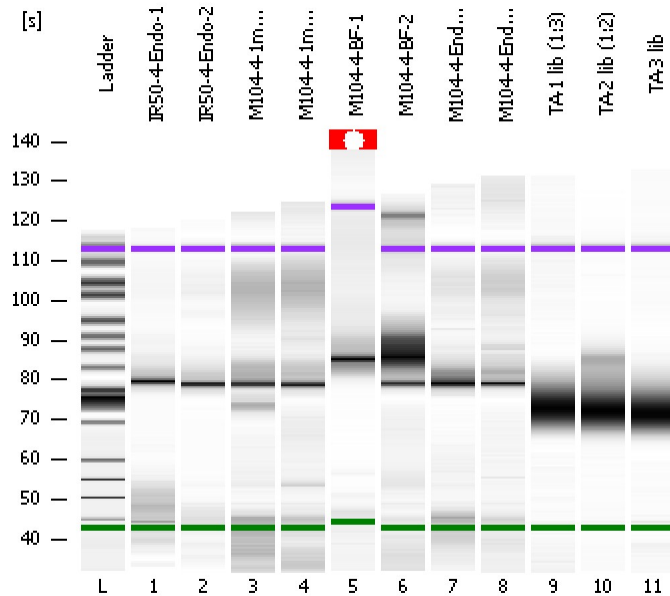


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-14\2012-08-14\_003.xad

Created: 8/14/2012 10:42:51 AM  
Modified: 8/14/2012 2:19:20 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

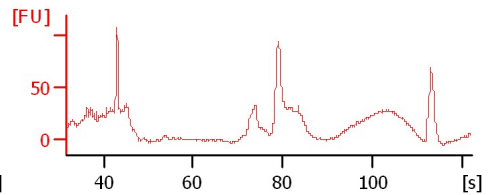
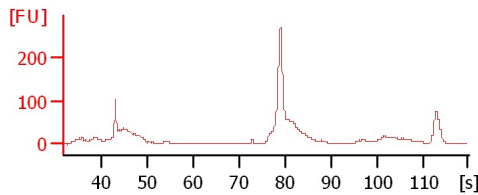
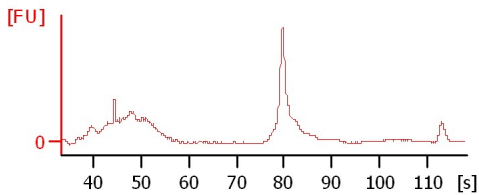
Chip Information:

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

**IR50-4-Endo-1**

**IR50-4-Endo-2**

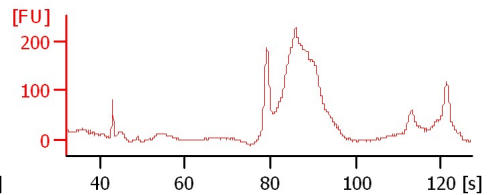
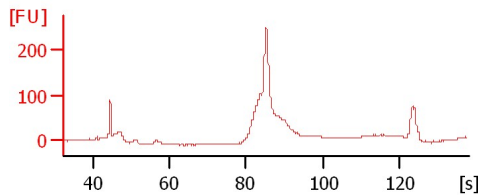
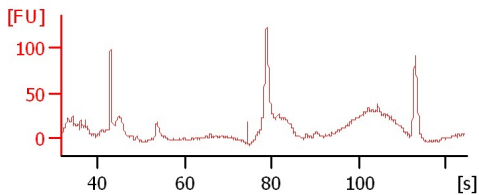
**M104-4-1mm-1**



**M104-4-1mm-2**

**M104-4-BF-1**

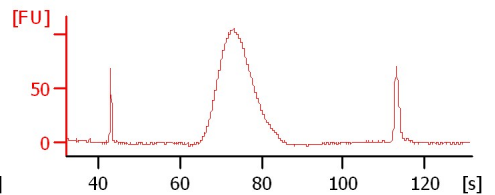
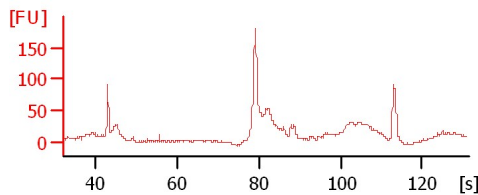
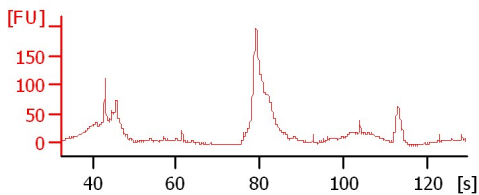
**M104-4-BF-2**



**M104-4-Endo-1**

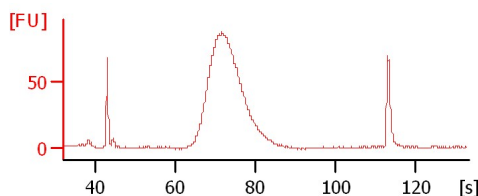
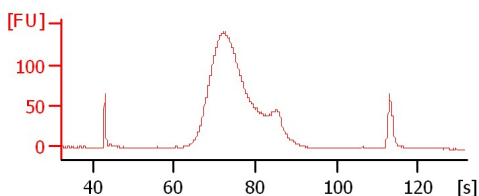
**M104-4-Endo-2**

**TA-1 lib (1:3)**



**TA-2 lib (1:2)**

**TA-3 lib**



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-14\2012-08-14\_003.xad

Created: 8/14/2012 10:42:51 AM  
 Modified: 8/14/2012 2:19:20 PM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
IR50-4-Endo-1		<input type="checkbox"/>	✓			
IR50-4-Endo-2		<input type="checkbox"/>	✓			
M104-4-1mm-1		<input type="checkbox"/>	✓			
M104-4-1mm-2		<input type="checkbox"/>	✓			
M104-4-BF-1		<input type="checkbox"/>	✓			
M104-4-BF-2		<input type="checkbox"/>	✓			
M104-4-Endo-1		<input type="checkbox"/>	✓			
M104-4-Endo-2		<input type="checkbox"/>	✓			
TA-1 lib (1:3)		<input type="checkbox"/>	✓			
TA-2 lib (1:2)		<input type="checkbox"/>	✓			
TA-3 lib		<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\2012-08-14\2012-08-14\_003.xad

