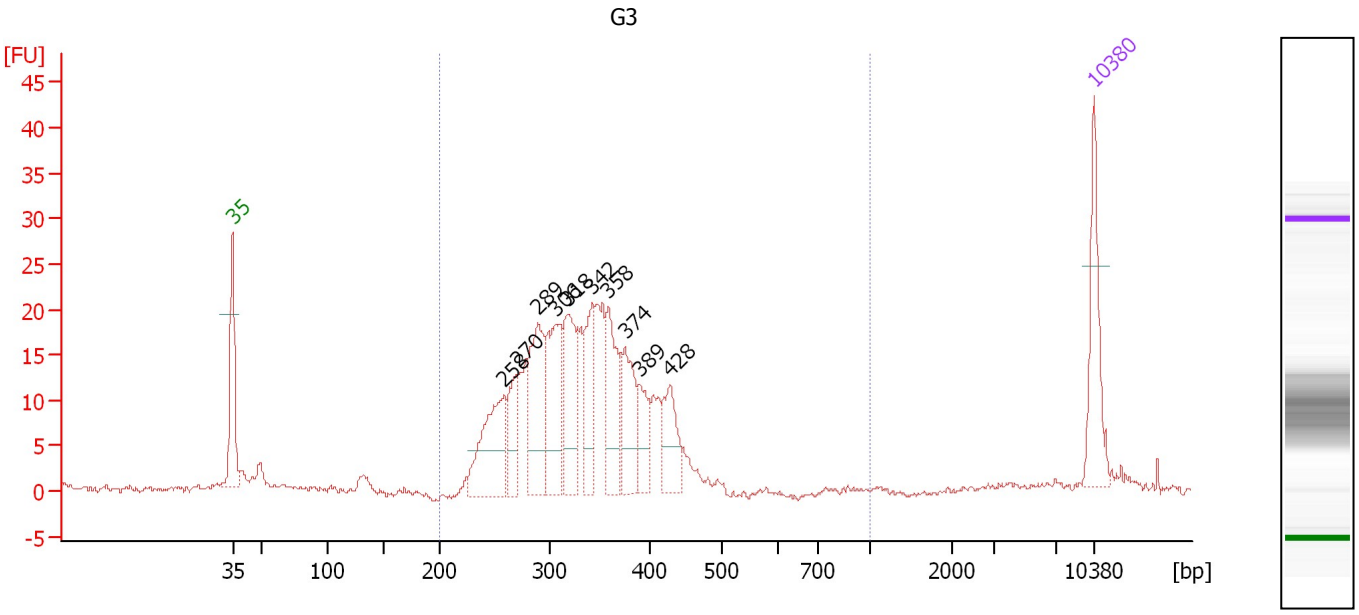


Overall Results for sample 5 : G3

Number of peaks found:	10	Corr. Area 1:	340.9
Noise:	0.3		

Peak table for sample 5 : G3

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	157.14	921.2		65.09
3	270	71.50	401.9		66.09
4	289	148.75	780.1		67.82
5	306	145.78	722.0		69.29
6	318	120.56	575.2		70.25
7	342	85.48	379.2		72.20
8	358	105.35	445.9		73.54
9	374	87.90	355.7		74.88
10	389	48.10	187.2		76.09
11	428	67.04	237.4		78.56
12	10,380	75.00	10.9	Upper Marker	113.00

