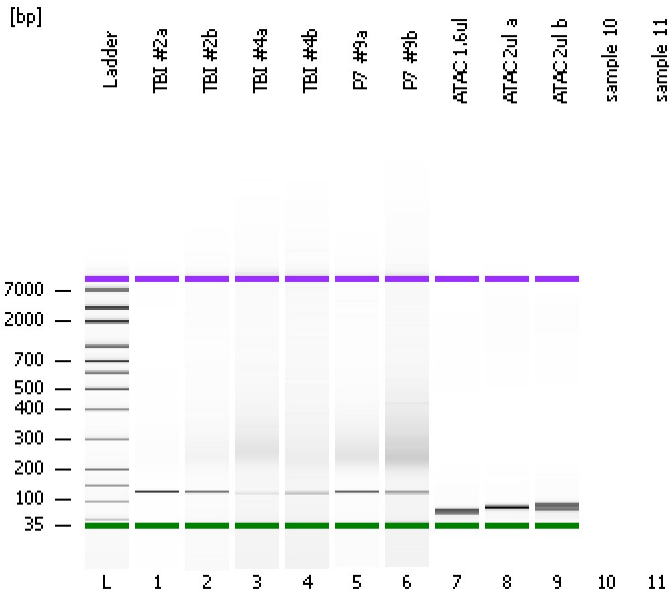


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-05\2015-06-05\_004.xad

Created: 6/5/2015 2:37:15 PM  
Modified: 6/5/2015 4:07:34 PM

**Electrophoresis File Run Summary**



Instrument Information:

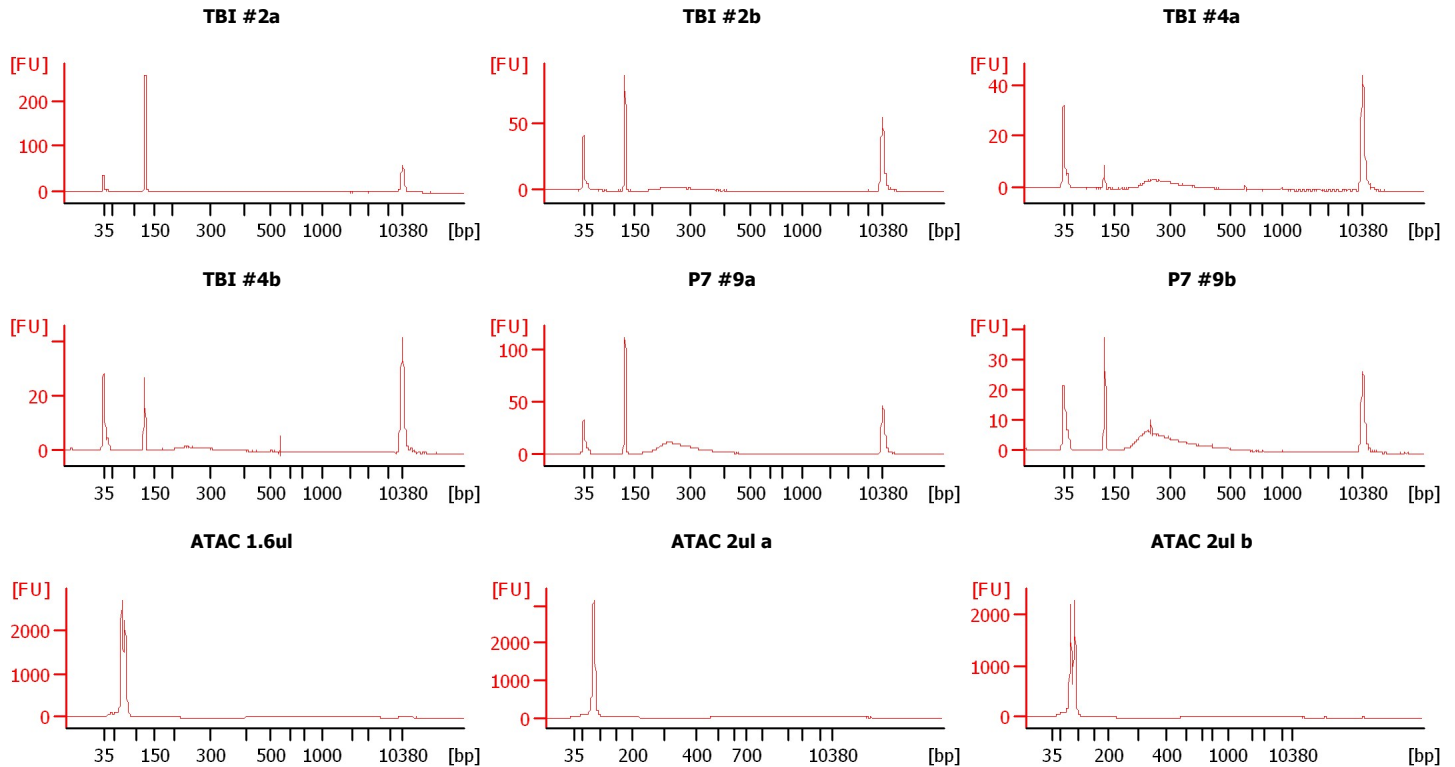
Instrument Name: DE13701086      Firmware: C.01.069  
Serial#: DE13701086      Type: G2938B

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\2015-06-05\2015-06-05\_004.xad

Created: 6/5/2015 2:37:15 PM  
Modified: 6/5/2015 4:07:34 PM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
TBI #2a		<input type="checkbox"/>	✓			
TBI #2b		<input type="checkbox"/>	✓			
TBI #4a		<input type="checkbox"/>	✓			
TBI #4b		<input type="checkbox"/>	✓			
P7 #9a		<input type="checkbox"/>	✓			
P7 #9b		<input type="checkbox"/>	✓			
ATAC 1.6ul		<input type="checkbox"/>	✓			
ATAC 2ul a		<input type="checkbox"/>	✓			
ATAC 2ul b		<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:\...ents and Settings\Bioanalyzer\2015-06-05\2015-06-05\_004.xad

