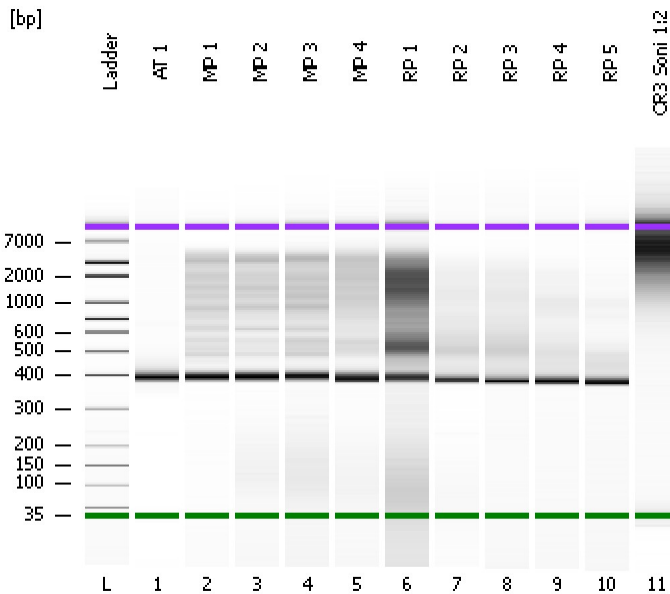


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-10\2013-10-10\_001.xad

Created: 10/10/2013 10:51:59 AM  
Modified: 10/10/2013 11:38:19 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

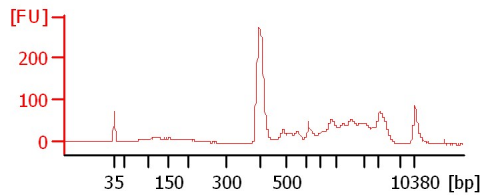
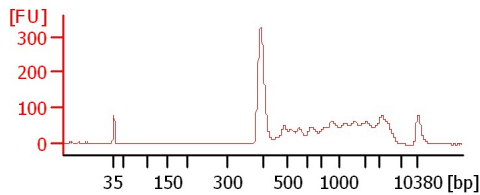
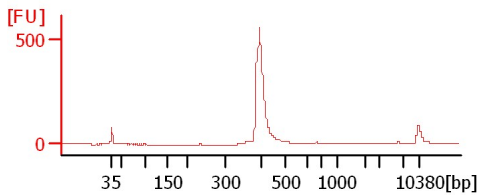
Chip Information:

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

**AT 1**

**MP 1**

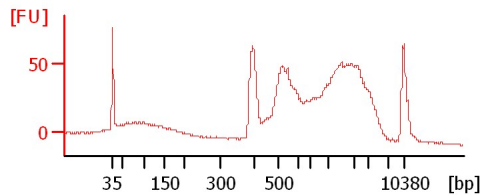
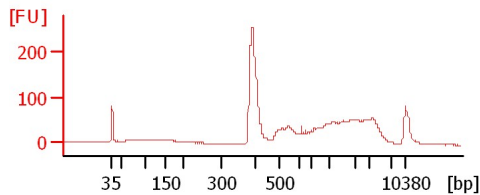
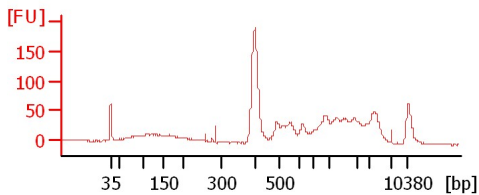
**MP 2**



**MP 3**

**MP 4**

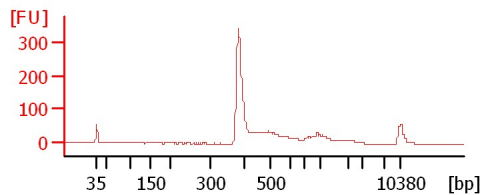
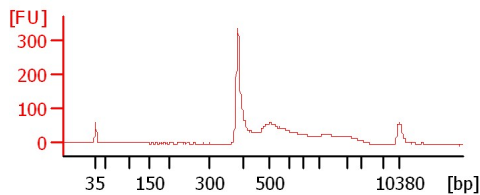
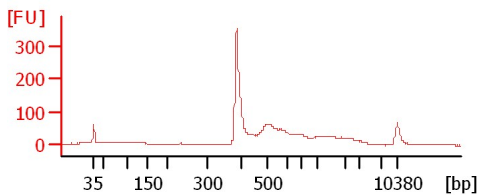
**RP 1**



**RP 2**

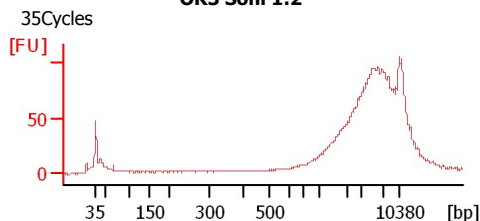
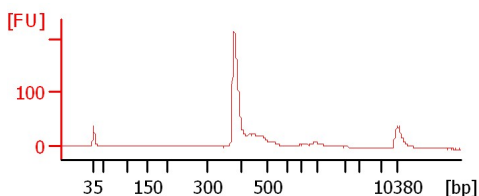
**RP 3**

**RP 4**



**RP 5**

**OR3 Soni 1:2**



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

Created: 10/10/2013 10:51:59 AM  
Modified: 10/10/2013 11:38:19 AM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
AT 1		<input type="checkbox"/>	✓			
MP 1		<input type="checkbox"/>	✓			
MP 2		<input type="checkbox"/>	✓			
MP 3		<input type="checkbox"/>	✓			
MP 4		<input type="checkbox"/>	✓			
RP 1		<input type="checkbox"/>	✓			
RP 2		<input type="checkbox"/>	✓			
RP 3		<input type="checkbox"/>	✓			
RP 4		<input type="checkbox"/>	✓			
RP 5		<input type="checkbox"/>	✓			
OR3 Soni 1:2	35Cycles	<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\2013-10-10\2013-10-10\_001.xad

Created: 10/10/2013 10:51:59 AM  
Modified: 10/10/2013 11:38:19 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