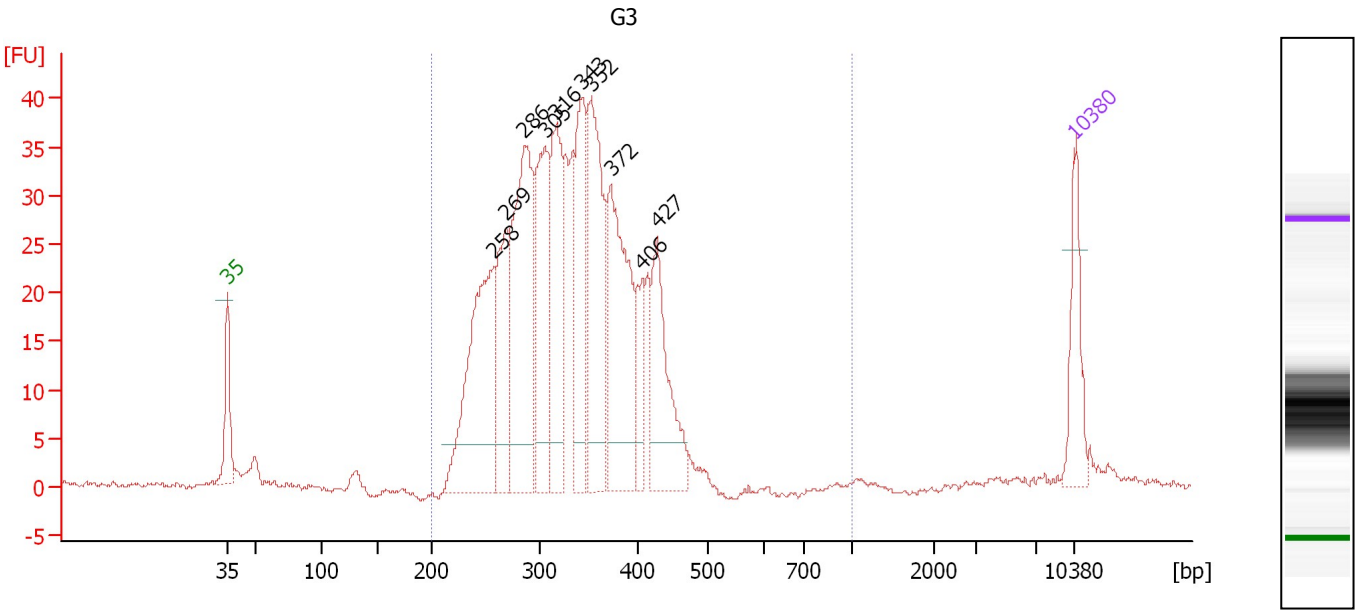
Region table for sample 5 : G3

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	334	340.9	6,113.5	1,297.09	94	18.0

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-04\2016-05-04_007.xad

Created: 5/4/2016 11:23:28 AM
Modified: 5/4/2016 11:59:00 AM

Electropherogram Summary Continued ...



Overall Results for sample 6 : G3

Number of peaks found:	10	Corr. Area 1:	700.8
Noise:	0.3		

Peak table for sample 6 : G3

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	381.35	2,239.1		65.05
3	269	173.60	978.3		66.02
4	286	390.34	2,070.6		67.52
5	305	250.14	1,241.4		69.24
6	316	237.28	1,137.3		70.13
7	343	201.62	890.2		72.33
8	352	301.31	1,297.6		73.04
9	372	307.36	1,250.6		74.71
10	406	66.12	246.7		77.32
11	427	191.70	680.5		78.51
12	10,380	75.00	10.9	Upper Marker	113.00