Created: 6/5/2015 2:37:15 PM  
Modified: 6/5/2015 4:07:34 PM

**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

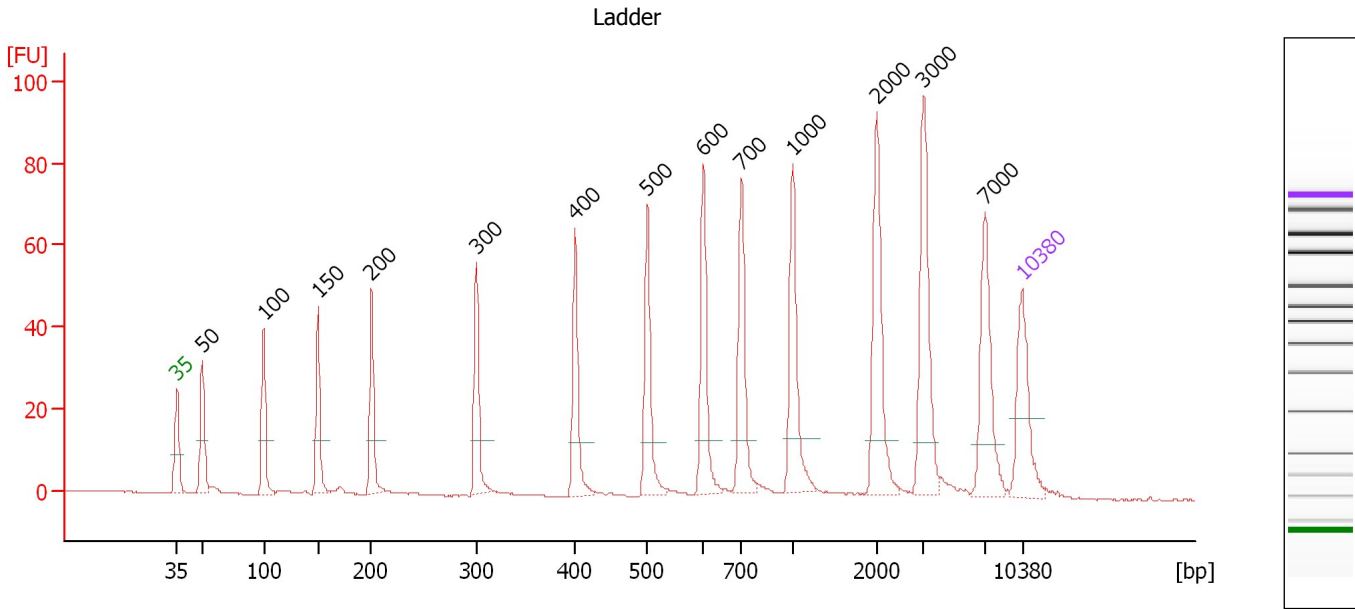
**Ladder**

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\2015-06-05\2015-06-05\_004.xad

Created: 6/5/2015 2:37:15 PM  
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**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.1

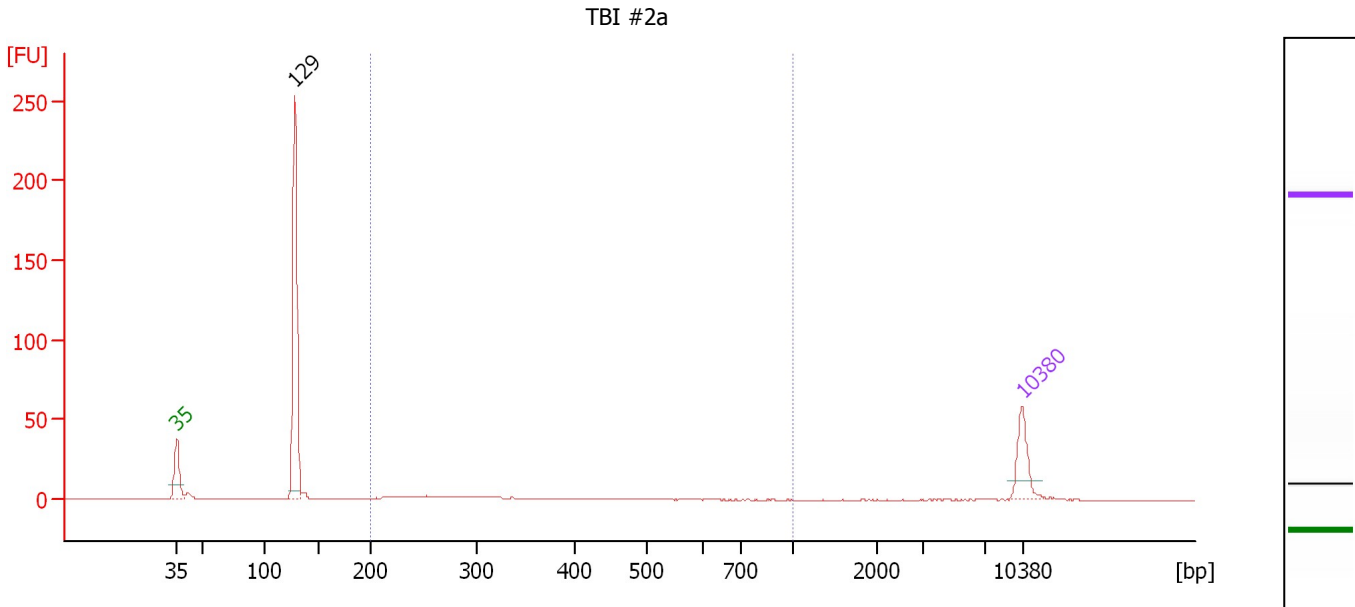
**Peak table for Ladder**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	50	150.00	4,545.5	Ladder Peak	45.13
3	100	150.00	2,272.7	Ladder Peak	50.19
4	150	150.00	1,515.2	Ladder Peak	54.70
5	200	150.00	1,136.4	Ladder Peak	59.11
6	300	150.00	757.6	Ladder Peak	67.82
7	400	150.00	568.2	Ladder Peak	75.97
8	500	150.00	454.5	Ladder Peak	81.95
9	600	150.00	378.8	Ladder Peak	86.61
10	700	150.00	324.7	Ladder Peak	89.75
11	1,000	150.00	227.3	Ladder Peak	94.01
12	2,000	150.00	113.6	Ladder Peak	100.95
13	3,000	150.00	75.8	Ladder Peak	104.85
14	7,000	150.00	32.5	Ladder Peak	109.91
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-05\2015-06-05\_004.xad

