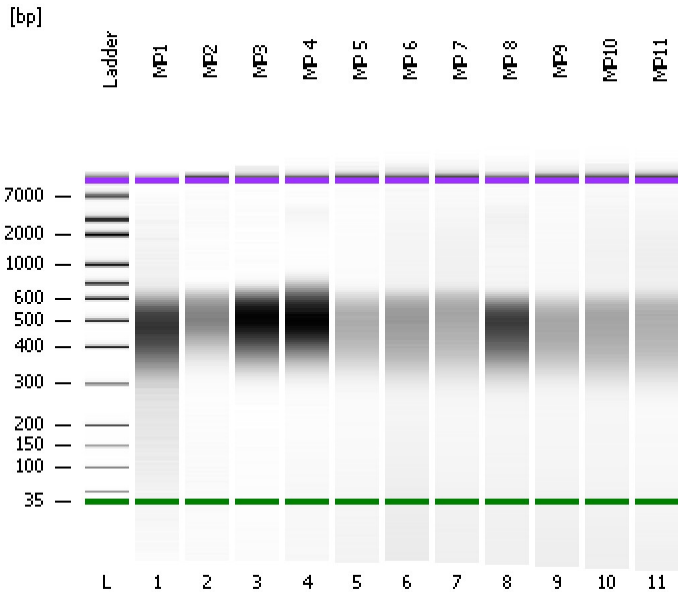


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-09\2013-10-09_001.xad

Created: 10/9/2013 9:18:14 AM
Modified: 10/9/2013 10:00:36 AM

Electrophoresis File Run Summary



Instrument Information:

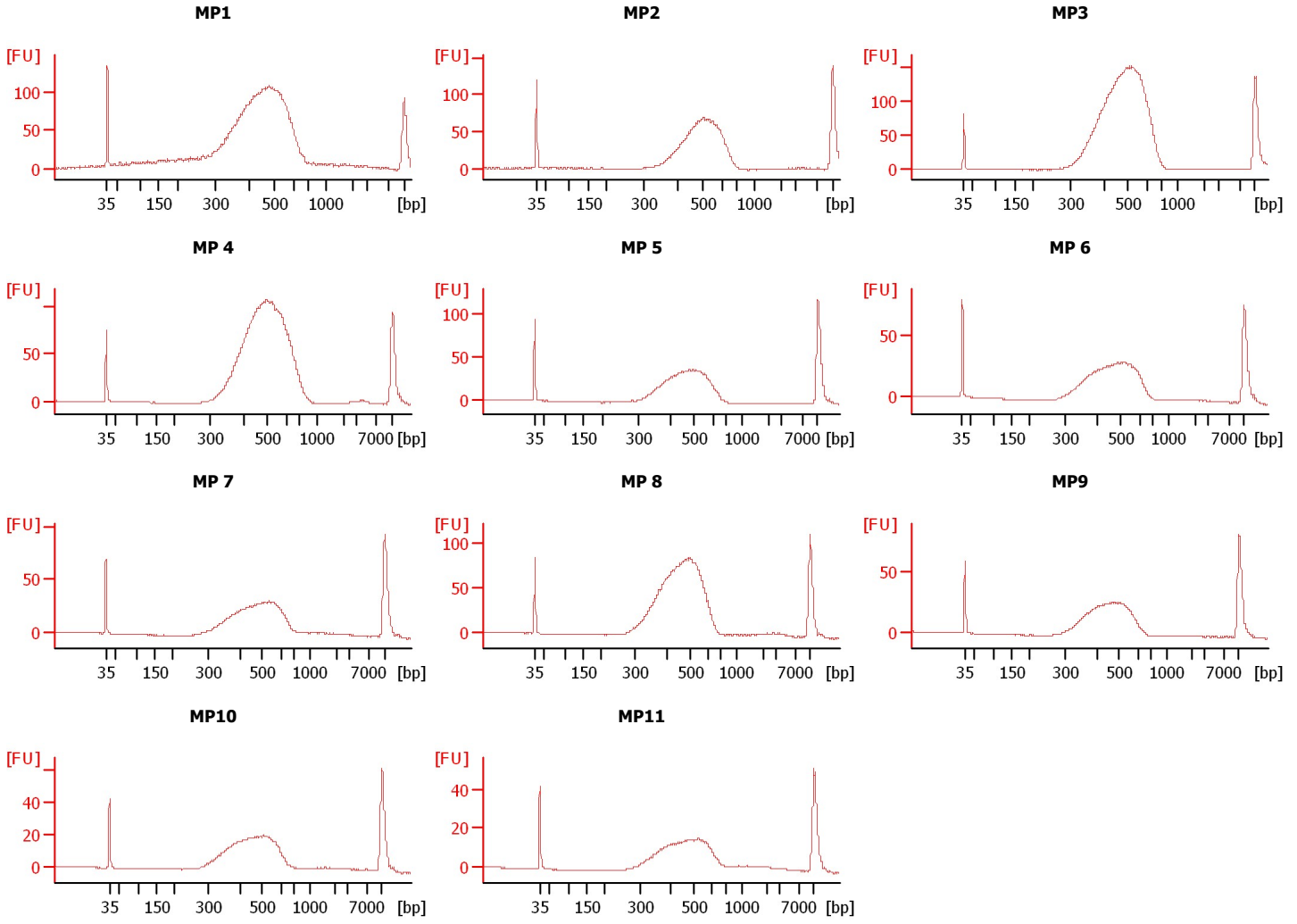
Instrument Name: DE13701086 Firmware: C.01.069
Serial#: DE13701086 Type: G2938B

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\2013-10-09\2013-10-09_001.xad

Created: 10/9/2013 9:18:14 AM
 Modified: 10/9/2013 10:00:36 AM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
MP1		<input type="checkbox"/>	✓			
MP2		<input type="checkbox"/>	✓			
MP3		<input type="checkbox"/>	✓			
MP 4		<input type="checkbox"/>	✓			
MP 5		<input type="checkbox"/>	✓			
MP 6		<input type="checkbox"/>	✓			
MP 7		<input type="checkbox"/>	✓			
MP 8		<input type="checkbox"/>	✓			
MP9		<input type="checkbox"/>	✓			
MP10		<input type="checkbox"/>	✓			
MP11		<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\2013-10-09\2013-10-09_001.xad