Created: 8/14/2012 10:42:51 AM  
Modified: 8/14/2012 2:19:20 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

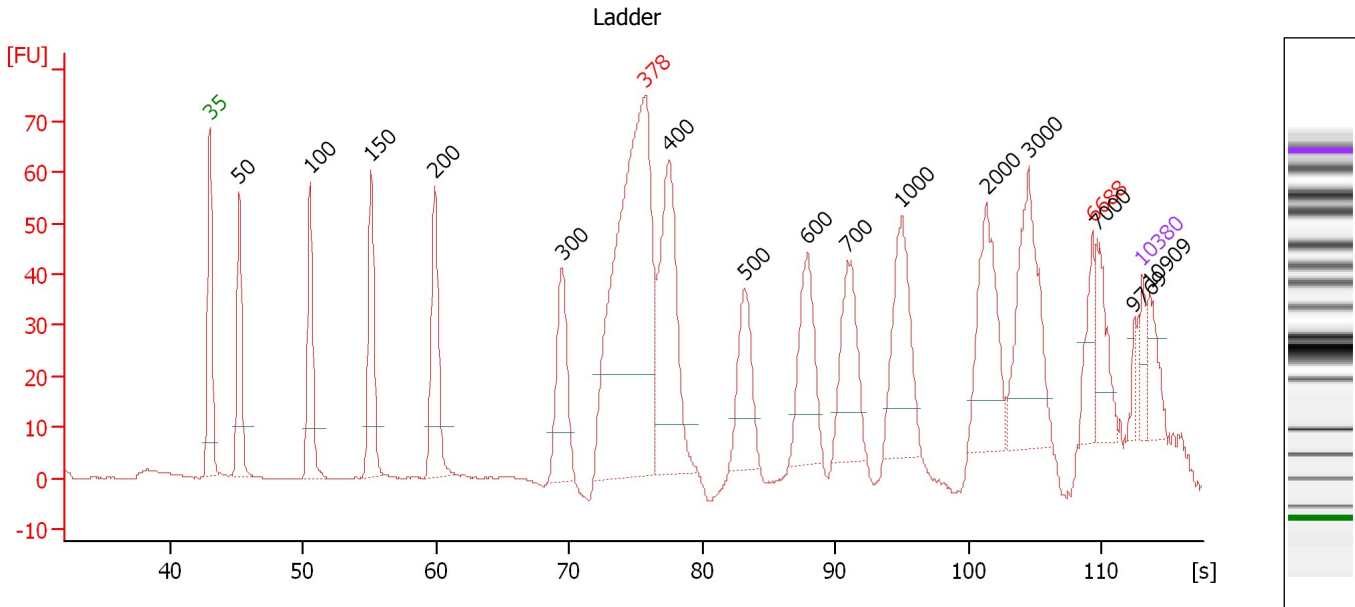
**Ladder**

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\2012-08-14\2012-08-14\_003.xad

Created: 8/14/2012 10:42:51 AM  
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**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.2

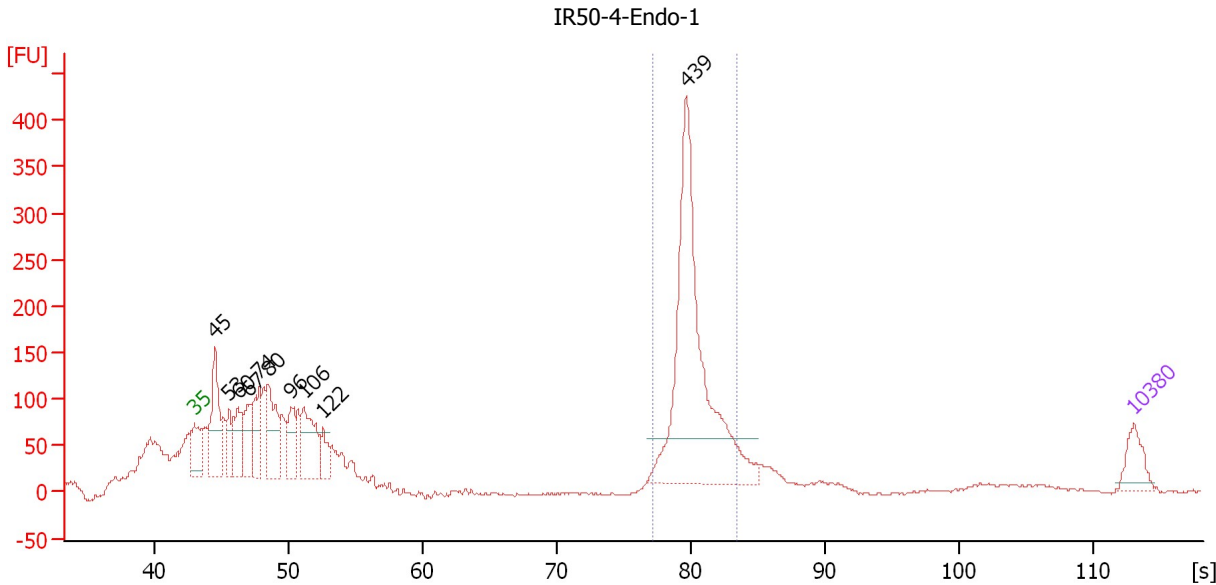
**Peak table for Ladder**

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	378	0.00	0.0	excluded peak
8	400	150.00	568.2	Ladder Peak
9	500	150.00	454.5	Ladder Peak
10	600	150.00	378.8	Ladder Peak
11	700	150.00	324.7	Ladder Peak
12	1,000	150.00	227.3	Ladder Peak
13	2,000	150.00	113.6	Ladder Peak
14	3,000	150.00	75.8	Ladder Peak
15	6,688	0.00	0.0	excluded peak
16	7,000	150.00	32.5	Ladder Peak
17	9,769	0.00	0.0	
18	10,380	75.00	10.9	Upper Marker
19	10,909	0.00	0.0	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-14\2012-08-14\_003.xad

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**Electropherogram Summary Continued ...**