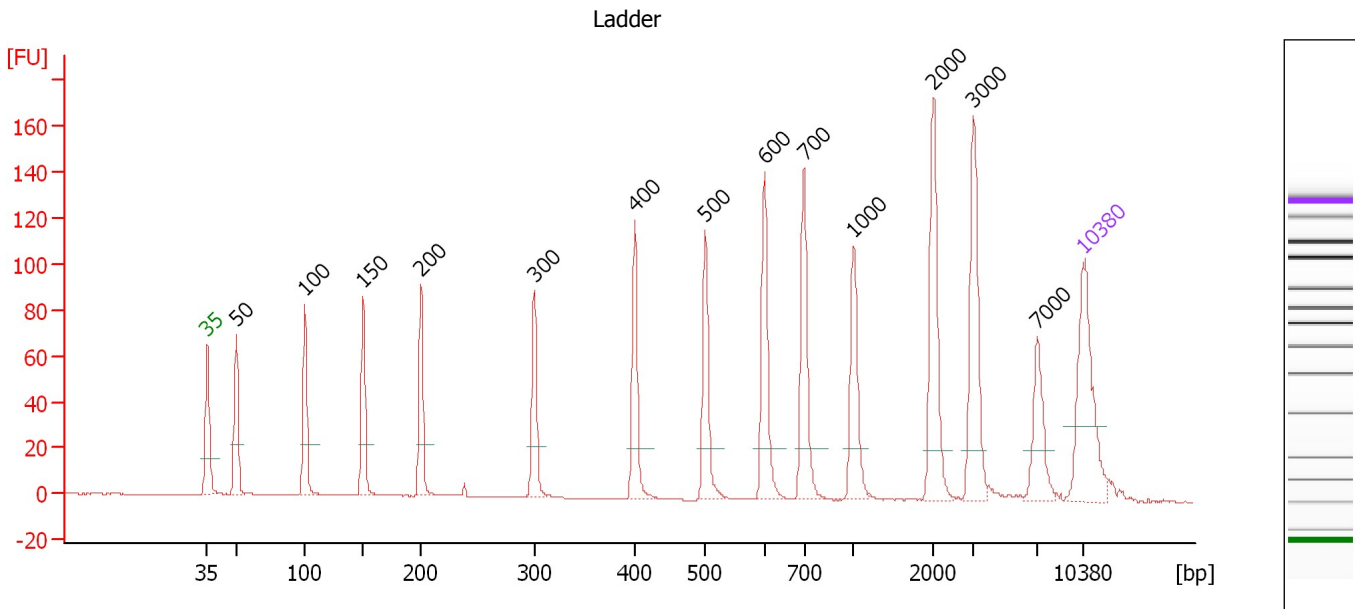
**Ladder**

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

Created: 10/10/2013 10:51:59 AM  
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**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.1

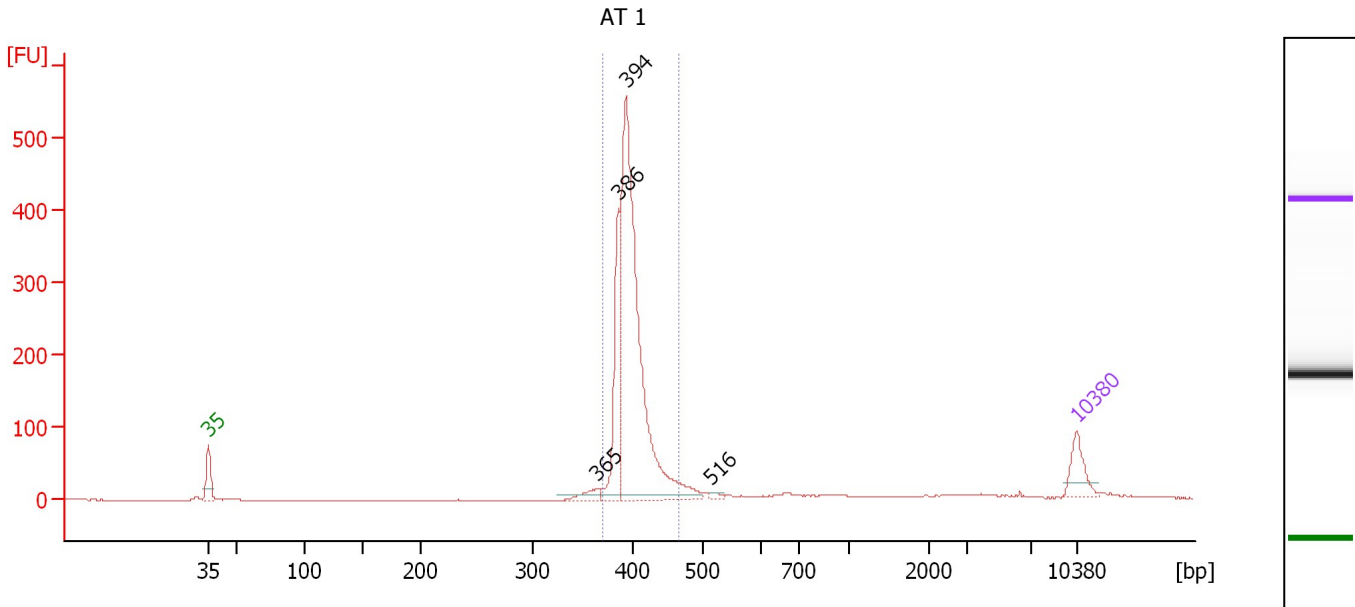
**Peak table for Ladder**

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

Created: 10/10/2013 10:51:59 AM  
 Modified: 10/10/2013 11:38:19 AM

**Electropherogram Summary Continued ...**



**Setpoint Deviations for sample 1 : AT 1**

Height Threshold [FU] : 7

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

Number of peaks found: 4                      Corr. Area 1: 1,465.8  
 Noise: 0.2

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

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	365	39.60	164.5	
3	386	302.75	1,188.3	
4	394	1,296.28	4,991.1	
5	516	11.30	33.2	
6	10,380	75.00	10.9	Upper Marker