Created: 10/9/2013 9:18:14 AM
Modified: 10/9/2013 10:00:36 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

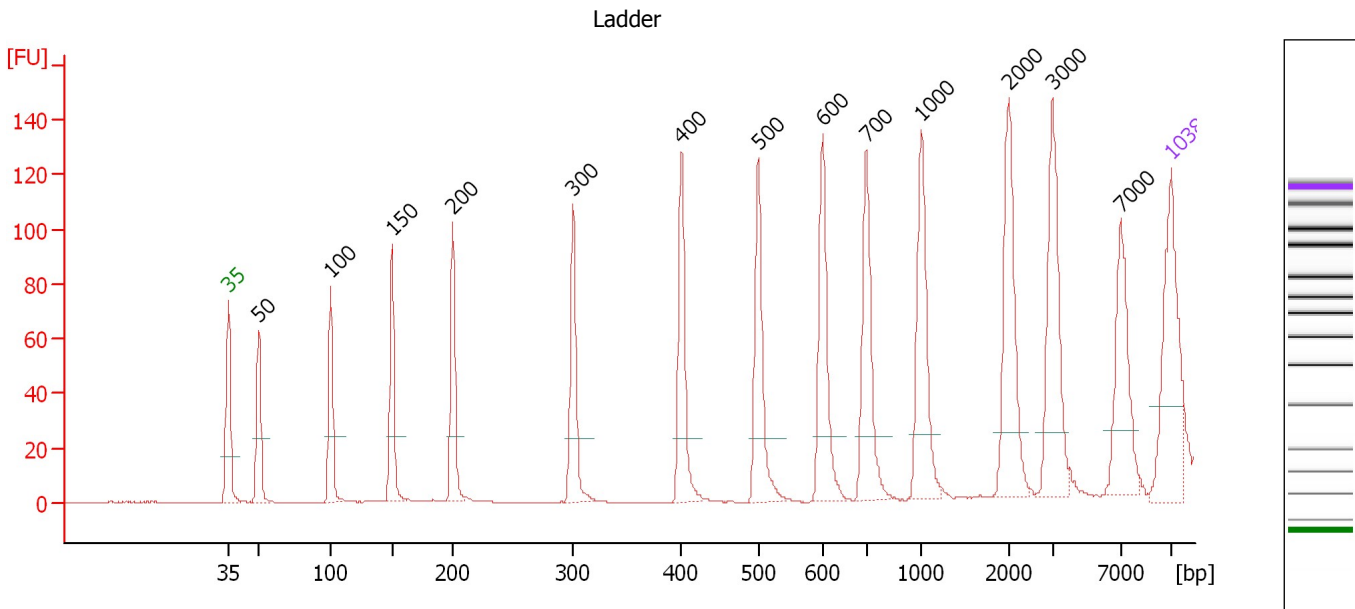
Ladder

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\2013-10-09\2013-10-09_001.xad

Created: 10/9/2013 9:18:14 AM
 Modified: 10/9/2013 10:00:36 AM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

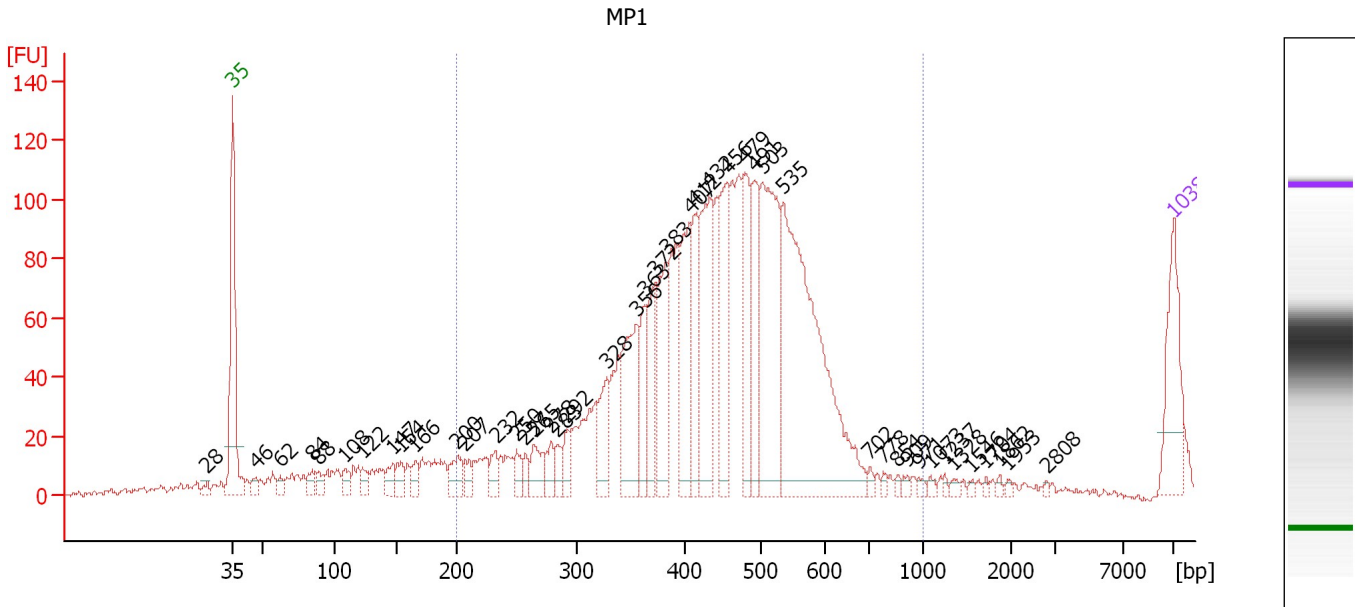
Peak table for Ladder

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	50	150.00	4,545.5	Ladder Peak
3	100	150.00	2,272.7	Ladder Peak
4	150	150.00	1,515.2	Ladder Peak
5	200	150.00	1,136.4	Ladder Peak
6	300	150.00	757.6	Ladder Peak
7	400	150.00	568.2	Ladder Peak
8	500	150.00	454.5	Ladder Peak
9	600	150.00	378.8	Ladder Peak
10	700	150.00	324.7	Ladder Peak
11	1,000	150.00	227.3	Ladder Peak
12	2,000	150.00	113.6	Ladder Peak
13	3,000	150.00	75.8	Ladder Peak
14	7,000	150.00	32.5	Ladder Peak
15	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-09\2013-10-09_001.xad

Created: 10/9/2013 9:18:14 AM
 Modified: 10/9/2013 10:00:36 AM

Electropherogram Summary Continued ...