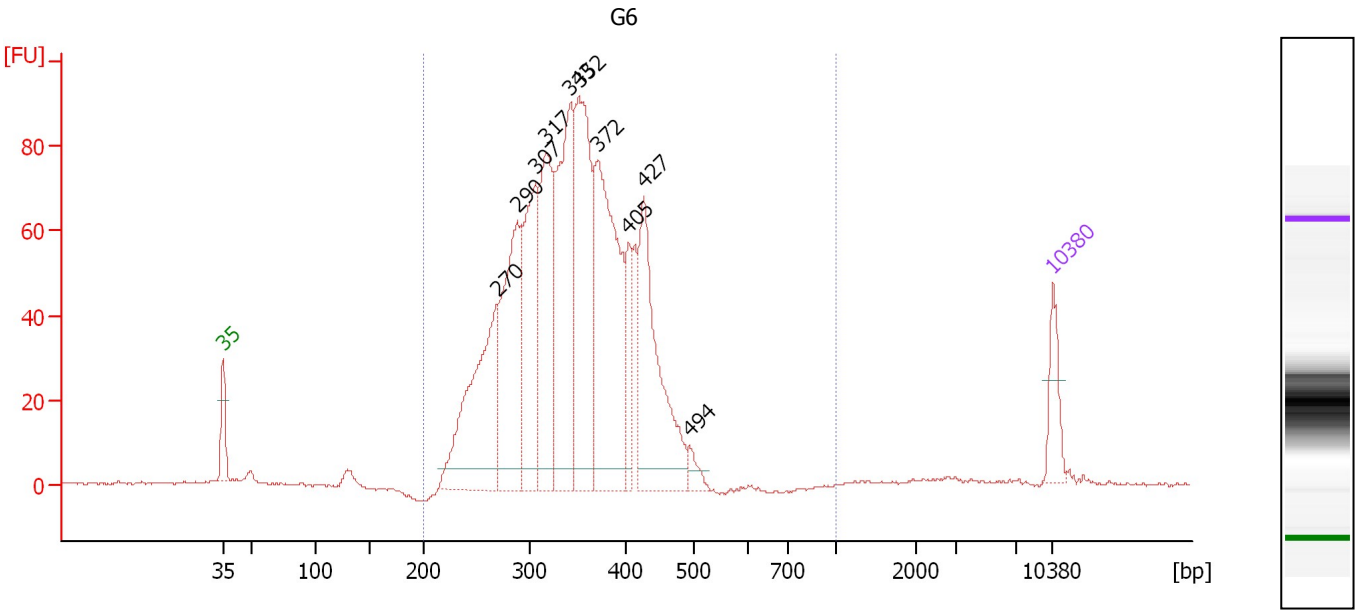
Region table for sample 6 : G3

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	332	700.8	13,061.5	2,740.03	97	17.8

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-04\2016-05-04_007.xad

Created: 5/4/2016 11:23:28 AM
Modified: 5/4/2016 11:59:00 AM

Electropherogram Summary Continued ...



Overall Results for sample 7 : G6

Number of peaks found:	10	Corr. Area 1:	1,465.5
Noise:	0.3		

Peak table for sample 7 : G6

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	270	576.74	3,236.7		66.12
3	290	499.85	2,615.4		67.88
4	307	466.57	2,300.4		69.41
5	317	467.41	2,232.4		70.22
6	343	570.78	2,520.1		72.33
7	352	593.71	2,555.6		73.05
8	372	718.85	2,928.9		74.67
9	405	124.21	465.0		77.24
10	427	501.18	1,779.9		78.49
11	494	37.59	115.3		82.36
12	10,380	75.00	10.9	Upper Marker	113.00

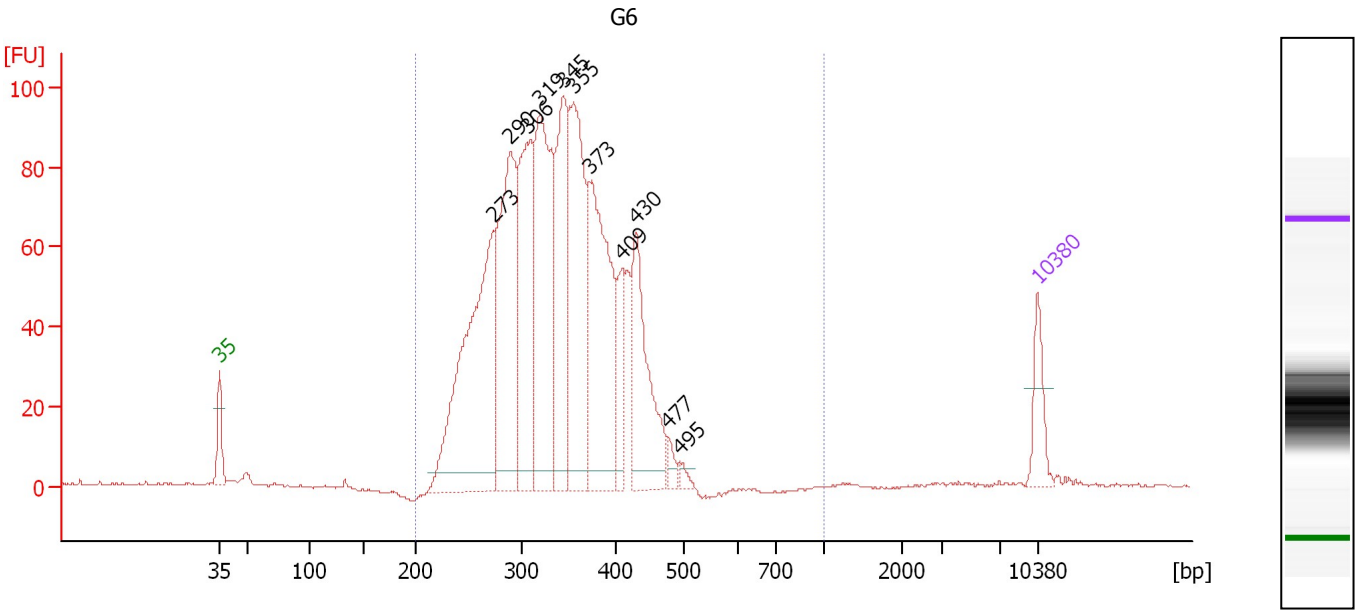
Region table for sample 7 : G6

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	346	1,465.5	20,542.1	4,510.64	98	16.8

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-04\2016-05-04_007.xad

Created: 5/4/2016 11:23:28 AM
Modified: 5/4/2016 11:59:00 AM

Electropherogram Summary Continued ...