**Setpoint Deviations for sample 1 : IR50-4-Endo-1**

Height Threshold [FU] : 50

**Overall Results for sample 1 : IR50-4-Endo-1**

Number of peaks found: 10                      Corr. Area 1: 1,144.7  
 Noise: 0.8

**Peak table for sample 1 : IR50-4-Endo-1**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	45	412.22	13,874.4	
3	53	140.68	4,004.3	
4	60	215.78	5,483.7	
5	67	194.76	4,395.3	
6	74	249.57	5,090.4	
7	80	347.36	6,554.2	
8	96	191.96	3,026.8	
9	106	318.45	4,534.3	
10	122	113.00	1,400.8	
11	439	1,302.25	4,497.5	
12	10,380	75.00	10.9	Upper Marker

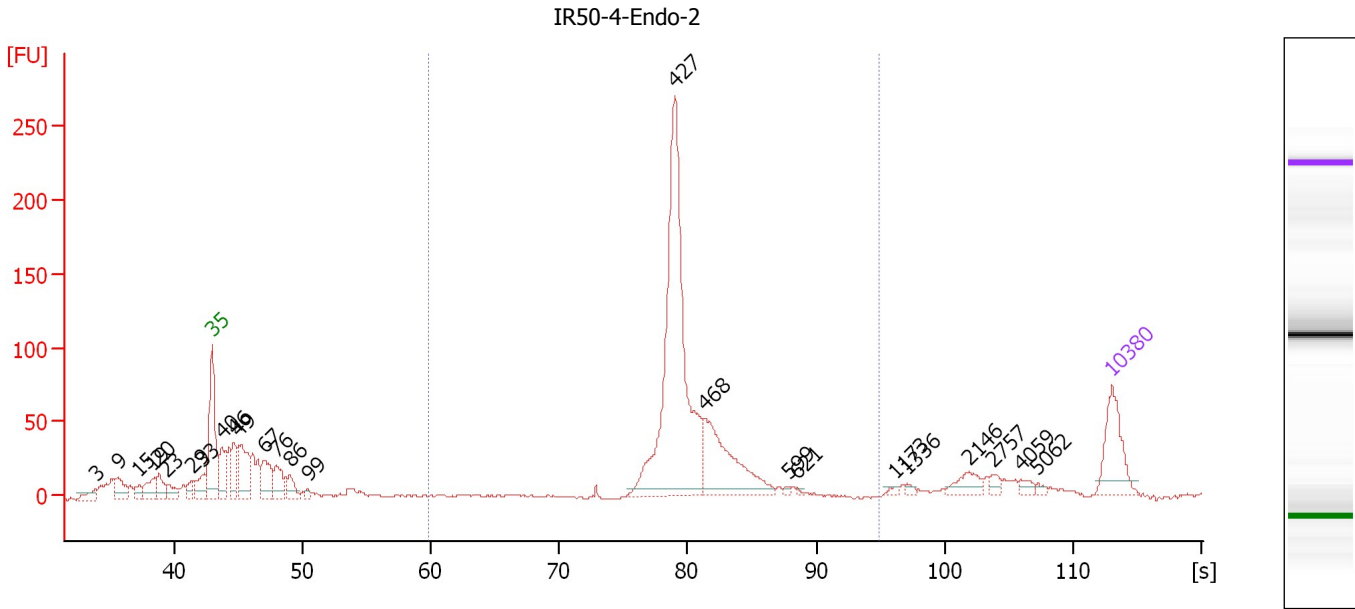
**Region table for sample 1 : IR50-4-Endo-1**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
396	506	447	4,244.1	1,250.38	1,144.7	30	4.9	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-14\2012-08-14\_003.xad

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 Modified: 8/14/2012 2:19:20 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : IR50-4-Endo-2**

Number of peaks found: 25                      Corr. Area 1: 830.7  
 Noise: 0.6


**Peak table for sample 2 : IR50-4-Endo-2**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	3	0.00	0.0	
2	9	0.00	0.0	
3	15	0.00	0.0	
4	19	0.00	0.0	
5	20	0.00	0.0	
6	23	0.00	0.0	
7	29	0.00	0.0	
8	33	0.00	0.0	
9	35	125.00	5,411.3	Lower Marker
10	40	82.31	3,111.3	
11	46	78.64	2,573.4	
12	49	126.03	3,865.0	
13	67	84.28	1,910.7	
14	76	64.23	1,282.9	
15	86	41.91	738.0	
16	99	9.31	142.4	
17	427	657.21	2,331.8	
18	468	201.06	650.3	
19	599	4.42	11.2	
20	621	2.46	6.0	
21	1,173	4.64	6.0	
22	1,336	5.42	6.1	
23	2,146	26.53	18.7	
24	2,757	9.64	5.3	
25	4,059	9.37	3.5	
26	5,062	4.44	1.3	


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-14\2012-08-14\_003.xad

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**Electropherogram Summary Continued ...****... Peak table for sample 2 : IR50-4-Endo-2**

Peak	Size [bp]	Conc. [pg/ $\mu$ l]	Molarity [pmol/l]	Observations
27	 10,380	75.00	10.9	Upper Marker