Overall Results for sample 1 : MP1

Number of peaks found: 45 Corr. Area 1: 1,868.4
 Noise: 1.5

Peak table for sample 1 : MP1


Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	28	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	46	14.40	470.7	
4	62	12.09	295.7	
5	84	19.66	353.7	
6	88	18.43	317.6	
7	108	20.58	288.6	
8	122	18.13	224.4	
9	147	23.90	246.7	
10	154	23.04	226.9	
11	166	20.08	183.6	
12	200	36.95	279.3	
13	207	19.53	143.2	
14	232	24.34	158.6	
15	250	20.58	124.5	
16	257	15.75	92.7	
17	265	38.18	218.7	
18	278	25.10	136.6	
19	283	20.54	109.9	
20	292	29.47	152.8	
21	328	58.66	270.7	
22	356	137.90	587.7	
23	363	58.09	242.5	
24	372	77.21	314.2	
25	383	113.52	448.9	
26	407	122.23	455.1	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-09\2013-10-09_001.xad

Created: 10/9/2013 9:18:14 AM
 Modified: 10/9/2013 10:00:36 AM

Electropherogram Summary Continued ...

... Peak table for sample 1 : MP1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	412	92.20	338.7	
28	432	170.29	597.3	
29	456	137.66	457.8	
30	479	106.35	336.2	
31	491	110.01	339.4	
32	503	242.00	729.4	
33	535	468.24	1,326.1	
34	702	5.74	12.4	
35	778	4.65	9.1	
36	854	4.11	7.3	
37	909	5.00	8.3	
38	971	4.74	7.4	
39	1,073	4.50	6.4	
40	1,237	3.38	4.1	
41	1,328	4.56	5.2	
42	1,546	3.03	3.0	
43	1,704	2.60	2.3	
44	1,862	3.02	2.5	
45	1,953	3.03	2.4	
46	2,808	2.06	1.1	
47	 10,380	75.00	10.9	Upper Marker

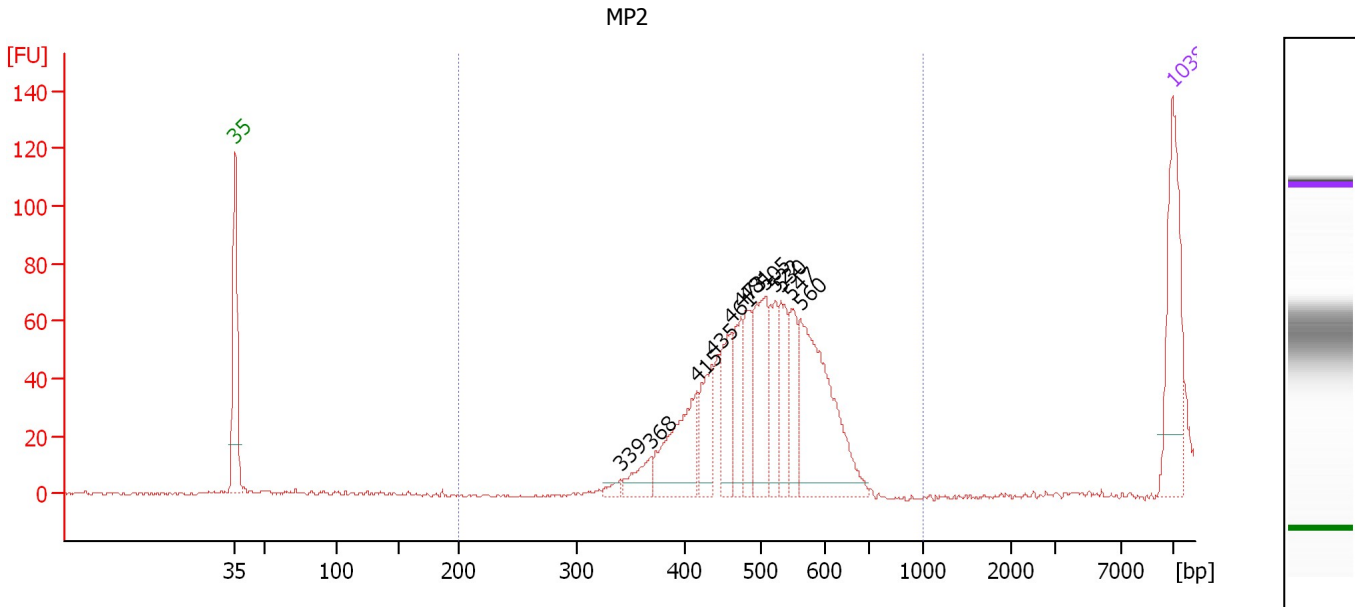
Region table for sample 1 : MP1

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	445	8,213.3	2,248.55	1,868.4	92	20.0	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-09\2013-10-09_001.xad

Created: 10/9/2013 9:18:14 AM
 Modified: 10/9/2013 10:00:36 AM

Electropherogram Summary Continued ...



Overall Results for sample 2 : MP2

Number of peaks found: 12 Corr. Area 1: 564.0
 Noise: 0.5

Peak table for sample 2 : MP2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	339	7.59	33.9	
3	368	24.60	101.2	
4	415	88.98	324.7	
5	435	48.84	169.9	
6	461	54.14	178.1	
7	473	41.91	134.2	
8	481	47.11	148.4	
9	505	86.04	258.3	
10	522	41.66	120.9	
11	530	48.29	138.2	
12	547	42.86	118.7	
13	560	163.25	441.4	
14	10,380	75.00	10.9	Upper Marker