Overall Results for sample 8 : G6

Number of peaks found:	11	Corr. Area 1:	1,667.2
Noise:	0.3		

Peak table for sample 8 : G6

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	273	892.78	4,948.6		66.42
3	290	635.69	3,325.2		67.89
4	306	526.44	2,606.6		69.30
5	319	648.04	3,073.7		70.40
6	345	421.66	1,850.7		72.50
7	355	556.57	2,373.5		73.32
8	373	566.78	2,304.5		74.74
9	409	128.87	477.6		77.47
10	430	358.82	1,265.7		78.66
11	477	28.54	90.6		81.40
12	495	17.04	52.2		82.41
13	10,380	75.00	10.9	Upper Marker	113.00

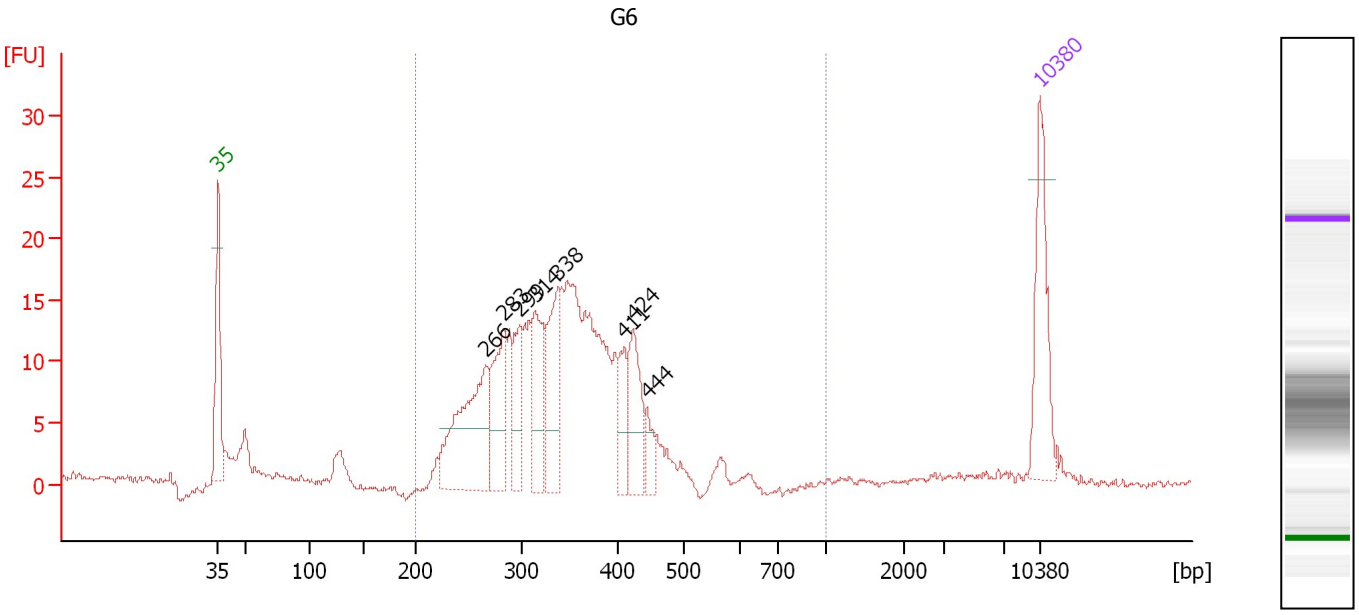
Region table for sample 8 : G6

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	338	1,667.2	22,656.2	4,851.54	99	17.1

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-04\2016-05-04_007.xad

Created: 5/4/2016 11:23:28 AM
Modified: 5/4/2016 11:59:00 AM

Electropherogram Summary Continued ...