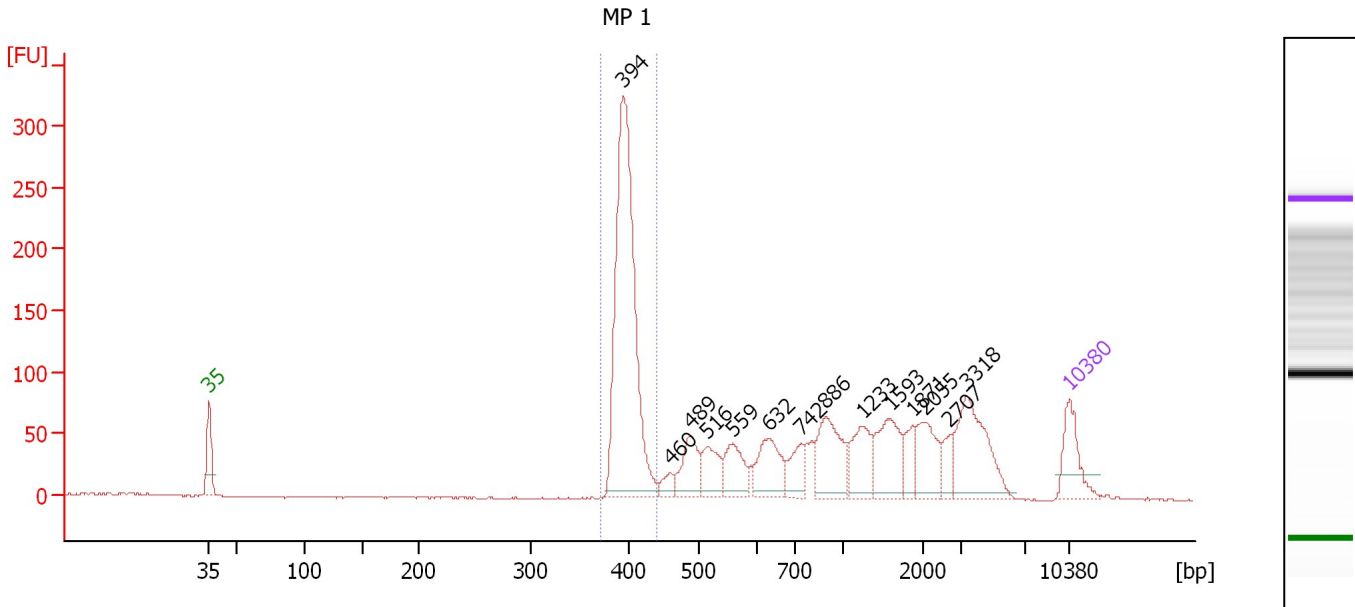
**Region table for sample 1 : AT 1**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
370	467	401	5,805.8	1,532.23	1,465.8	87	4.2	Blue

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

Created: 10/10/2013 10:51:59 AM  
 Modified: 10/10/2013 11:38:19 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : MP 1**

Number of peaks found: 14                      Corr. Area 1: 788.6  
 Noise: 0.7

**Peak table for sample 2 : MP 1**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	394	786.95	3,025.0	
3	460	26.26	86.6	
4	489	97.21	301.3	
5	516	78.23	229.7	
6	559	83.91	227.4	
7	632	112.35	269.2	
8	742	60.21	123.0	
9	886	143.77	245.8	
10	1,233	89.87	110.4	
11	1,593	111.55	106.1	
12	1,871	41.19	33.3	
13	2,055	87.69	64.7	
14	2,707	31.57	17.7	
15	3,318	172.15	78.6	
16	10,380	75.00	10.9	Upper Marker

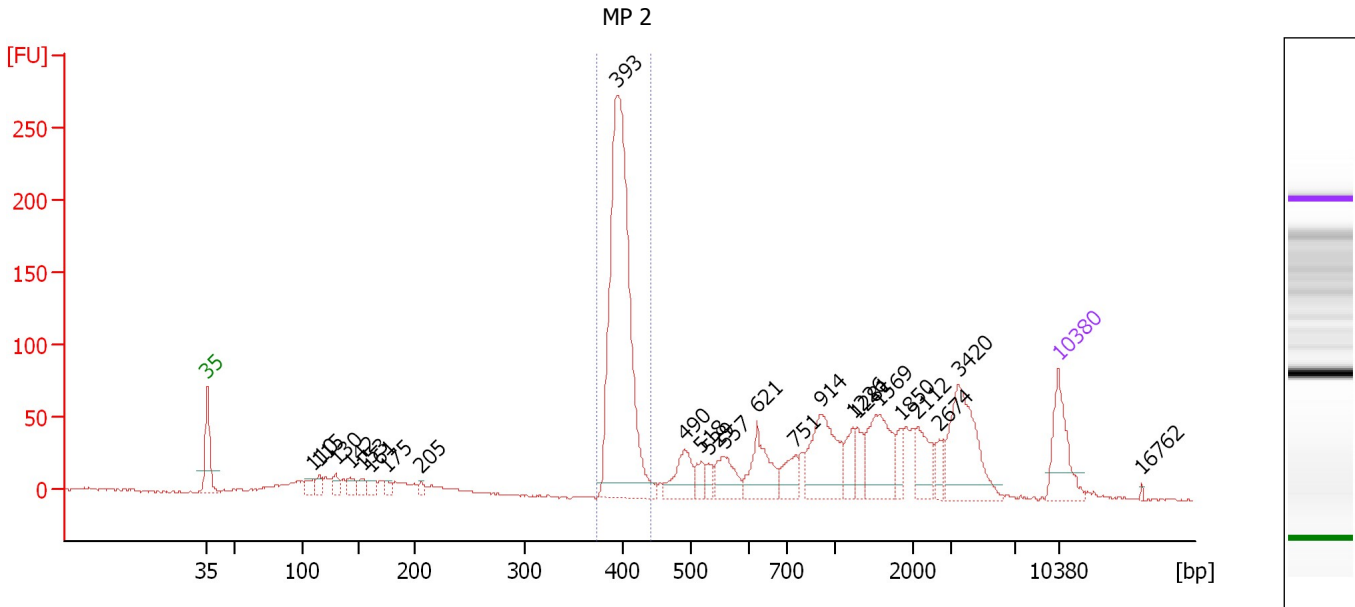
**Region table for sample 2 : MP 1**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
371	441	398	2,988.8	785.36	788.6	35	2.8	Blue