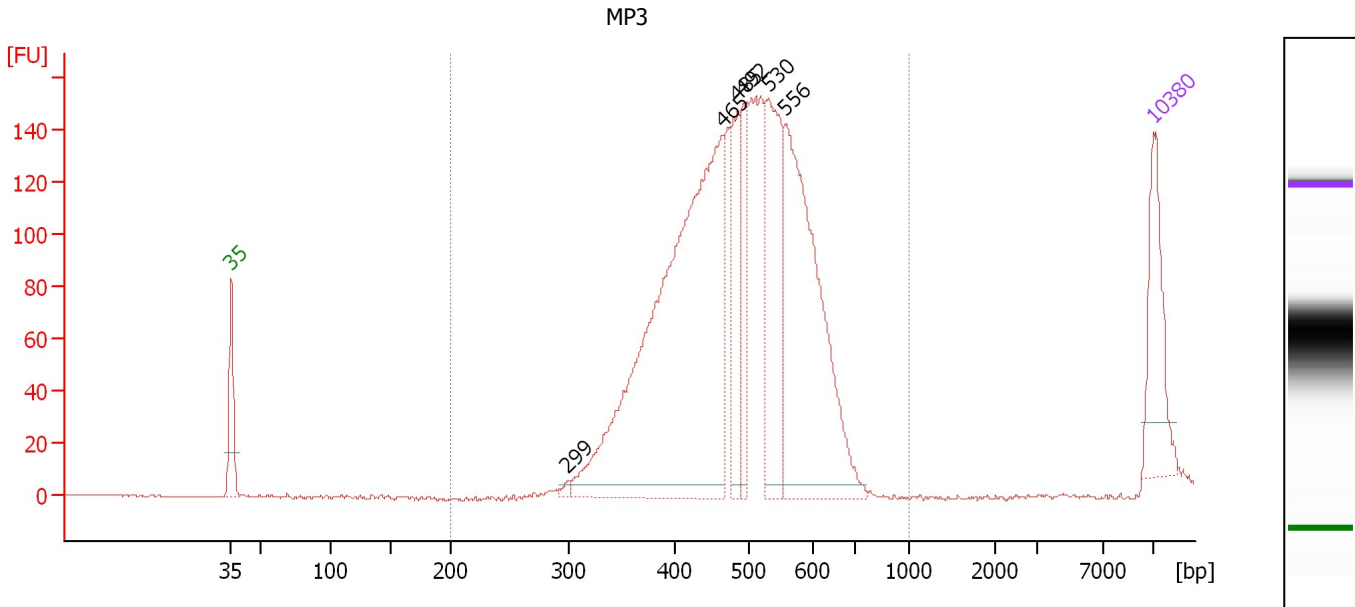
Region table for sample 2 : MP2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	505	1,322.7	433.14	564.0	99	11.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-09\2013-10-09_001.xad

Created: 10/9/2013 9:18:14 AM
 Modified: 10/9/2013 10:00:36 AM

Electropherogram Summary Continued ...



Overall Results for sample 3 : MP3

Number of peaks found: 6 Corr. Area 1: 2,322.6
 Noise: 0.2

Peak table for sample 3 : MP3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	299	5.16	26.1	
3	465	725.62	2,365.6	
4	485	96.80	302.6	
5	492	71.92	221.3	
6	530	170.86	488.6	
7	556	364.52	993.3	
8	10,380	75.00	10.9	Upper Marker

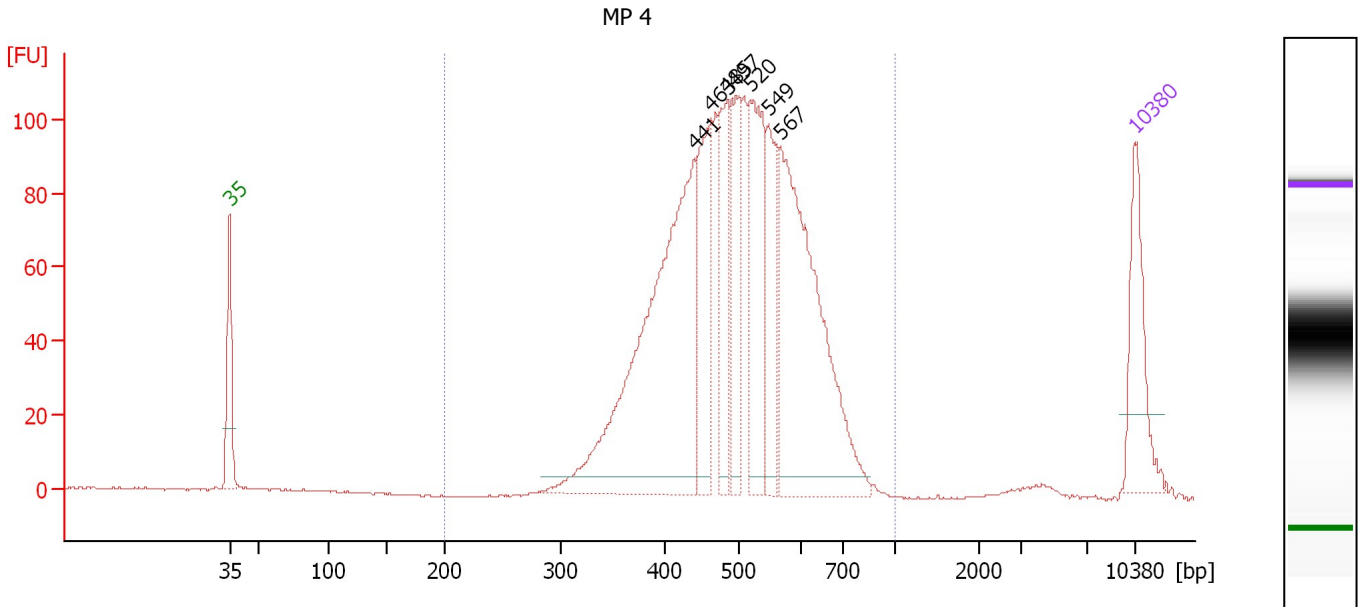
Region table for sample 3 : MP3

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	487	5,222.5	1,615.93	2,322.6	100	16.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-09\2013-10-09_001.xad

Created: 10/9/2013 9:18:14 AM
 Modified: 10/9/2013 10:00:36 AM

Electropherogram Summary Continued ...