Overall Results for sample 9 : G6

Number of peaks found:	8	Corr. Area 1:	280.2
Noise:	0.3		

Peak table for sample 9 : G6

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	266	181.87	1,036.9		65.74
3	283	98.06	525.1		67.29
4	299	58.63	297.4		68.69
5	314	82.92	399.9		69.96
6	338	90.92	407.5		71.92
7	411	40.37	148.8		77.59
8	424	71.37	254.8		78.36
9	444	22.26	75.9		79.50
10	10,380	75.00	10.9	Upper Marker	113.00

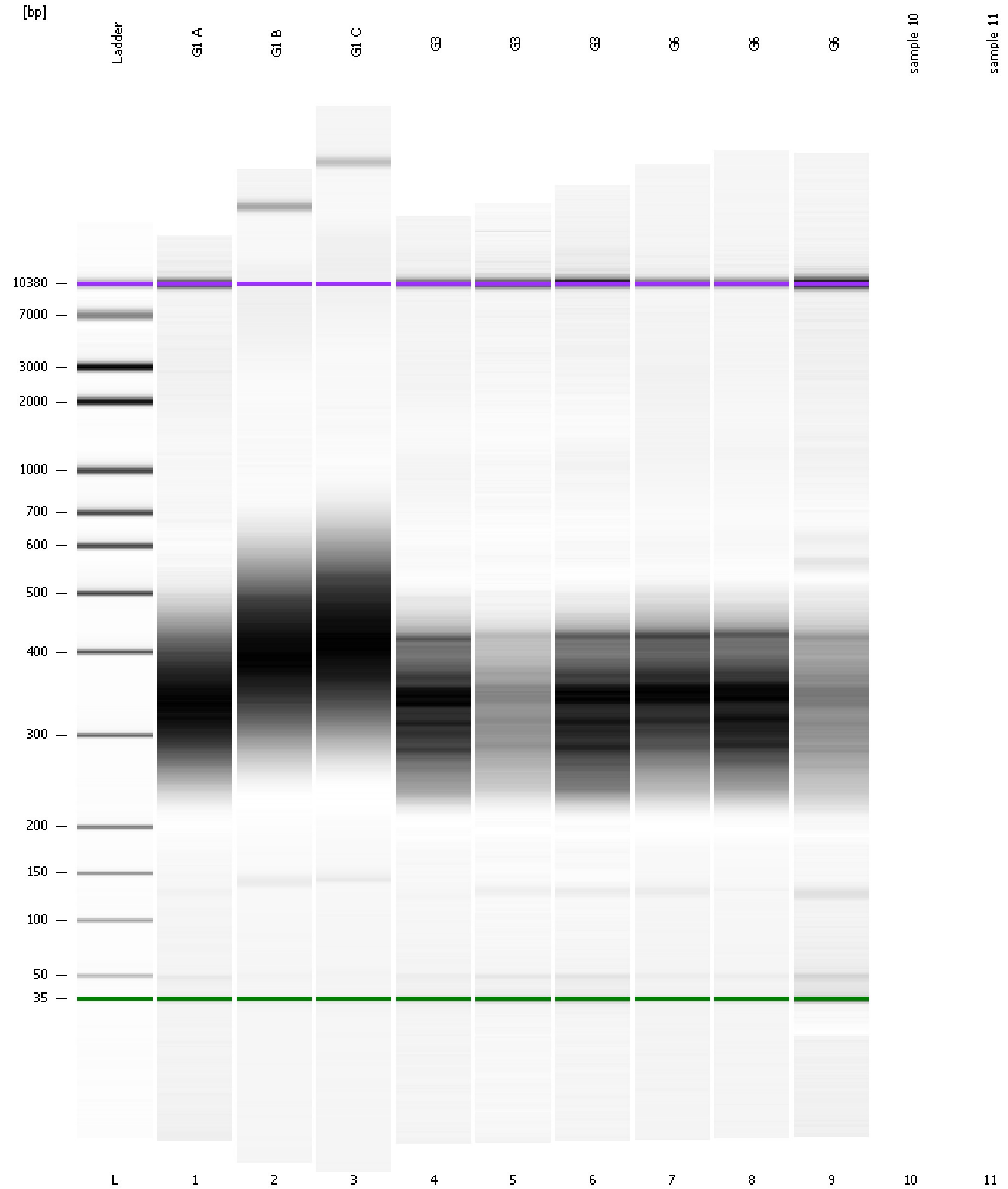
Region table for sample 9 : G6

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	342	280.2	4,965.0	1,069.53	91	18.8