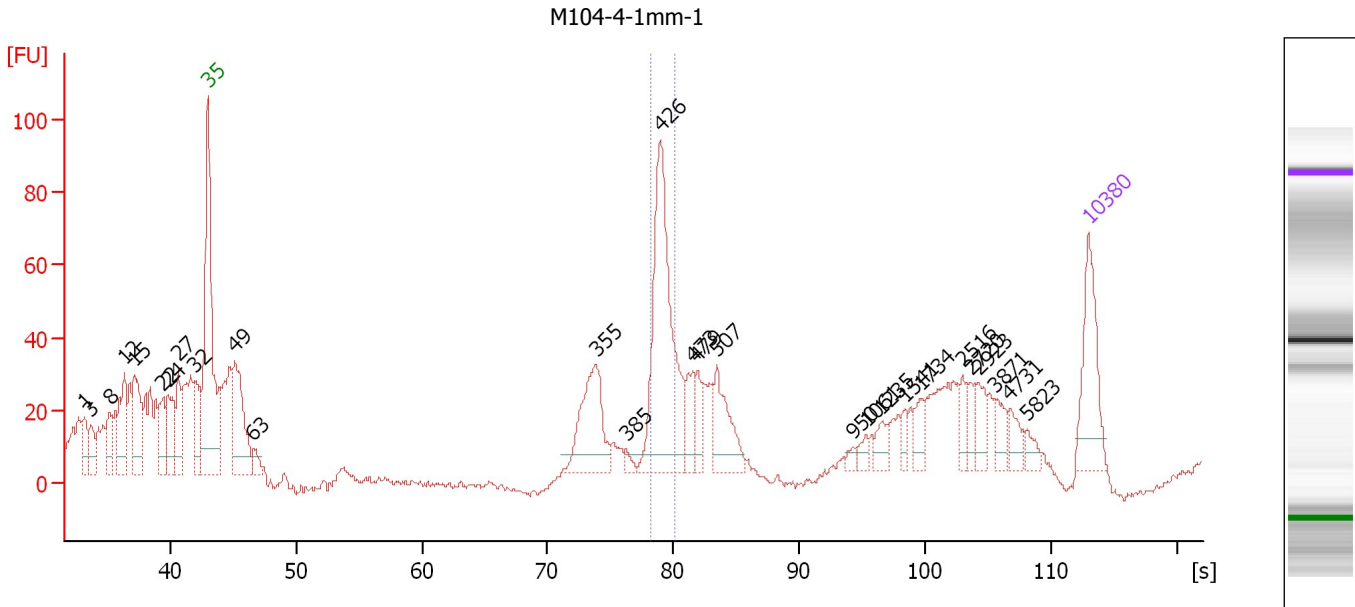
**Region table for sample 2 : IR50-4-Endo-2**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/ $\mu$ l]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	446	3,186.2	915.59	830.7	50	12.1	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-14\2012-08-14\_003.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : M104-4-1mm-1**

Number of peaks found: 28                      Corr. Area 1: 138.9  
 Noise: 0.8

**Peak table for sample 3 : M104-4-1mm-1**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	1	0.00	0.0	
2	3	0.00	0.0	
3	8	0.00	0.0	
4	12	0.00	0.0	
5	15	0.00	0.0	
6	22	0.00	0.0	
7	24	0.00	0.0	
8	27	0.00	0.0	
9	32	0.00	0.0	
10	35	125.00	5,411.3	Lower Marker
11	49	162.17	4,970.5	
12	63	20.98	502.5	
13	355	128.42	548.2	
14	385	8.59	33.8	
15	426	299.71	1,066.2	
16	473	38.50	123.4	
17	479	27.36	86.6	
18	507	71.86	214.7	
19	950	7.24	11.5	
20	1,061	10.88	15.5	
21	1,235	18.79	23.1	
22	1,541	10.94	10.8	
23	1,734	18.74	16.4	
24	2,516	16.18	9.7	
25	2,720	15.67	8.7	
26	2,923	22.30	11.6	



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-14\2012-08-14\_003.xad


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### Electropherogram Summary Continued ...

#### ... Peak table for sample 3 : M104-4-1mm-1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	3,871	19.93	7.8	
28	4,731	17.08	5.5	
29	5,823	11.59	3.0	
30	10,380	75.00	10.9	Upper Marker

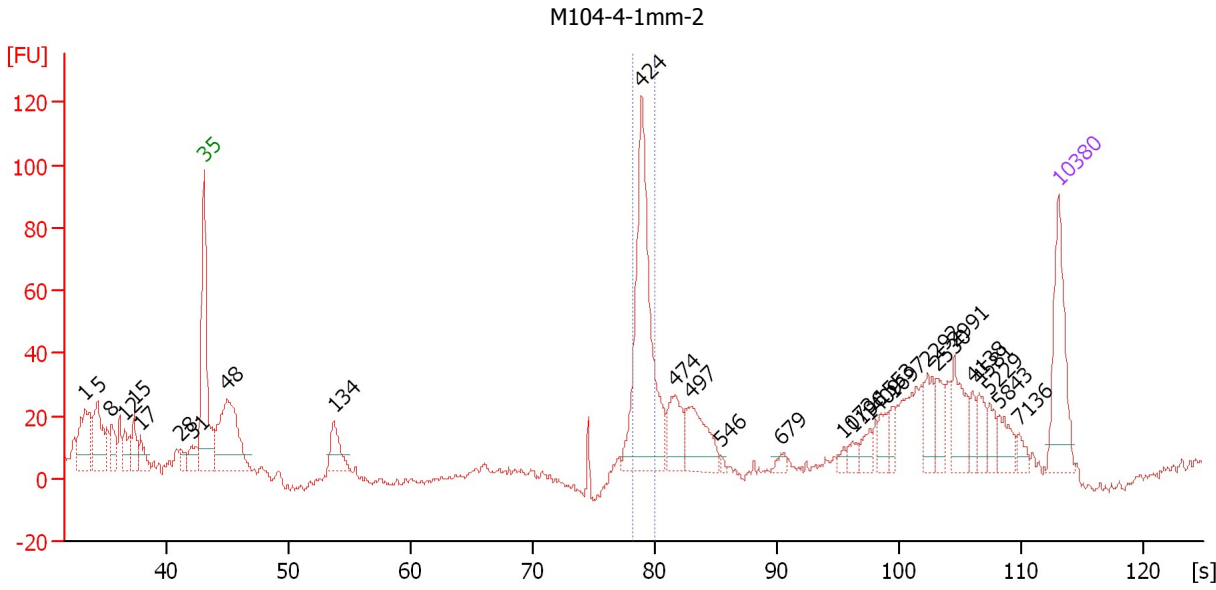
#### Region table for sample 3 : M104-4-1mm-1

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
414	446	428	711.6	201.18	138.9	18	1.8	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-14\2012-08-14\_003.xad

Created: 8/14/2012 10:42:51 AM  
 Modified: 8/14/2012 2:19:20 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : M104-4-1mm-2**

Number of peaks found: 28                      Corr. Area 1: 154.9  
 Noise: 1.3

**Peak table for sample 4 : M104-4-1mm-2**


Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	1	0.00	0.0	
2	5	0.00	0.0	
3	8	0.00	0.0	
4	12	0.00	0.0	
5	15	0.00	0.0	
6	17	0.00	0.0	
7	28	0.00	0.0	
8	31	0.00	0.0	
9	35	125.00	5,411.3	Lower Marker
10	48	185.07	5,866.9	
11	134	49.11	554.9	
12	424	275.21	982.3	
13	474	51.45	164.6	
14	497	69.35	211.4	
15	546	2.99	8.3	
16	679	7.26	16.2	
17	1,073	5.13	7.2	
18	1,196	9.50	12.0	
19	1,409	13.49	14.5	
20	1,553	15.67	15.3	
21	1,697	11.67	10.4	
22	2,292	25.64	17.0	
23	2,530	21.57	12.9	
24	2,991	38.84	19.7	
25	4,138	12.79	4.7	
26	4,581	18.64	6.2	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-14\2012-08-14\_003.xad


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### Electropherogram Summary Continued ...