Overall Results for sample 4 : MP 4

Number of peaks found: 7 Corr. Area 1: 1,790.8
 Noise: 0.2

Peak table for sample 4 : MP 4

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	441	519.11	1,783.8	
3	463	146.98	481.4	
4	485	119.55	373.5	
5	497	115.15	351.3	
6	520	170.15	495.7	
7	549	105.91	292.1	
8	567	372.93	995.9	
9	10,380	75.00	10.9	Upper Marker

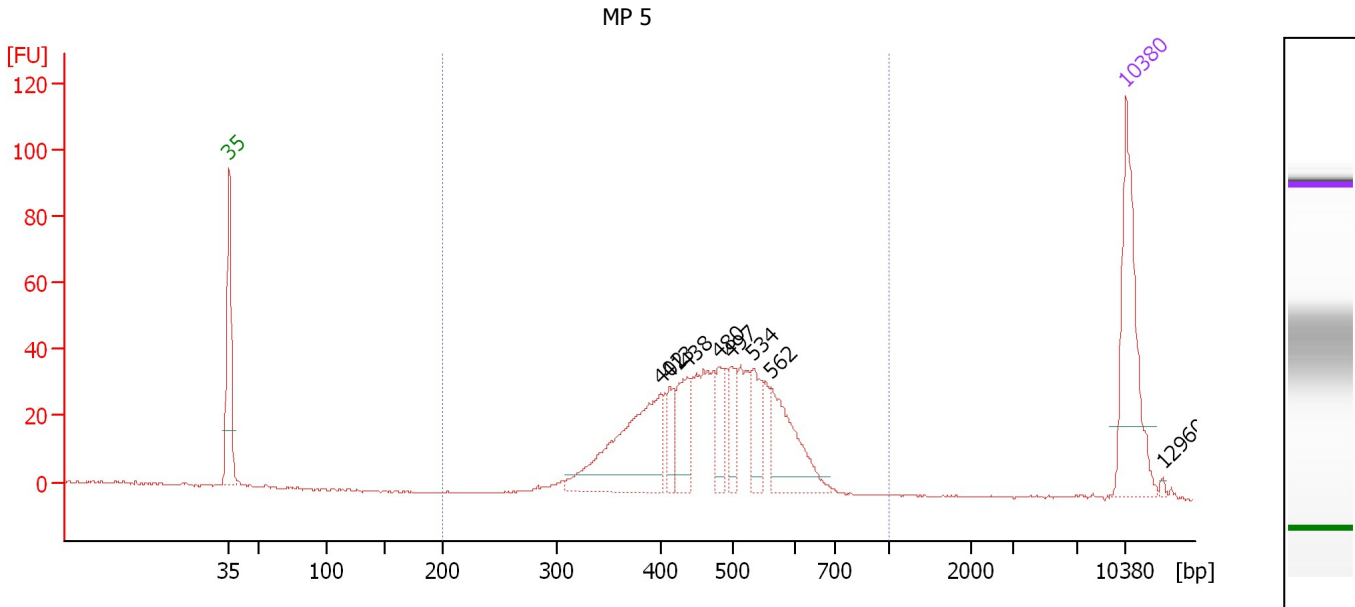
Region table for sample 4 : MP 4

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	501	5,429.5	1,712.00	1,790.8	98	18.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-09\2013-10-09_001.xad

Created: 10/9/2013 9:18:14 AM
 Modified: 10/9/2013 10:00:36 AM

Electropherogram Summary Continued ...



Overall Results for sample 5 : MP 5

Number of peaks found: 8 Corr. Area 1: 639.0
 Noise: 0.2

Peak table for sample 5 : MP 5

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	402	128.74	485.6	
3	413	22.91	84.0	
4	438	38.47	133.0	
5	480	24.81	78.4	
6	497	26.06	79.4	
7	534	29.91	84.9	
8	562	66.34	178.9	
9	10,380	75.00	10.9	Upper Marker
10	12,960	0.00	0.0	

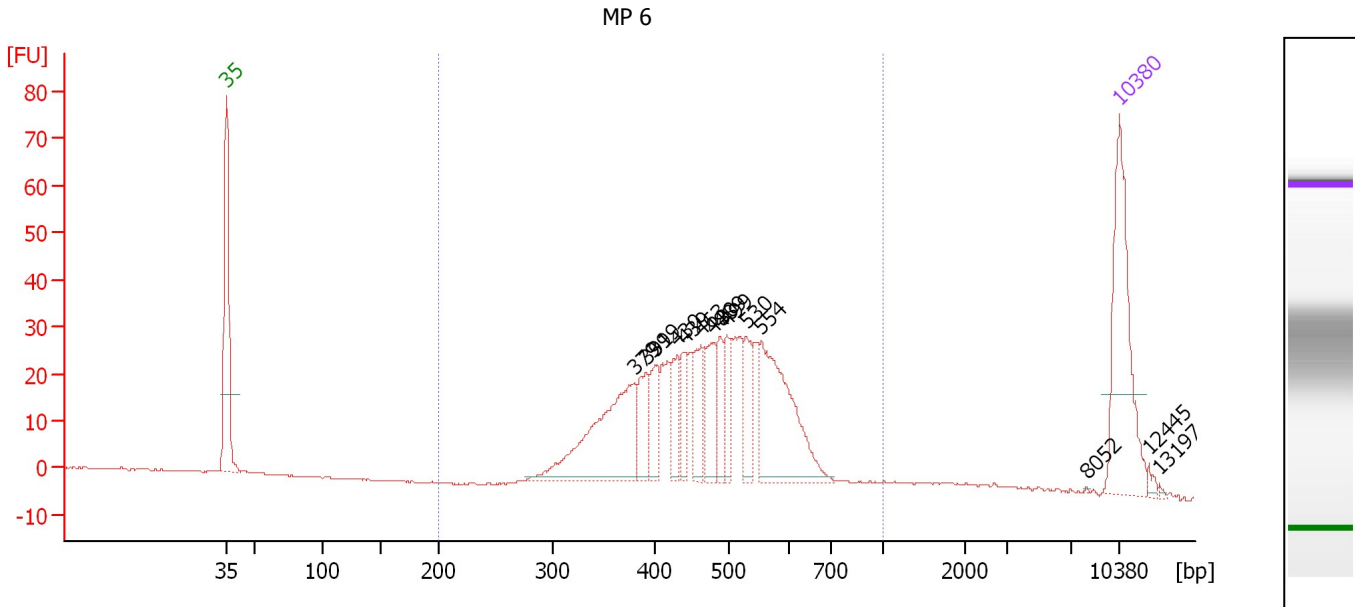
Region table for sample 5 : MP 5

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	471	1,652.3	492.43	639.0	98	17.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-09\2013-10-09_001.xad