Created: 6/5/2015 2:37:15 PM  
 Modified: 6/5/2015 4:07:34 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : TBI #2a**

Number of peaks found: 1                      Corr. Area 1: 34.3  
 Noise: 0.1

**Peak table for sample 1 : TBI #2a**

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	129	573.37	6,740.3		52.80
3	10,380	75.00	10.9	Upper Marker	113.00

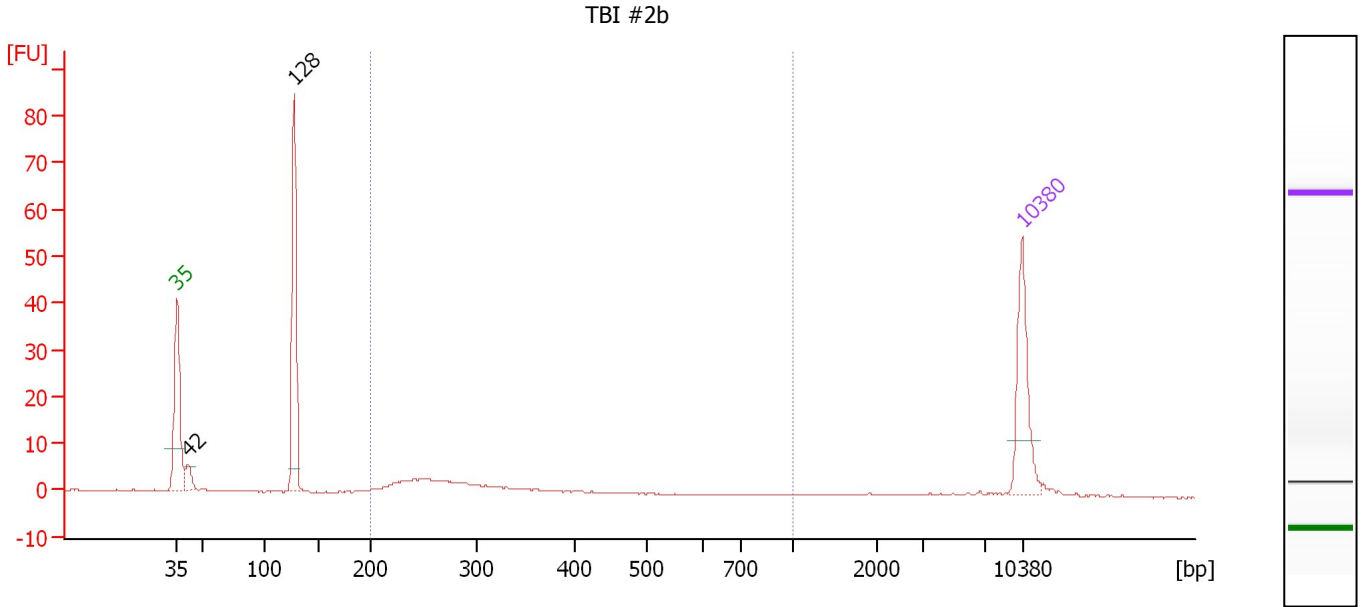
**Region table for sample 1 : TBI #2a**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
200	314	1,000	34.3	435.7	14	33.6	82.18

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-05\2015-06-05\_004.xad

Created: 6/5/2015 2:37:15 PM  
 Modified: 6/5/2015 4:07:34 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : TBI #2b**

Number of peaks found: 2                      Corr. Area 1: 38.2  
 Noise: 0.1

**Peak table for sample 2 : TBI #2b**

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	42	23.42	855.0		43.92
3	128	198.54	2,346.1		52.74
4	10,380	75.00	10.9	Upper Marker	113.00

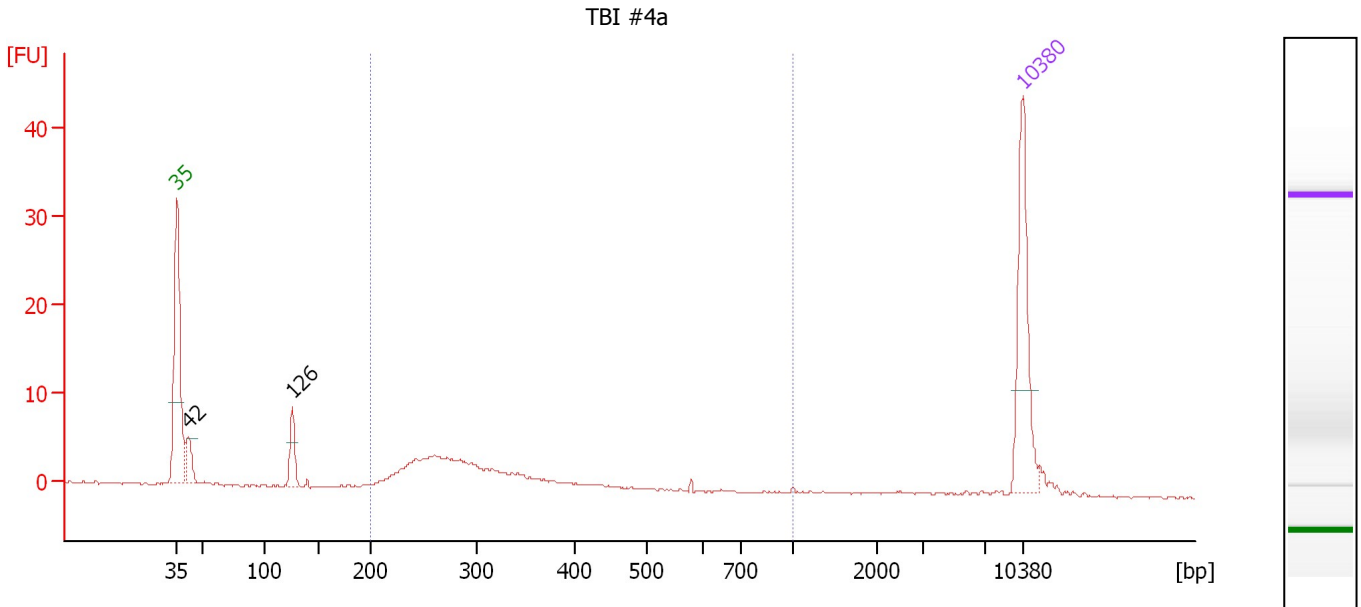
**Region table for sample 2 : TBI #2b**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
200	288	1,000	38.2	550.8	32	24.0	99.80