#### ... Peak table for sample 4 : M104-4-1mm-2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	5,229	15.15	4.4	
28	5,843	21.13	5.5	
29	7,136	8.97	1.9	
30	 10,380	75.00	10.9	Upper Marker

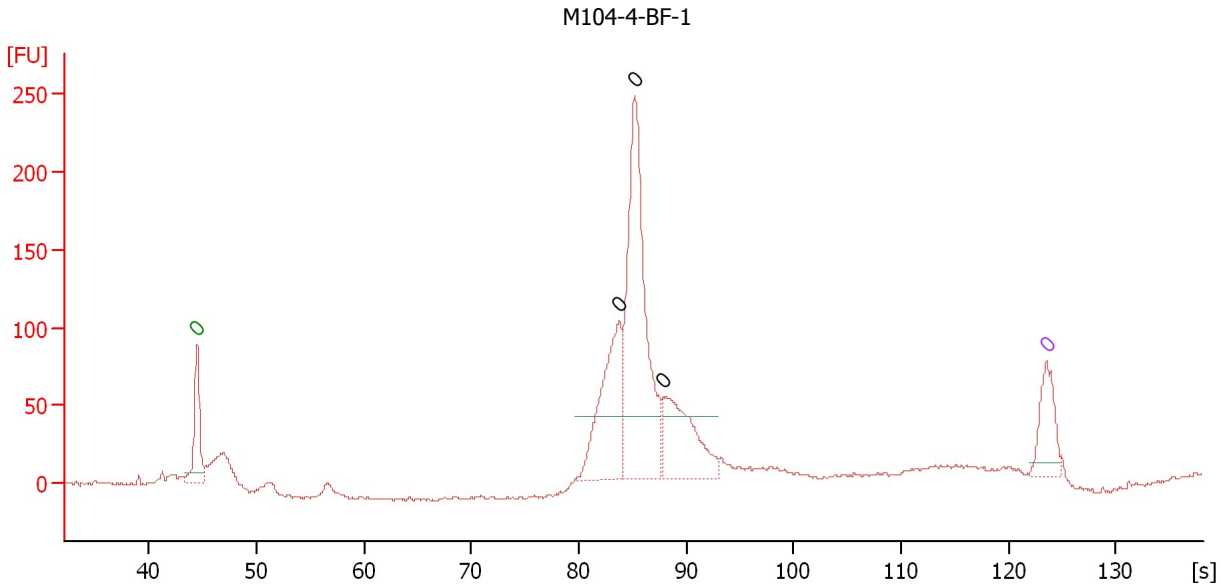
#### Region table for sample 4 : M104-4-1mm-2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
412	443	426	694.9	195.46	154.9	26	1.7	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-14\2012-08-14\_003.xad

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**Electropherogram Summary Continued ...**



**Setpoint Deviations for sample 5 : M104-4-BF-1**

End Analysis Time Range [s] : 106.05      Height Threshold [FU] : 40  
 Slope Threshold : 1      Area Threshold : 1

**Overall Results for sample 5 : M104-4-BF-1**

Number of peaks found: 3      Noise: 0.9

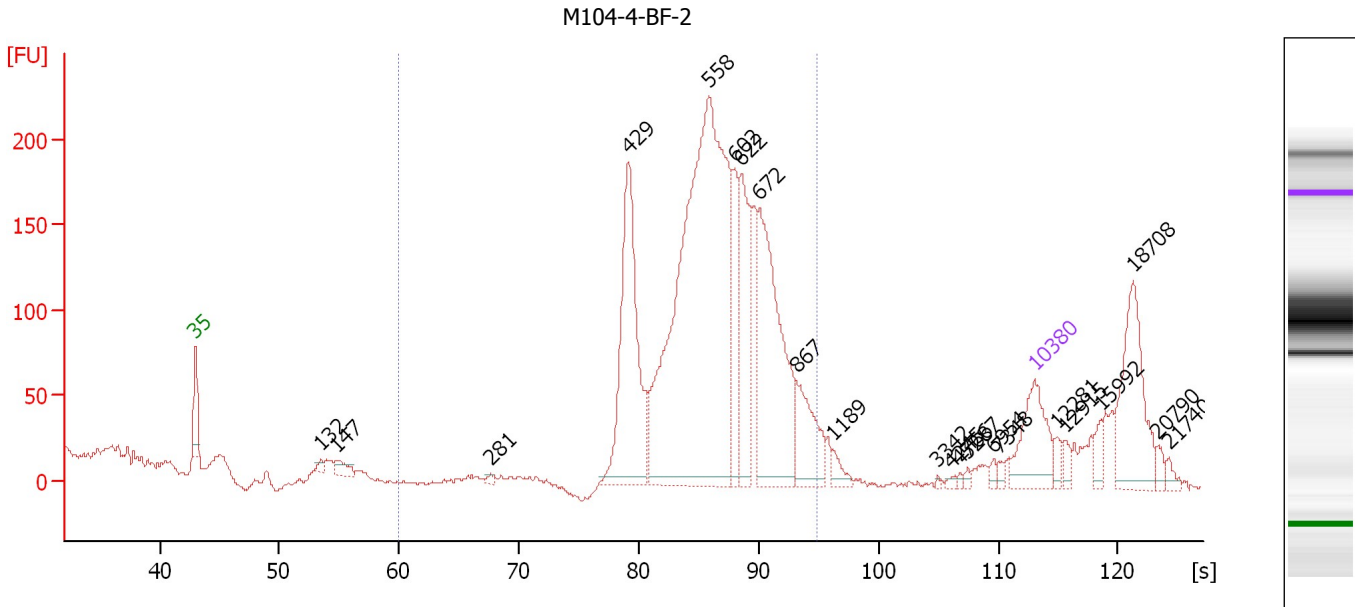
**Peak table for sample 5 : M104-4-BF-1**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	0	125.00	0.0	Lower Marker
2	0	595.00	0.0	
3	0	1,266.40	0.0	
4	0	468.34	0.0	
5	0	75.00	0.0	Upper Marker