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

Created: 10/10/2013 10:51:59 AM  
 Modified: 10/10/2013 11:38:19 AM

**Electropherogram Summary Continued ...**



**Setpoint Deviations for sample 3 : MP 2**

Height Threshold [FU] : 10

**Overall Results for sample 3 : MP 2**

Number of peaks found: 24                      Corr. Area 1: 689.6  
 Noise: 0.6

**Peak table for sample 3 : MP 2**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	110	23.89	329.4	
3	115	20.98	276.3	
4	130	20.75	241.9	
5	142	23.69	253.4	
6	153	20.23	200.4	
7	161	19.59	184.3	
8	175	13.97	121.0	
9	205	10.06	74.2	
10	393	714.10	2,751.9	
11	490	67.75	209.5	
12	518	27.59	80.7	
13	529	18.23	52.2	
14	557	59.48	161.9	
15	621	86.28	210.4	
16	751	43.77	88.3	
17	914	142.03	235.6	
18	1,226	33.93	41.9	
19	1,281	31.84	37.7	
20	1,569	105.27	101.7	
21	1,850	20.93	17.1	
22	2,112	48.98	35.1	

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


Created: 10/10/2013 10:51:59 AM  
 Modified: 10/10/2013 11:38:19 AM

### Electropherogram Summary Continued ...

#### ... Peak table for sample 3 : MP 2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
23	2,674	18.24	10.3	
24	3,420	145.19	64.3	
25	10,380	75.00	10.9	Upper Marker
26	16,762	0.00	0.0	

#### Region table for sample 3 : MP 2

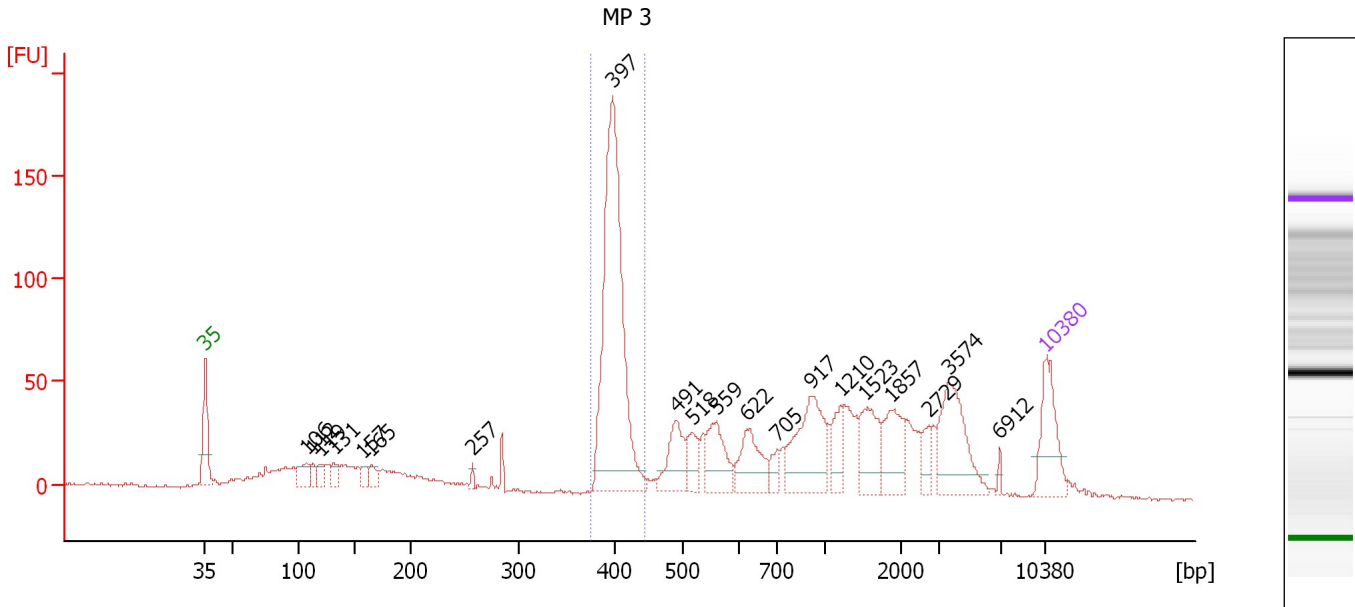
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
373	441	399	2,616.4	688.26	689.6	35	2.8	



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

Created: 10/10/2013 10:51:59 AM  
 Modified: 10/10/2013 11:38:19 AM

**Electropherogram Summary Continued ...**



**Setpoint Deviations for sample 4 : MP 3**

Height Threshold [FU] : 10

**Overall Results for sample 4 : MP 3**

Number of peaks found: 20                      Corr. Area 1: 455.4  
 Noise: 0.8


**Peak table for sample 4 : MP 3**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	106	41.14	585.6	
3	112	21.93	296.3	
4	119	24.75	315.7	
5	131	23.83	275.5	
6	157	19.34	186.3	
7	165	21.58	198.1	
8	257	7.41	43.6	
9	397	549.05	2,093.6	
10	491	79.98	246.8	
11	518	44.10	129.1	
12	559	80.33	217.8	
13	622	80.18	195.5	
14	705	21.67	46.6	
15	917	143.45	237.1	
16	1,210	41.70	52.2	
17	1,523	71.69	71.3	
18	1,857	69.62	56.8	
19	2,729	23.99	13.3	
20	3,574	118.88	50.4	
21	6,912	4.87	1.1	
22	10,380	75.00	10.9	Upper Marker