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-05\2015-06-05\_004.xad

Created: 6/5/2015 2:37:15 PM  
 Modified: 6/5/2015 4:07:34 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : TBI #4a**

Number of peaks found: 2                      Corr. Area 1: 44.8  
 Noise: 0.1

**Peak table for sample 3 : TBI #4a**

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	42	25.54	929.4		43.94
3	126	27.48	329.5		52.57
4	10,380	75.00	10.9	Upper Marker	113.00

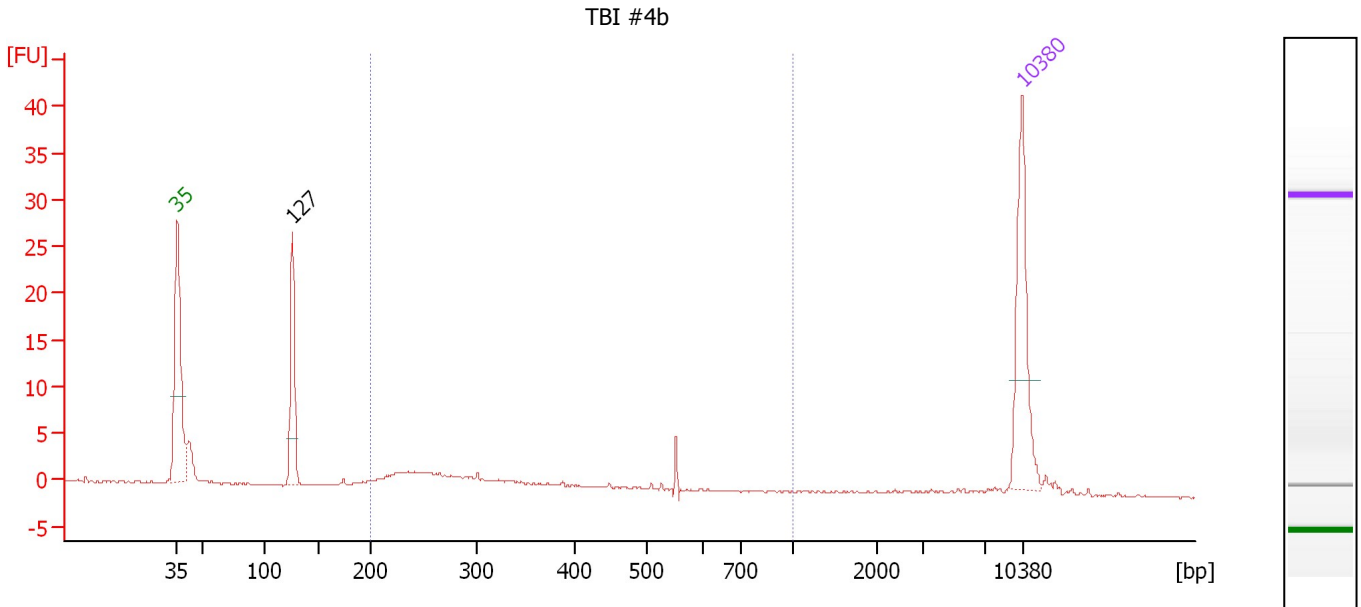
**Region table for sample 3 : TBI #4a**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
200	296	1,000	44.8	784.7	72	21.6	146.78

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-05\2015-06-05\_004.xad

Created: 6/5/2015 2:37:15 PM  
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**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : TBI #4b**

Number of peaks found: 1                      Corr. Area 1: 21.4  
 Noise: 0.1

**Peak table for sample 4 : TBI #4b**

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	127	88.95	1,064.7		52.59
3	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 4 : TBI #4b**

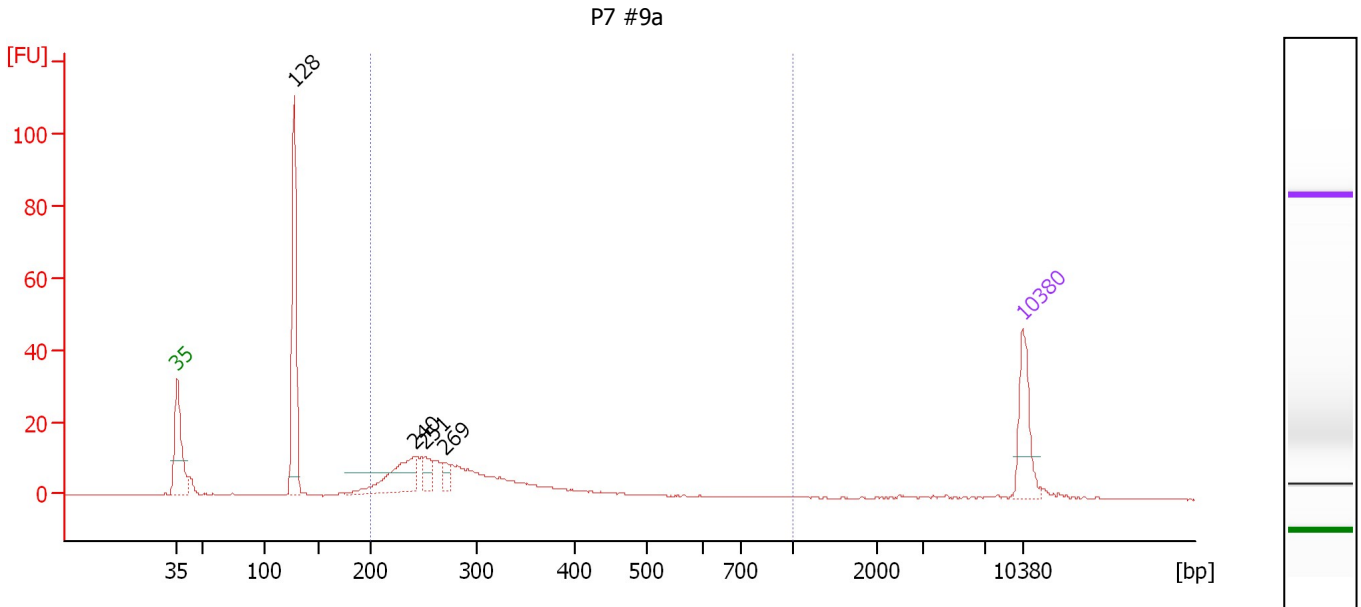
From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
200	307	1,000	21.4	402.6	41	30.8	74.23