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-14\2012-08-14\_003.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : M104-4-BF-2**

Number of peaks found: 22                      Corr. Area 1: 2,445.6  
 Noise: 1.1

**Peak table for sample 6 : M104-4-BF-2**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	132	7.94	91.0	
3	147	22.06	227.2	
4	281	5.09	27.5	
5	429	309.07	1,091.2	
6	558	927.70	2,518.4	
7	602	89.49	225.1	
8	622	143.24	349.2	
9	672	295.86	667.1	
10	867	89.91	157.1	
11	1,189	14.53	18.5	
12	3,342	1.50	0.7	
13	4,245	3.26	1.2	
14	4,766	2.59	0.8	
15	5,287	3.31	0.9	
16	6,954	6.00	1.3	
17	7,348	5.03	1.0	
18	10,380	75.00	10.9	Upper Marker
19	12,281	0.00	0.0	
20	12,915	0.00	0.0	
21	15,992	0.00	0.0	
22	18,708	0.00	0.0	
23	20,790	0.00	0.0	
24	21,740	0.00	0.0	

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-14\2012-08-14\_003.xad

Created: 8/14/2012 10:42:51 AM  
Modified: 8/14/2012 2:19:20 PM

**Electropherogram Summary Continued ...**

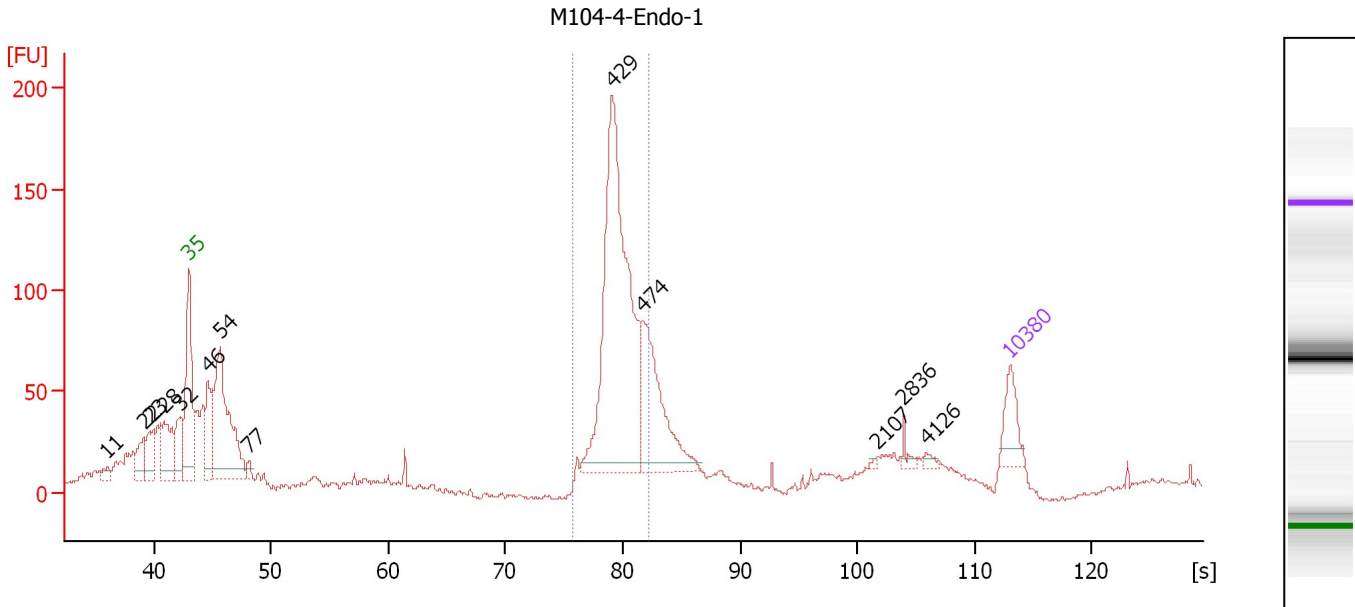
... Region table for sample 6 : M104-4-BF-2

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	588	4,883.7	1,809.85	2,445.6	84	19.9	■

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-14\2012-08-14\_003.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : M104-4-Endo-1**

Number of peaks found: 13      Corr. Area 1: 672.0  
 Noise: 1.5

**Peak table for sample 7 : M104-4-Endo-1**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	11	0.00	0.0	
2	22	0.00	0.0	
3	23	0.00	0.0	
4	28	0.00	0.0	
5	32	0.00	0.0	
6	35	125.00	5,411.3	Lower Marker
7	46	188.53	6,230.8	
8	54	605.54	16,950.6	
9	77	21.91	429.1	
10	429	1,087.11	3,841.6	
11	474	372.05	1,188.7	
12	2,107	4.77	3.4	
13	2,836	16.17	8.6	
14	4,126	10.17	3.7	
15	10,380	75.00	10.9	Upper Marker