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

Created: 10/10/2013 10:51:59 AM  
Modified: 10/10/2013 11:38:19 AM

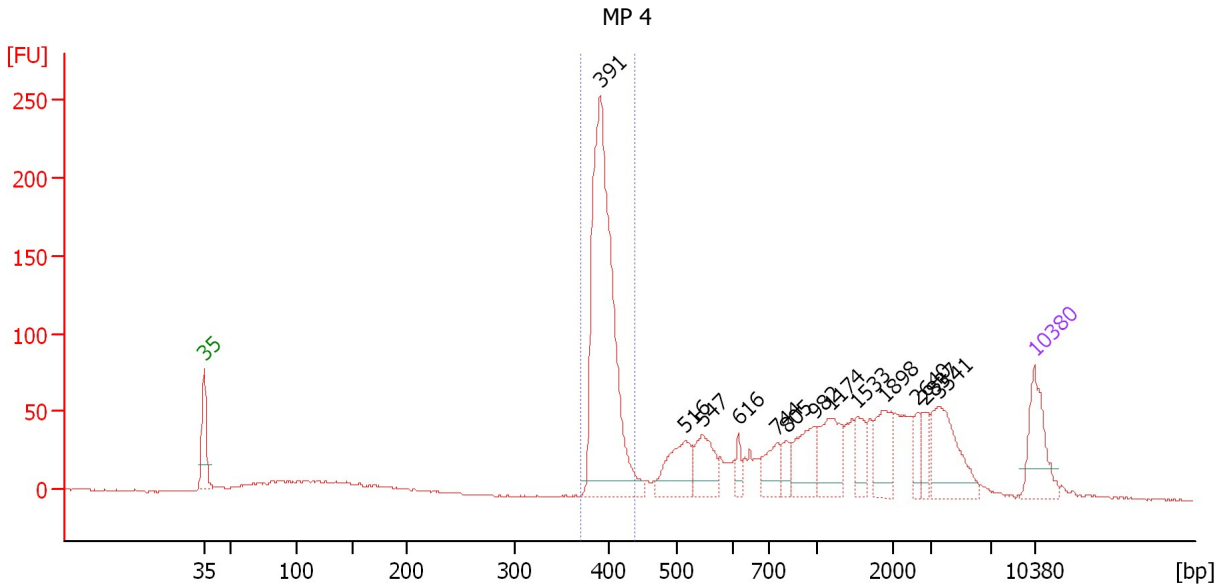
**Electropherogram Summary Continued ...****... Region table for sample 4 : MP 3**

<b>From [bp]</b>	<b>To [bp]</b>	<b>Average Size [bp]</b>	<b>Molarity [pmol/l]</b>	<b>Conc. [pg/μl]</b>	<b>Corr. Area</b>	<b>% of Total</b>	<b>Size distribution in CV [%]</b>	<b>Co lor</b>
374	445	400	2,080.3	549.24	455.4	27	2.9	

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

Created: 10/10/2013 10:51:59 AM  
 Modified: 10/10/2013 11:38:19 AM

**Electropherogram Summary Continued ...**



**Setpoint Deviations for sample 5 : MP 4**

Height Threshold [FU] : 10

**Overall Results for sample 5 : MP 4**

Number of peaks found: 13      Corr. Area 1: 667.0  
 Noise: 0.6

**Peak table for sample 5 : MP 4**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	391	647.26	2,509.4	
3	516	96.19	282.7	
4	547	75.76	209.9	
5	616	18.50	45.5	
6	744	47.72	97.2	
7	805	23.74	44.7	
8	982	75.80	116.9	
9	1,174	87.68	113.2	
10	1,533	41.27	40.8	
11	1,898	65.40	52.2	
12	2,640	21.50	12.3	
13	2,837	25.09	13.4	
14	3,541	105.19	45.0	
15	10,380	75.00	10.9	Upper Marker

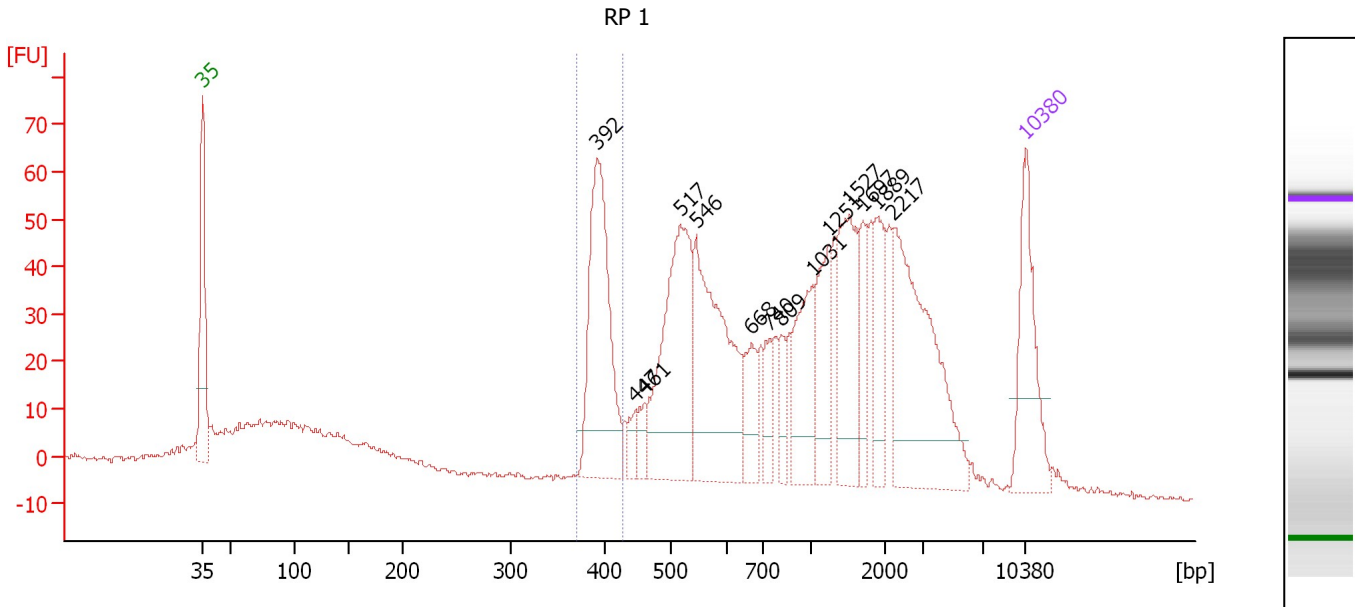
**Region table for sample 5 : MP 4**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
369	438	395	2,396.5	624.68	667.0	34	3.0	Blue

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

Created: 10/10/2013 10:51:59 AM  
 Modified: 10/10/2013 11:38:19 AM

**Electropherogram Summary Continued ...**



**Setpoint Deviations for sample 6 : RP 1**

Height Threshold [FU] : 10

**Overall Results for sample 6 : RP 1**

Number of peaks found: 14                      Corr. Area 1: 179.0  
 Noise: 0.6

**Peak table for sample 6 : RP 1**

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	392	199.45	770.8	
3	447	14.98	50.8	
4	461	17.10	56.2	
5	517	197.71	579.4	
6	546	191.04	530.4	
7	668	41.37	93.8	
8	740	26.24	53.7	
9	809	21.59	40.4	
10	1,031	70.43	103.5	
11	1,251	61.42	74.4	
12	1,527	90.94	90.2	
13	1,697	34.55	30.8	
14	1,889	48.58	39.0	
15	2,217	169.24	115.7	
16	10,380	75.00	10.9	Upper Marker