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-05\2015-06-05\_004.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : P7 #9a**

Number of peaks found: 4                      Corr. Area 1: 158.5  
 Noise: 0.1

**Peak table for sample 5 : P7 #9a**

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	128	303.51	3,582.1		52.75
3	240	119.49	753.7		62.61
4	251	39.41	238.0		63.54
5	269	23.82	134.2		65.12
6	10,380	75.00	10.9	Upper Marker	113.00

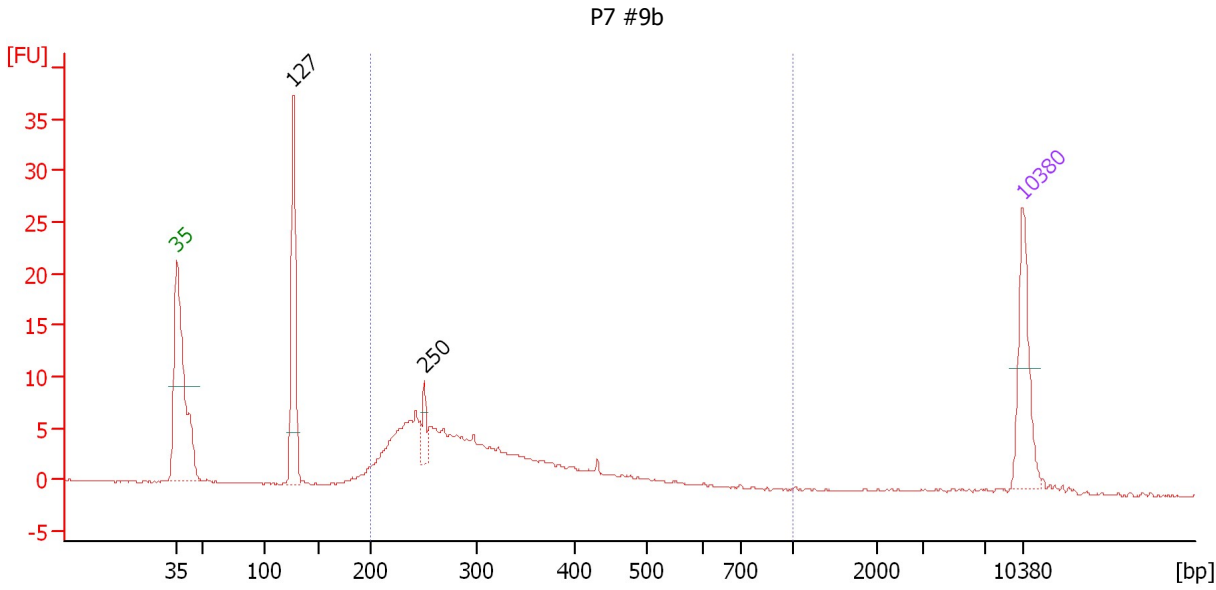
**Region table for sample 5 : P7 #9a**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
200	299	1,000	158.5	2,581.8	60	28.0	474.85

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-05\2015-06-05\_004.xad

Created: 6/5/2015 2:37:15 PM  
 Modified: 6/5/2015 4:07:34 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : P7 #9b**

Number of peaks found: 2                      Corr. Area 1: 109.3  
 Noise: 0.1

**Peak table for sample 6 : P7 #9b**

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	127	186.76	2,230.7		52.61
3	250	28.49	172.8		63.44
4	10,380	75.00	10.9	Upper Marker	113.00

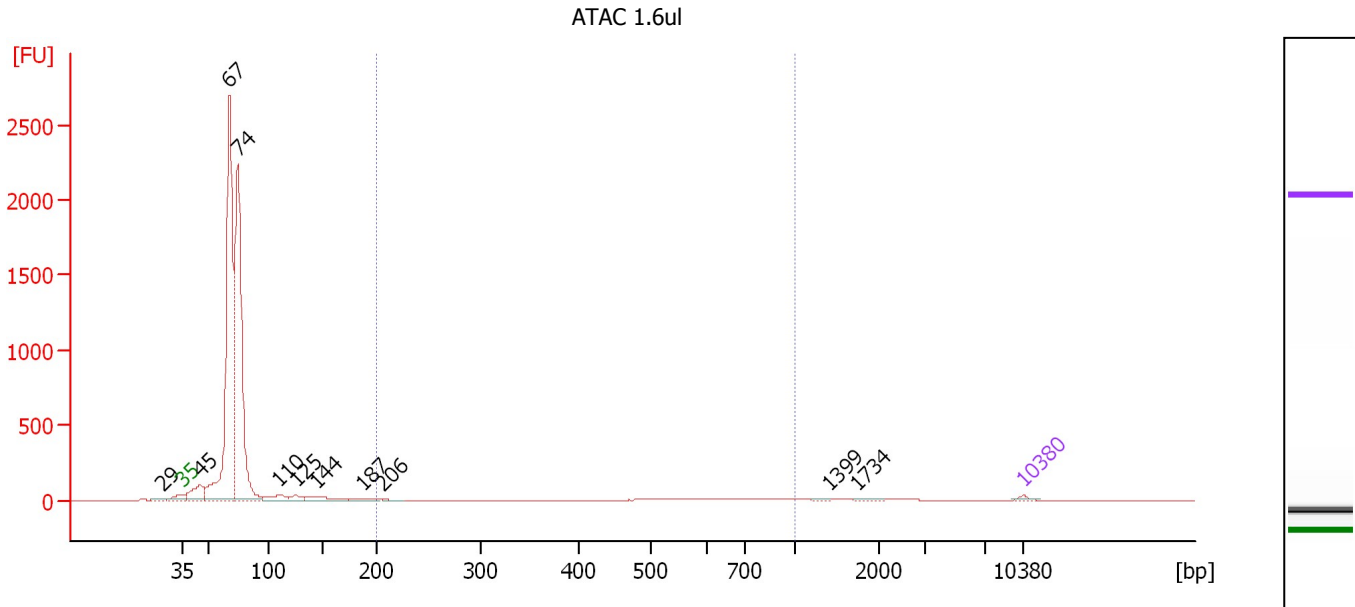
**Region table for sample 6 : P7 #9b**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
200	317	1,000	109.3	2,922.4	74	30.8	555.49