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-04\2016-05-04_007.xad

Created: 5/4/2016 11:23:28 AM
Modified: 5/4/2016 11:59:00 AM

Gel Image

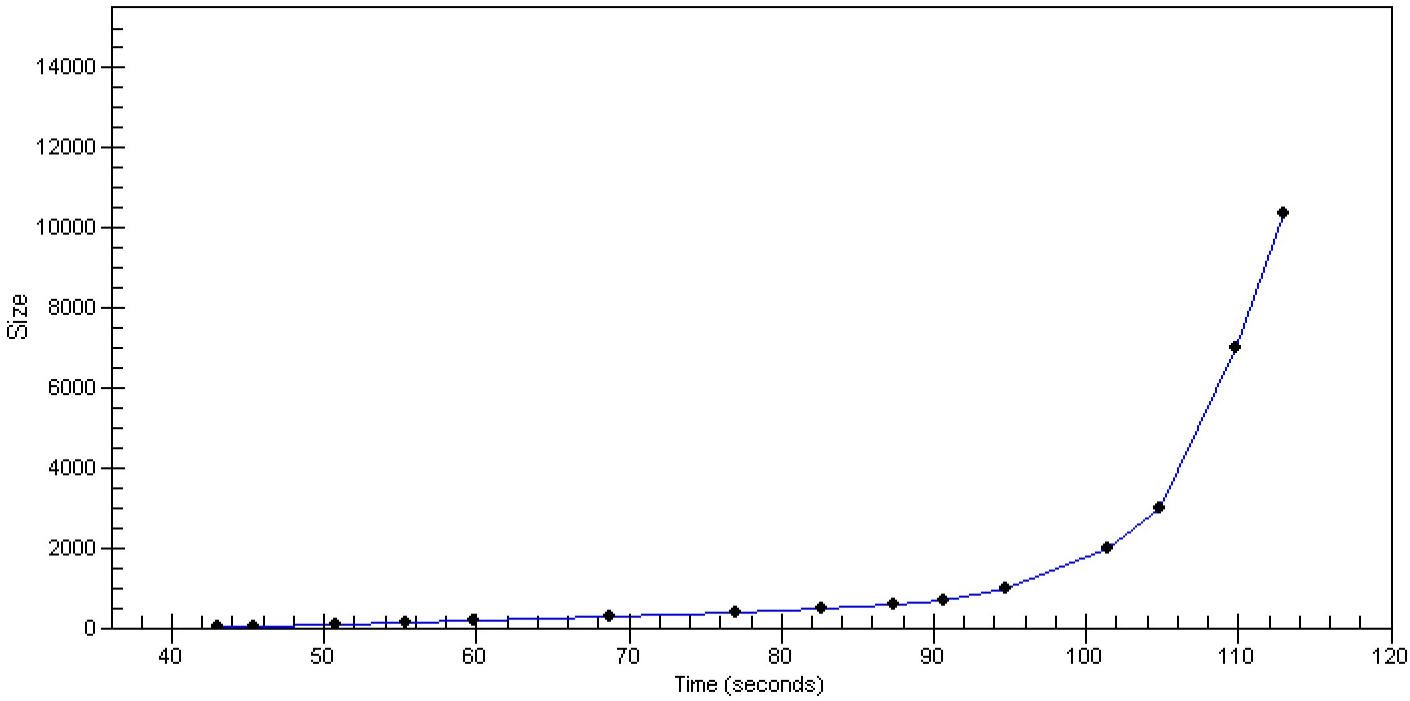


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-04\2016-05-04_007.xad

Created: 5/4/2016 11:23:28 AM
Modified: 5/4/2016 11:59:00 AM

Curves

Standard Curve



Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-04\2016-05-04_007.xad

Created: 5/4/2016 11:23:28 AM
Modified: 5/4/2016 11:59:00 AM

Invalid Samples

Sample 10 has not been run, no results available.

Sample 11 has not been run, no results available.

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-04\2016-05-04_007.xad

Created: 5/4/2016 11:23:28 AM
Modified: 5/4/2016 11:59:00 AM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 10)		Instrument	Run		5/4/2016 11:58:59 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\2016-05-04\2016-05-04_007.xad)		Instrument	Run		5/4/2016 11:23:28 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		5/4/2016 11:23:28 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		5/4/2016 11:23:28 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		5/4/2016 11:23:28 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		5/4/2016 11:23:28 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		5/4/2016 11:23:28 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		5/4/2016 11:23:28 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1