Created: 10/9/2013 9:18:14 AM
 Modified: 10/9/2013 10:00:36 AM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 6 : MP 6

Height Threshold [FU] : 1

Overall Results for sample 6 : MP 6

Number of peaks found: 14 Corr. Area 1: 600.1
 Noise: 0.1

Peak table for sample 6 : MP 6

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	379	119.91	479.3	
3	391	28.85	111.8	
4	399	27.77	105.4	
5	430	23.63	83.3	
6	439	19.90	68.6	
7	463	29.52	96.6	
8	480	30.09	95.0	
9	489	22.75	70.5	
10	499	21.20	64.4	
11	530	24.68	70.6	
12	554	99.98	273.3	
13	8,052	0.21	0.0	
14	10,380	75.00	10.9	Upper Marker
15	12,445	0.00	0.0	
16	13,197	0.00	0.0	

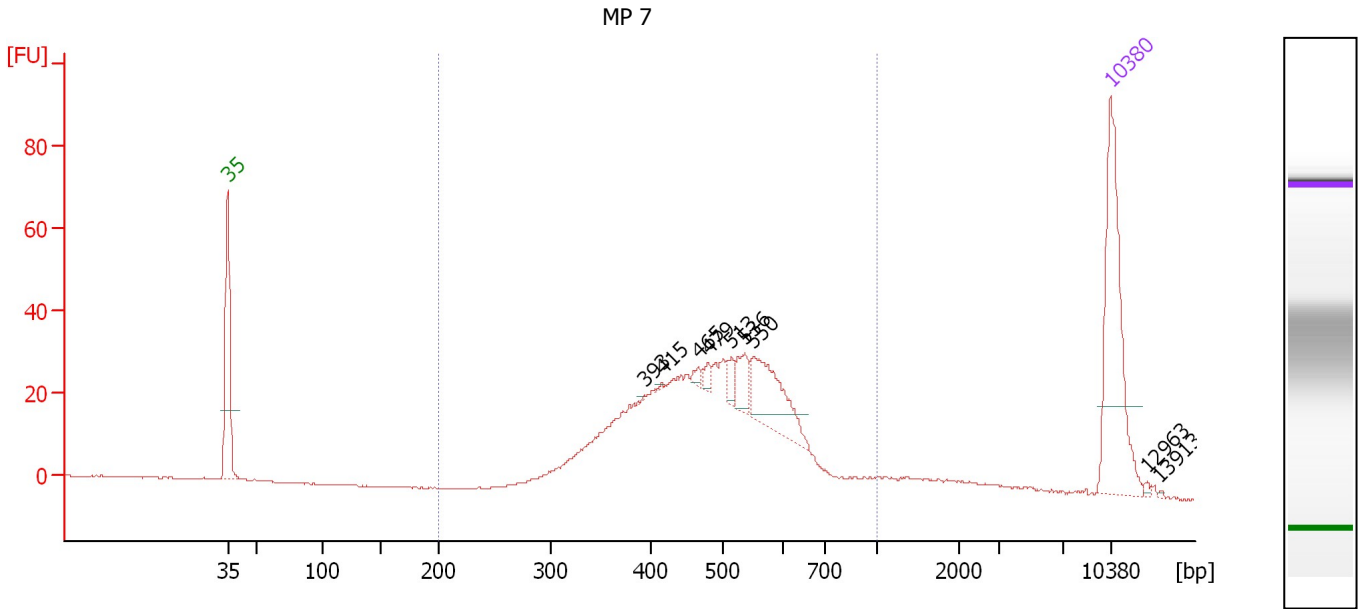
Region table for sample 6 : MP 6

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	477	2,030.3	602.58	600.1	94	21.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-09\2013-10-09_001.xad

Created: 10/9/2013 9:18:14 AM
 Modified: 10/9/2013 10:00:36 AM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 7 : MP 7

Height Threshold [FU] : 1

Overall Results for sample 7 : MP 7

Number of peaks found: 9 Corr. Area 1: 606.0
 Noise: 0.1

Peak table for sample 7 : MP 7

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	393	0.70	2.7	
3	415	0.70	2.6	
4	465	3.08	10.0	
5	479	4.49	14.2	
6	513	8.01	23.6	
7	536	14.45	40.8	
8	550	49.80	137.1	
9	10,380	75.00	10.9	Upper Marker
10	12,963	0.00	0.0	
11	13,913	0.00	0.0	