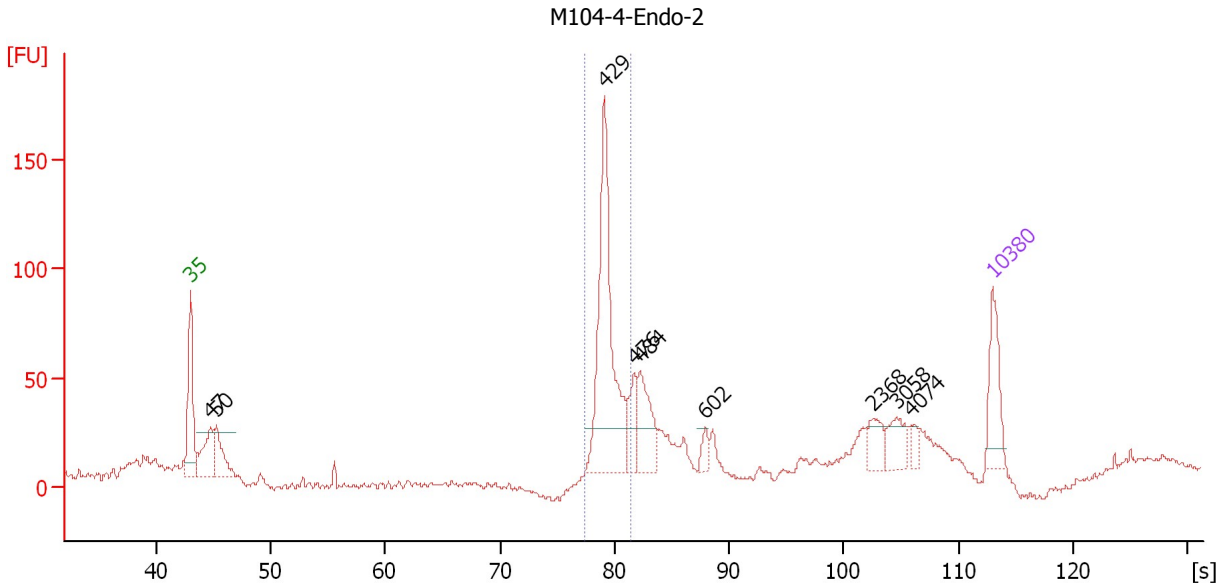
**Region table for sample 7 : M104-4-Endo-1**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
379	484	439	4,435.6	1,285.30	672.0	38	5.1	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-14\2012-08-14\_003.xad

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**Electropherogram Summary Continued ...**



**Setpoint Deviations for sample 8 : M104-4-Endo-2**

Height Threshold [FU] : 20

**Overall Results for sample 8 : M104-4-Endo-2**

Number of peaks found: 9                      Corr. Area 1: 299.1  
 Noise: 1.4

**Peak table for sample 8 : M104-4-Endo-2**

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	47	117.54	3,811.5	
3	50	101.86	3,068.7	
4	429	420.83	1,485.6	
5	476	68.62	218.6	
6	484	111.64	349.5	
7	602	20.82	52.4	
8	2,368	37.05	23.7	
9	3,058	43.32	21.5	
10	4,074	13.81	5.1	
11	10,380	75.00	10.9	Upper Marker

**Region table for sample 8 : M104-4-Endo-2**

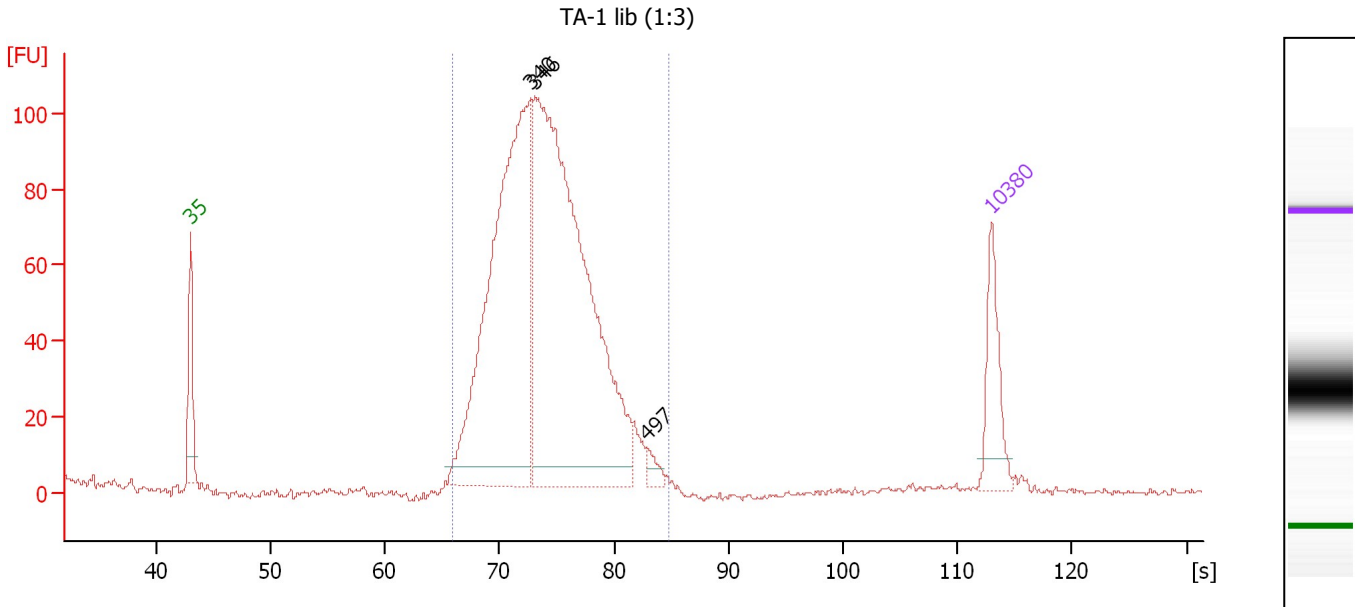
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
399	470	434	1,530.1	438.64	299.1	34	3.3	Blue



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-14\2012-08-14\_003.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : TA-1 lib (1:3)**

Number of peaks found: 3                      Corr. Area 1: 1,354.8  
 Noise: 0.7

**Peak table for sample 9 : TA-1 lib (1:3)**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	340	819.41	3,646.6	
3	346	1,071.52	4,696.0	
4	497	17.79	54.3	
5	10,380	75.00	10.9	Upper Marker