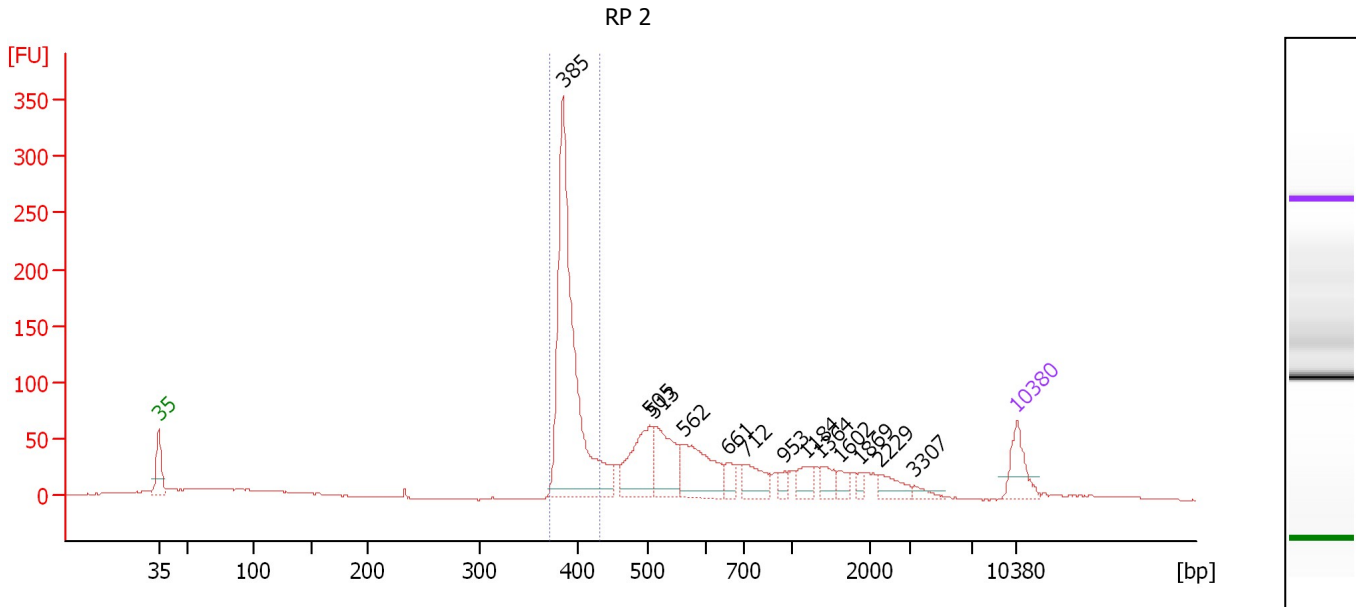
**Region table for sample 6 : RP 1**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
371	427	396	753.9	197.09	179.0	11	2.7	Blue

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

Created: 10/10/2013 10:51:59 AM  
 Modified: 10/10/2013 11:38:19 AM

**Electropherogram Summary Continued ...**



**Setpoint Deviations for sample 7 : RP 2**

Height Threshold [FU] : 7

**Overall Results for sample 7 : RP 2**

Number of peaks found: 13                      Corr. Area 1: 649.6  
 Noise: 0.5

**Peak table for sample 7 : RP 2**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	385	913.90	3,597.8	
3	505	198.38	594.7	
4	513	177.07	522.8	
5	562	203.16	547.8	
6	661	34.44	78.9	
7	712	78.87	167.8	
8	953	23.85	37.9	
9	1,184	44.63	57.1	
10	1,364	37.69	41.9	
11	1,602	25.52	24.1	
12	1,869	13.34	10.8	
13	2,229	44.84	30.5	
14	3,307	16.55	7.6	
15	10,380	75.00	10.9	Upper Marker

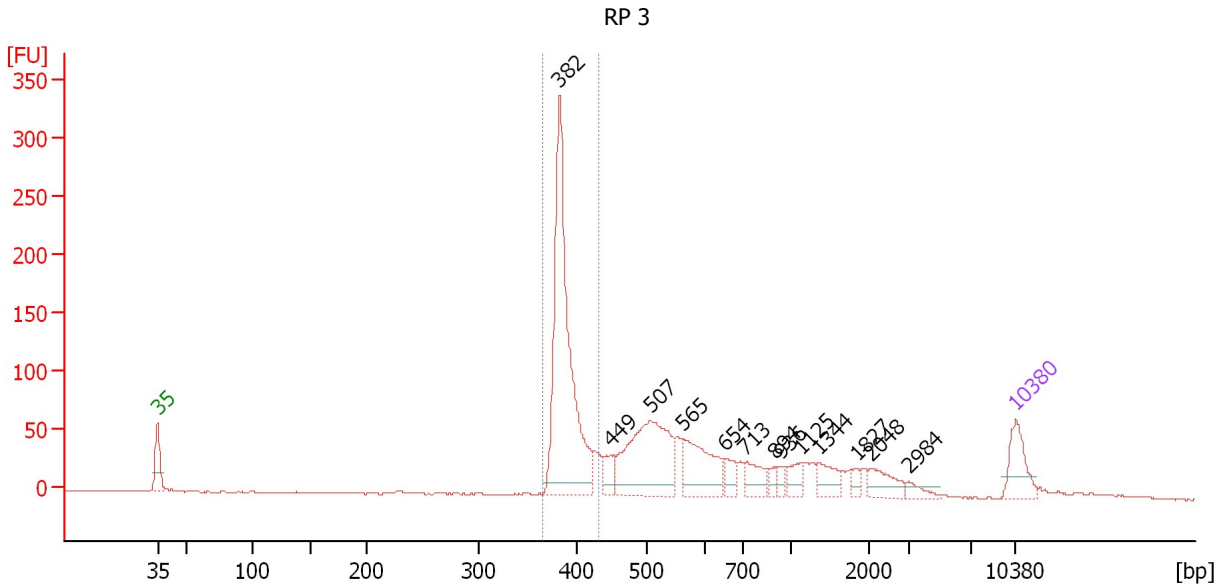
**Region table for sample 7 : RP 2**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
371	431	391	3,277.6	845.59	649.6	35	3.0	Blue