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-05\2015-06-05\_004.xad

Created: 6/5/2015 2:37:15 PM  
 Modified: 6/5/2015 4:07:34 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : ATAC 1.6ul**

Number of peaks found: 11                      Corr. Area 1: 81.6  
 Noise: 0.1

**Peak table for sample 7 : ATAC 1.6ul**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	29	0.00	0.0		41.39
2	35	125.00	5,411.3	Lower Marker	43.00
3	45	1,590.02	53,354.9		44.44
4	67	21,333.83	480,529.1		46.88
5	74	17,400.68	354,486.4		47.60
6	110	691.47	9,532.6		51.09
7	125	417.49	5,050.0		52.47
8	144	718.92	7,548.6		54.19
9	187	311.62	2,526.2		57.95
10	206	102.69	753.6		59.67
11	1,399	45.02	48.8		96.77
12	1,734	55.47	48.5		99.10
13	10,380	75.00	10.9	Upper Marker	113.00

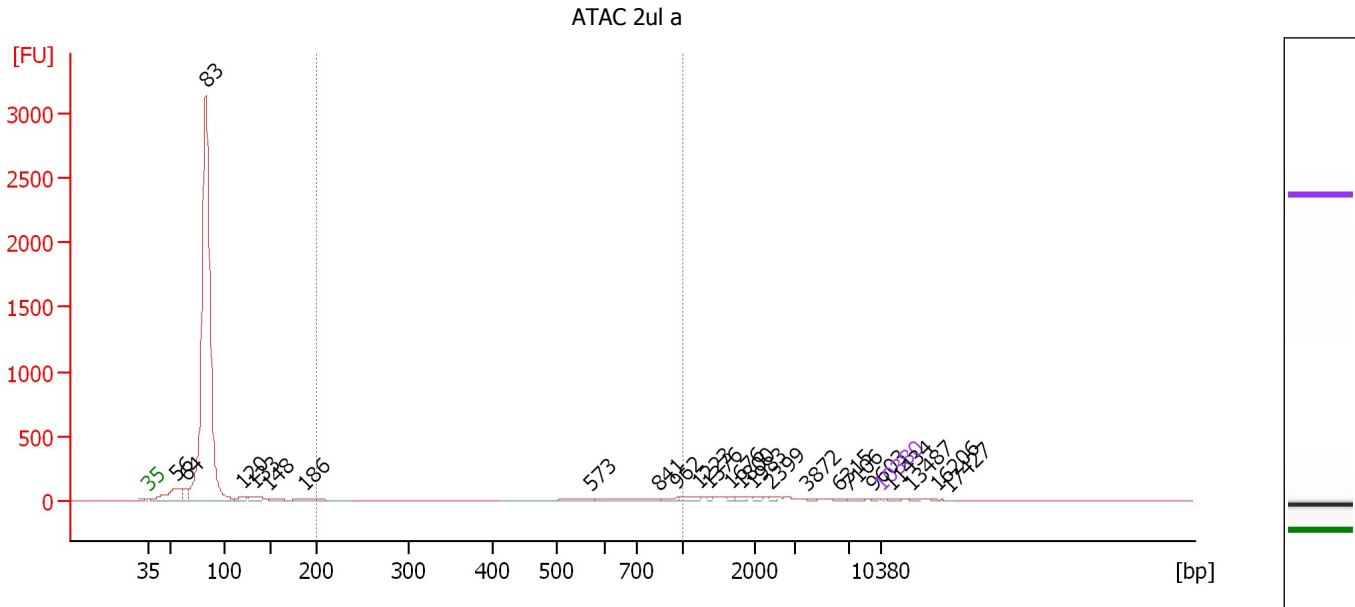
**Region table for sample 7 : ATAC 1.6ul**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
200	653	1,000	81.6	940.2	1	30.6	316.43

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-05\2015-06-05\_004.xad

Created: 6/5/2015 2:37:15 PM  
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**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : ATAC 2ul a**

Number of peaks found: 24                      Corr. Area 1: 196.2  
 Noise: 0.1

**Peak table for sample 8 : ATAC 2ul 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	56	7,973.99	217,539.2		45.69
3	64	2,877.57	68,070.3		46.55
4	83	138,282.48	2,537,234.8		48.43
5	120	1,260.66	15,943.1		51.98
6	133	1,483.16	16,928.5		53.14
7	148	1,054.50	10,800.0		54.51
8	186	2,214.71	17,997.2		57.91
9	573	1,072.68	2,836.2		85.36
10	841	1,310.82	2,362.4		91.75
11	962	525.35	827.2		93.47
12	1,223	629.40	780.0		95.55
13	1,376	225.45	248.2		96.62
14	1,676	239.82	216.8		98.70
15	1,800	351.71	296.0		99.56
16	1,983	334.10	255.3		100.83
17	2,399	197.23	124.6		102.50
18	3,872	192.60	75.4		105.95
19	6,315	288.19	69.1		109.04
20	7,106	313.18	66.8		110.01
21	9,603	92.12	14.5		112.29
22	10,380	75.00	10.9	Upper Marker	113.00
23	11,434	0.00	0.0		113.96
24	13,487	0.00	0.0		115.84
25	16,206	0.00	0.0		118.33