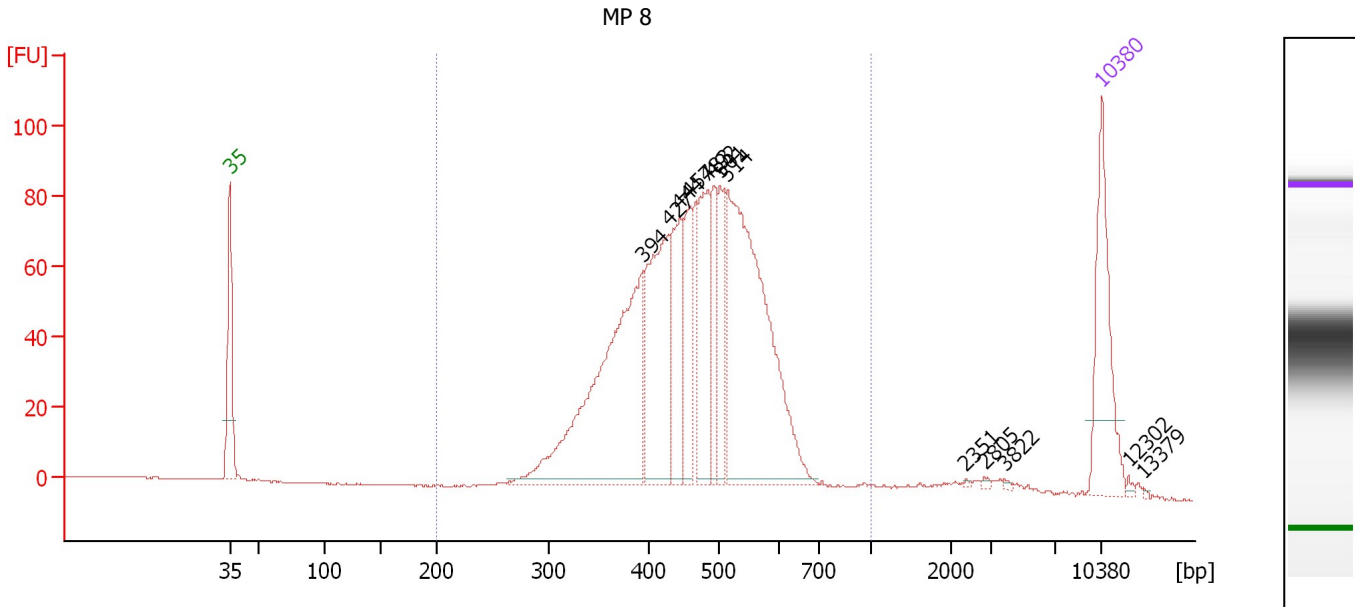
Region table for sample 7 : MP 7

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	490	1,739.7	526.54	606.0	93	22.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-09\2013-10-09_001.xad

Created: 10/9/2013 9:18:14 AM
 Modified: 10/9/2013 10:00:36 AM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 8 : MP 8

Height Threshold [FU] : 2

Overall Results for sample 8 : MP 8

Number of peaks found: 13 Corr. Area 1: 1,428.8
 Noise: 0.2

Peak table for sample 8 : MP 8

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	394	300.24	1,153.6	
3	427	158.56	562.2	
4	444	89.08	304.1	
5	457	63.06	208.9	
6	483	92.48	290.2	
7	492	50.79	156.5	
8	501	58.04	175.5	
9	514	324.16	956.4	
10	2,351	0.62	0.4	
11	2,805	1.25	0.7	
12	3,822	1.19	0.5	
13	10,380	75.00	10.9	Upper Marker
14	12,302	0.00	0.0	
15	13,379	0.00	0.0	

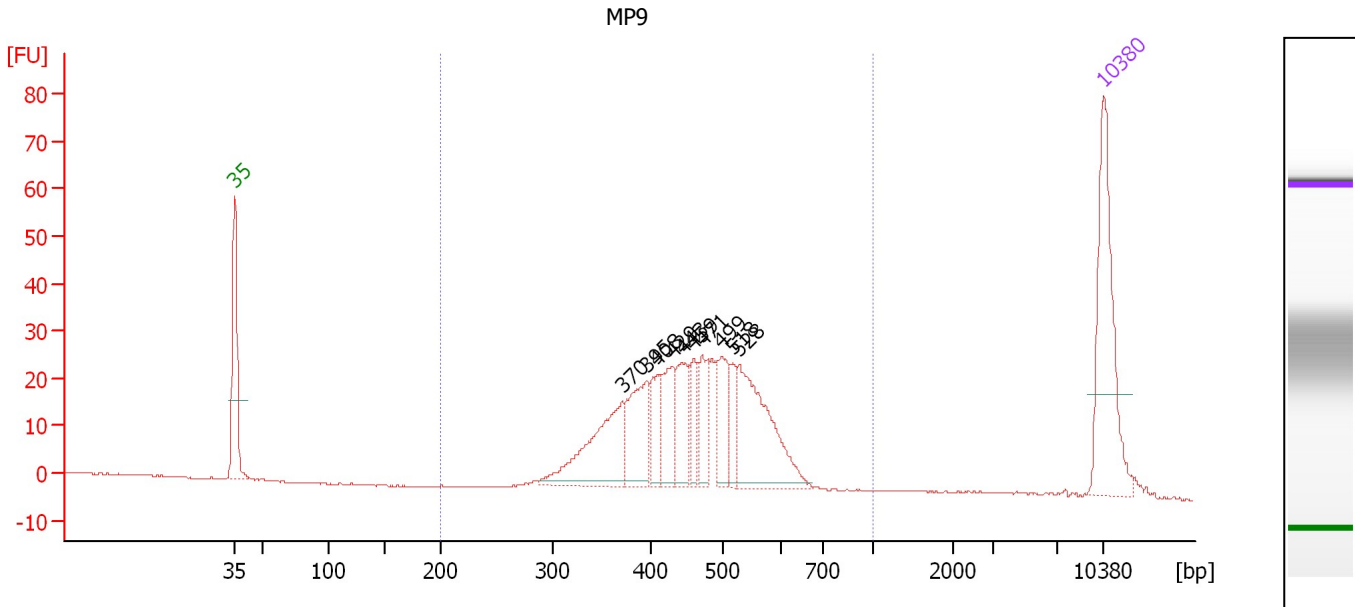
Region table for sample 8 : MP 8

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	465	4,220.7	1,234.09	1,428.8	96	19.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-09\2013-10-09_001.xad

Created: 10/9/2013 9:18:14 AM
 Modified: 10/9/2013 10:00:36 AM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 9 : MP9

Height Threshold [FU] : 1

Overall Results for sample 9 : MP9

Number of peaks found: 10 Corr. Area 1: 462.7
 Noise: 0.1

Peak table for sample 9 : MP9

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	370	82.43	337.1	
3	395	55.11	211.4	
4	408	25.55	94.9	
5	429	37.99	134.1	
6	443	35.14	120.2	
7	459	19.30	63.8	
8	471	28.41	91.3	
9	499	36.46	110.6	
10	518	17.81	52.1	
11	528	94.96	272.6	
12	10,380	75.00	10.9	Upper Marker