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

Created: 10/10/2013 10:51:59 AM  
 Modified: 10/10/2013 11:38:19 AM

**Electropherogram Summary Continued ...**



**Setpoint Deviations for sample 8 : RP 3**

Height Threshold [FU] : 10

**Overall Results for sample 8 : RP 3**

Number of peaks found: 13                      Corr. Area 1: 633.1  
 Noise: 0.6

**Peak table for sample 8 : RP 3**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	382	752.92	2,982.6	
3	449	47.78	161.3	
4	507	364.49	1,088.4	
5	565	173.42	465.3	
6	654	42.02	97.4	
7	713	63.81	135.5	
8	894	16.82	28.5	
9	936	17.19	27.8	
10	1,125	38.91	52.4	
11	1,344	51.51	58.1	
12	1,827	15.51	12.9	
13	2,048	54.02	40.0	
14	2,984	19.39	9.8	
15	10,380	75.00	10.9	Upper Marker

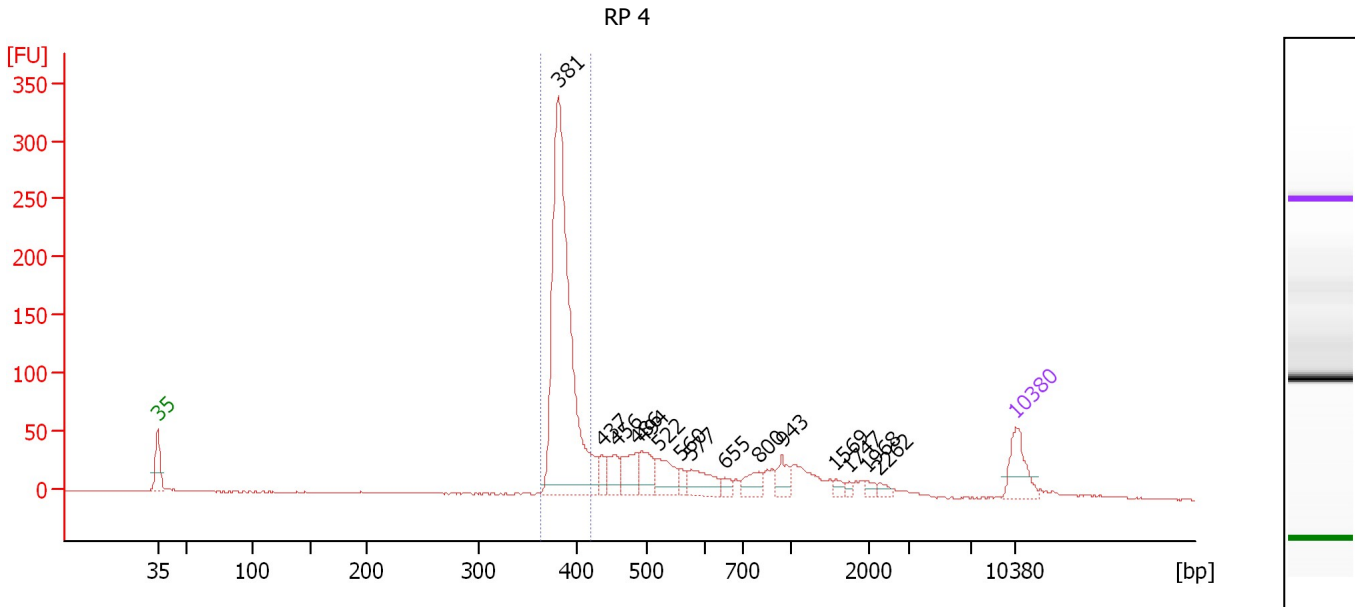
**Region table for sample 8 : RP 3**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
365	433	390	2,984.1	766.89	633.1	39	3.4	Blue

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

Created: 10/10/2013 10:51:59 AM  
 Modified: 10/10/2013 11:38:19 AM

**Electropherogram Summary Continued ...**



**Setpoint Deviations for sample 9 : RP 4**

Height Threshold [FU] : 8

**Overall Results for sample 9 : RP 4**

Number of peaks found: 15                      Corr. Area 1: 723.9  
 Noise: 0.6

**Peak table for sample 9 : RP 4**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	381	1,007.01	4,001.2	
3	437	33.41	115.8	
4	456	58.28	193.5	
5	486	76.41	238.4	
6	494	76.28	233.9	
7	522	78.43	227.7	
8	560	19.92	53.9	
9	577	74.91	196.7	
10	655	17.75	41.1	
11	800	43.98	83.3	
12	943	39.78	63.9	
13	1,569	12.28	11.9	
14	1,747	8.60	7.5	
15	1,968	11.05	8.5	
16	2,262	12.30	8.2	
17	10,380	75.00	10.9	Upper Marker

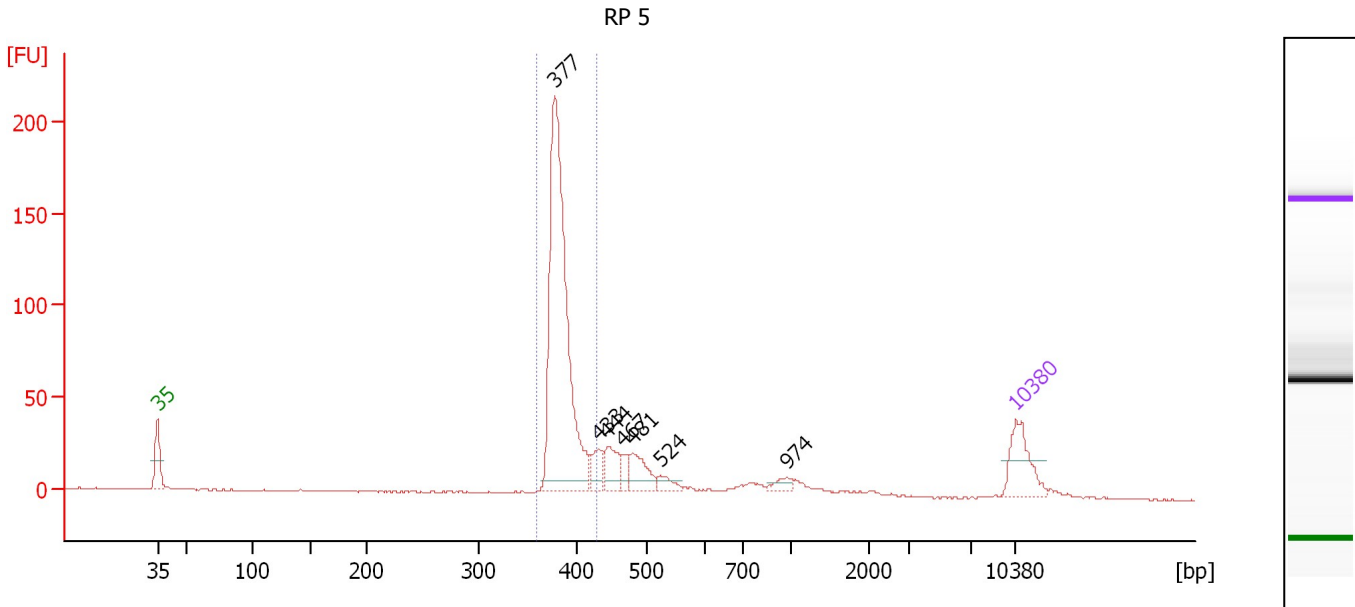
**Region table for sample 9 : RP 4**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
364	419	386	3,765.6	959.24	723.9	51	2.6	Blue