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-05\2015-06-05\_004.xad

Created: 6/5/2015 2:37:15 PM  
Modified: 6/5/2015 4:07:34 PM

**Electropherogram Summary Continued ...****... Peak table for sample 8 : ATAC 2ul a**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	17,427	0.00	0.0		119.44

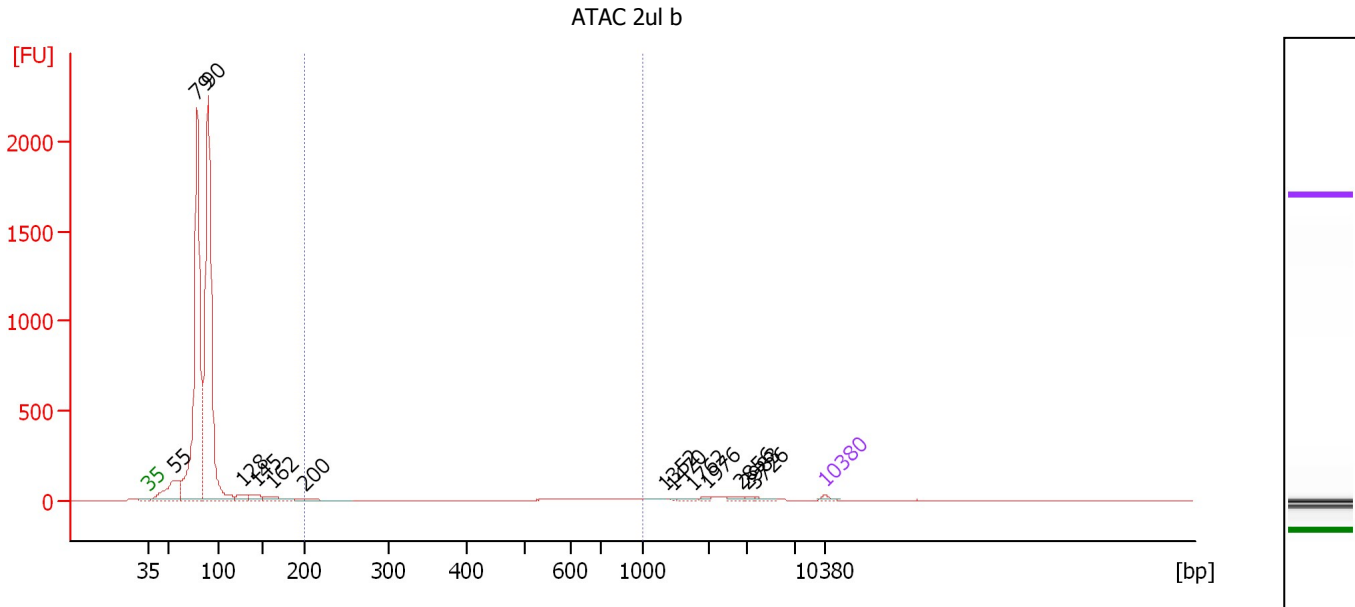
**Region table for sample 8 : ATAC 2ul a**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
200	682	1,000	196.2	7,994.6	2	29.9	2,727.58

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-05\2015-06-05\_004.xad

Created: 6/5/2015 2:37:15 PM  
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**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : ATAC 2ul b**

Number of peaks found: 14                      Corr. Area 1: 46.9  
 Noise: 0.1

**Peak table for sample 9 : ATAC 2ul 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	55	2,805.77	77,331.2		45.63
3	79	22,509.45	432,904.3		48.04
4	90	22,892.98	384,780.5		49.19
5	128	462.74	5,484.4		52.70
6	145	469.72	4,912.9		54.24
7	162	613.88	5,735.8		55.77
8	200	330.68	2,503.9		59.12
9	1,352	52.81	59.2		96.45
10	1,470	23.32	24.0		97.27
11	1,762	74.40	64.0		99.30
12	1,976	48.60	37.3		100.78
13	2,856	83.47	44.3		104.28
14	2,983	48.14	24.5		104.78
15	3,726	63.35	25.8		105.76
16	10,380	75.00	10.9	Upper Marker	113.00