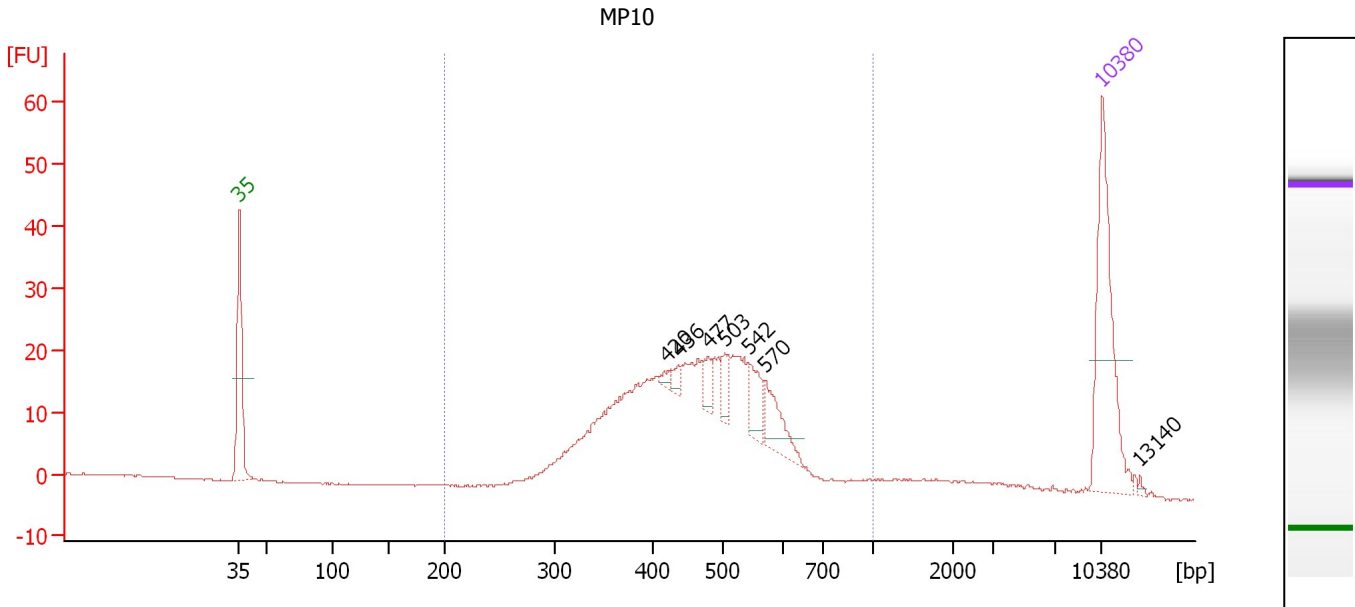
Region table for sample 9 : MP9

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	459	1,624.9	471.83	462.7	98	17.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-09\2013-10-09_001.xad

Created: 10/9/2013 9:18:14 AM
 Modified: 10/9/2013 10:00:36 AM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 10 : MP10

Height Threshold [FU] : 1

Overall Results for sample 10 : MP10

Number of peaks found: 7 Corr. Area 1: 418.3
 Noise: 0.1

Peak table for sample 10 : MP10

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	420	3.62	13.1	
3	436	5.63	19.6	
4	477	11.94	37.9	
5	503	12.67	38.2	
6	542	21.52	60.2	
7	570	26.85	71.4	
8	10,380	75.00	10.9	Upper Marker
9	13,140	0.00	0.0	

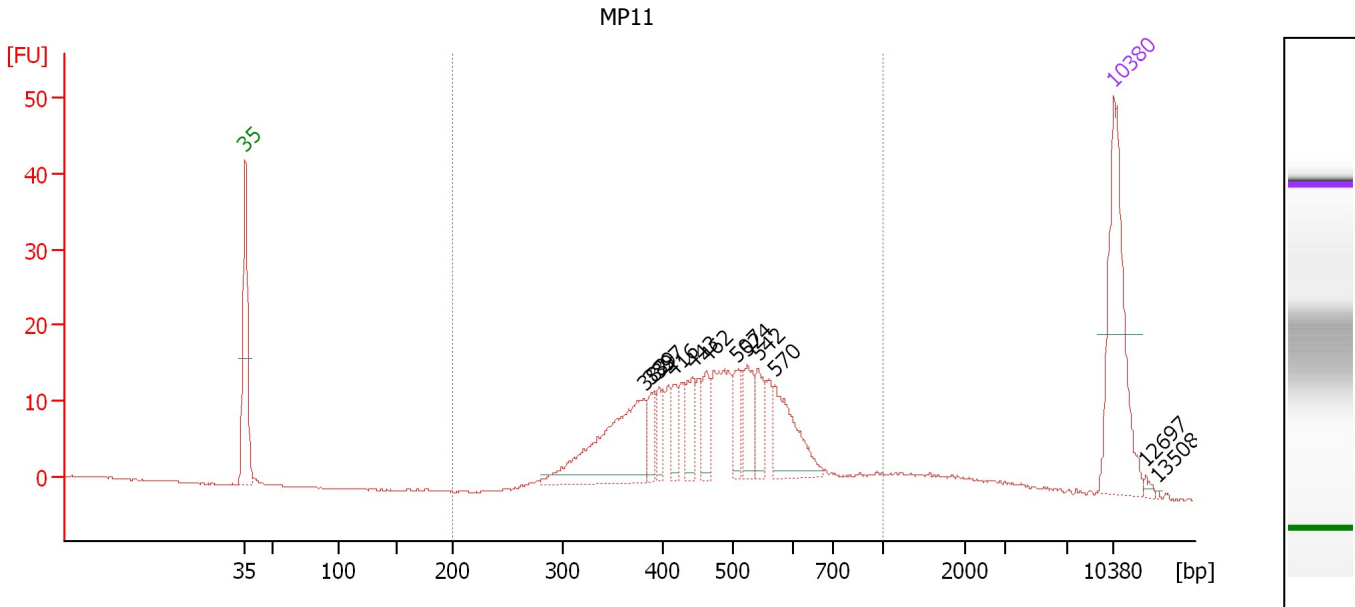
Region table for sample 10 : MP10

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	468	2,008.0	580.69	418.3	91	23.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-09\2013-10-09_001.xad

Created: 10/9/2013 9:18:14 AM
 Modified: 10/9/2013 10:00:36 AM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 11 : MP11

Height Threshold [FU] : 1

Overall Results for sample 11 : MP11

Number of peaks found: 12 Corr. Area 1: 309.7
 Noise: 0.1

Peak table for sample 11 : MP11

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	382	103.20	409.7	
3	389	14.63	57.0	
4	397	14.04	53.6	
5	416	14.27	52.0	
6	443	21.38	73.2	
7	462	19.69	64.5	
8	507	18.41	55.0	
9	524	26.09	75.4	
10	542	21.00	58.7	
11	570	44.18	117.4	
12	10,380	75.00	10.9	Upper Marker
13	12,697	0.00	0.0	
14	13,508	0.00	0.0	

Region table for sample 11 : MP11

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	480	1,632.7	480.86	309.7	91	24.4	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-09\2013-10-09_001.xad

Created: 10/9/2013 9:18:14 AM
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Gel Image