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

Created: 10/10/2013 10:51:59 AM  
 Modified: 10/10/2013 11:38:19 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : RP 5**

Number of peaks found: 7                      Corr. Area 1: 479.9  
 Noise: 0.4

**Peak table for sample 10 : RP 5**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	377	713.13	2,863.6	
3	433	40.71	142.6	
4	444	56.92	194.1	
5	467	22.55	73.1	
6	481	59.33	187.0	
7	524	18.94	54.8	
8	974	16.12	25.1	
9	10,380	75.00	10.9	Upper Marker

**Region table for sample 10 : RP 5**

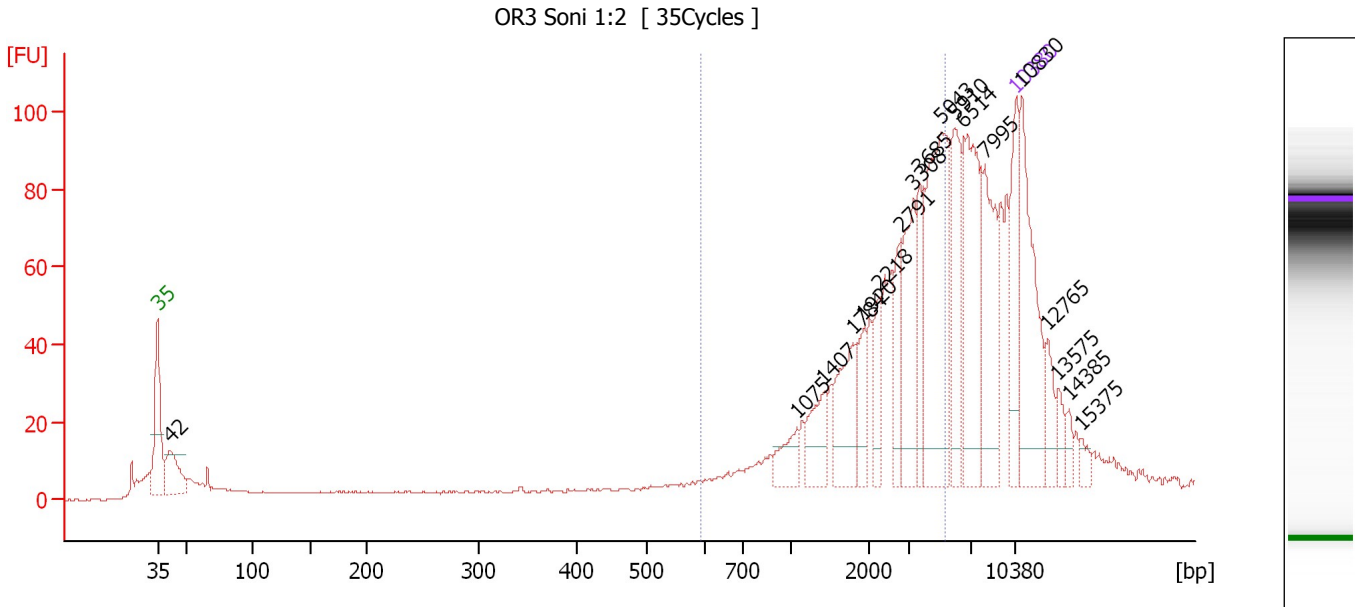
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
360	429	385	2,947.2	748.46	479.9	64	3.2	Blue



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

Created: 10/10/2013 10:51:59 AM  
 Modified: 10/10/2013 11:38:19 AM

**Electropherogram Summary Continued ...**



**Setpoint Deviations for sample 11 : OR3 Soni 1:2**

Height Threshold [FU] : 10

**Overall Results for sample 11 : OR3 Soni 1:2**

Number of peaks found: 18                      Corr. Area 1: 637.8  
 Noise: 0.3

**Peak table for sample 11 : OR3 Soni 1:2**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	42	77.50	2,801.3	
3	1,075	33.65	47.4	
4	1,407	48.08	51.8	
5	1,784	74.11	62.9	
6	1,920	37.59	29.7	
7	2,218	33.47	22.9	
8	2,791	45.83	24.9	
9	3,308	92.21	42.2	
10	3,685	53.49	22.0	
11	5,043	199.33	59.9	
12	5,910	91.89	23.6	
13	6,514	153.09	35.6	
14	7,995	109.16	20.7	
15	10,380	75.00	10.9	Upper Marker
16	10,830	0.00	0.0	
17	12,765	0.00	0.0	
18	13,575	0.00	0.0	
19	14,385	0.00	0.0	
20	15,375	0.00	0.0	

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

Created: 10/10/2013 10:51:59 AM  
Modified: 10/10/2013 11:38:19 AM

**Electropherogram Summary Continued ...**

... Region table for sample 11 : OR3 Soni 1:2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
596	5,304	2,740	595.4	783.12	637.8	45	47.2	■

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

Created: 10/10/2013 10:51:59 AM  
Modified: 10/10/2013 11:38:19 AM

**Gel Image**