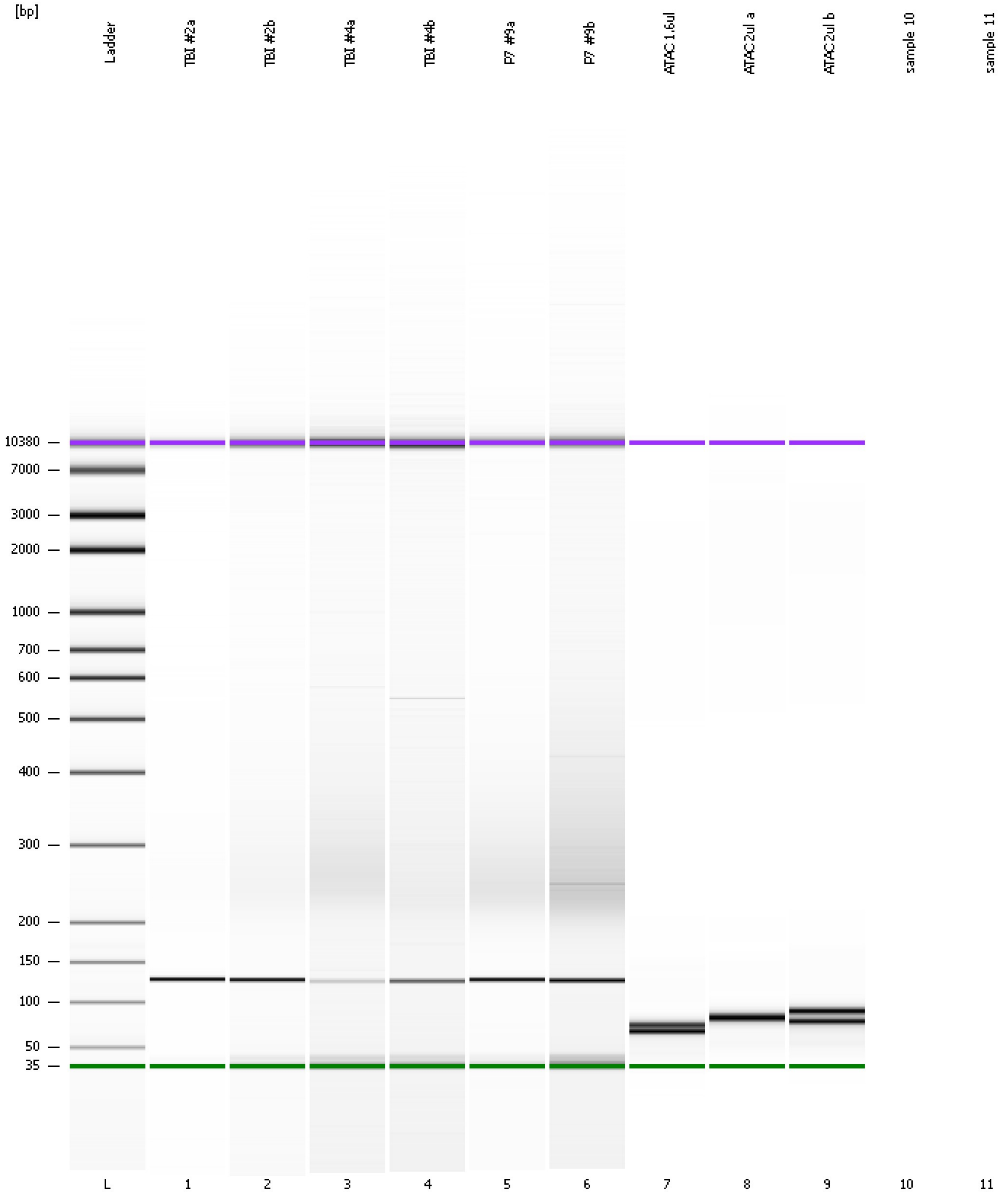
**Region table for sample 9 : ATAC 2ul b**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
200	668	1,000	46.9	707.8	1	34.3	208.14

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-05\2015-06-05\_004.xad

Created: 6/5/2015 2:37:15 PM  
Modified: 6/5/2015 4:07:34 PM

**Gel Image**

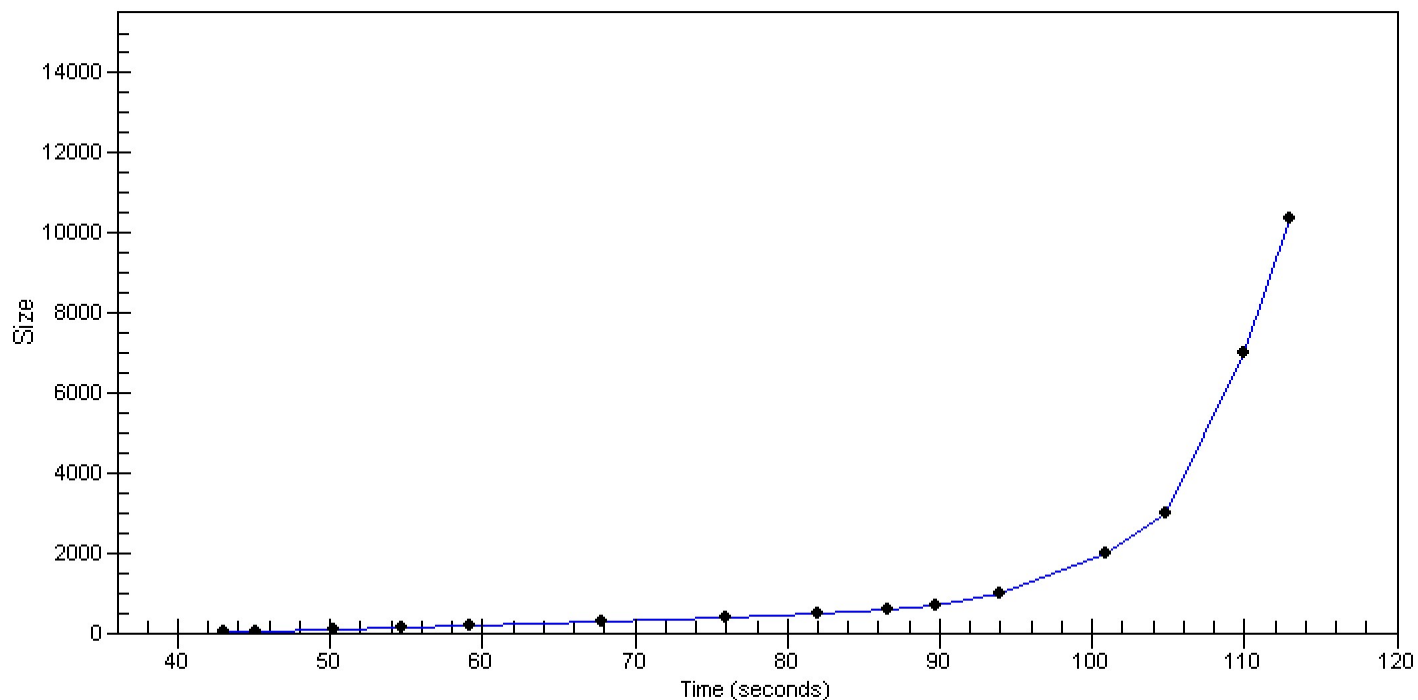


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-05\2015-06-05\_004.xad

Created: 6/5/2015 2:37:15 PM  
Modified: 6/5/2015 4:07:34 PM

**Curves**

**Standard Curve**





Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-05\2015-06-05\_004.xad

Created: 6/5/2015 2:37:15 PM  
Modified: 6/5/2015 4:07:34 PM

**Invalid Samples**

Sample 10 has not been run, no results available.

Sample 11 has not been run, no results available.