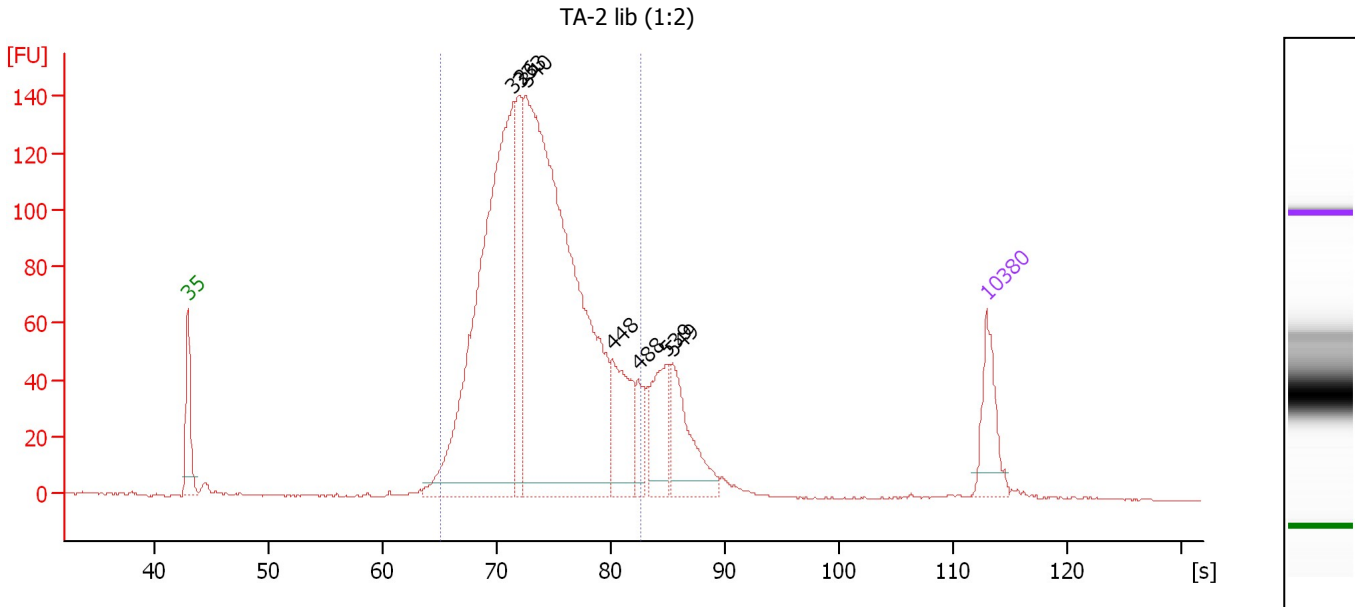
**Region table for sample 9 : TA-1 lib (1:3)**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
262	534	358	8,391.8	1,939.80	1,354.8	99	13.9	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-14\2012-08-14\_003.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : TA-2 lib (1:2)**

Number of peaks found: 7      Corr. Area 1: 1,977.9  
 Noise: 0.3

**Peak table for sample 10 : TA-2 lib (1:2)**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	326	1,045.16	4,859.5	
3	333	193.31	879.8	
4	340	1,445.88	6,444.3	
5	448	166.22	562.1	
6	488	55.75	173.1	
7	539	123.87	348.0	
8	549	148.57	409.9	
9	10,380	75.00	10.9	Upper Marker

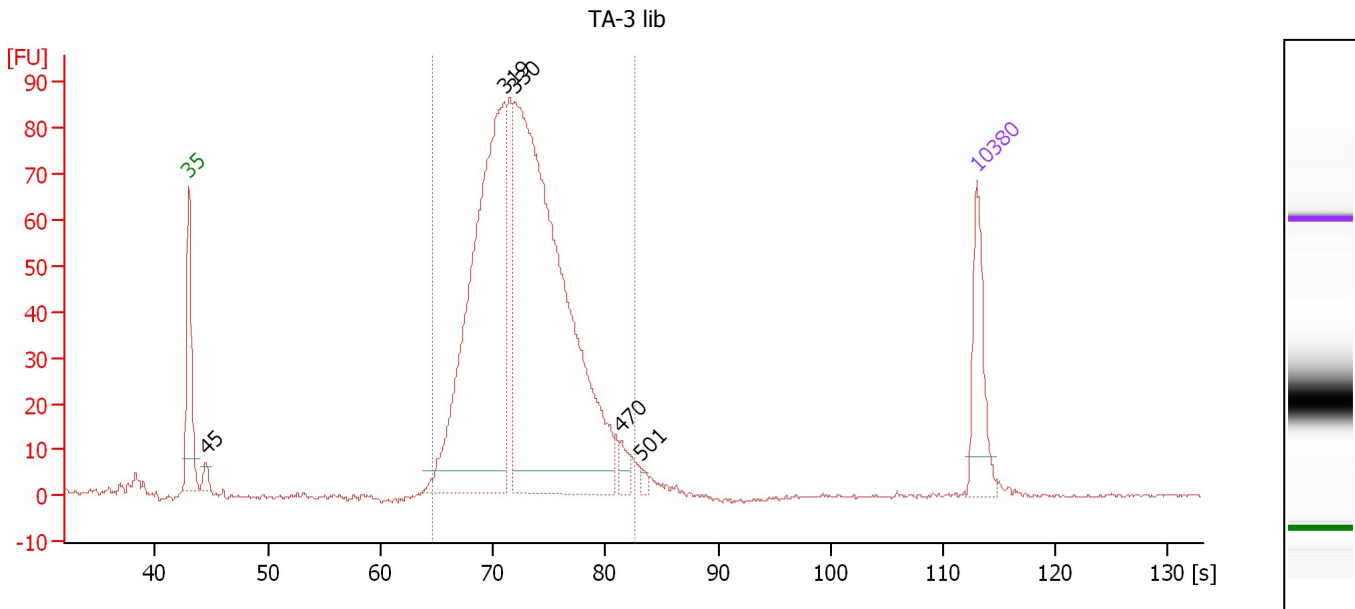
**Region table for sample 10 : TA-2 lib (1:2)**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
256	493	355	12,505.2	2,852.26	1,977.9	86	15.0	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-14\2012-08-14\_003.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : TA-3 lib**

Number of peaks found: 5                      Corr. Area 1: 1,116.5  
 Noise: 0.3

**Peak table for sample 11 : TA-3 lib**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	45	18.61	622.0	
3	319	762.48	3,616.9	
4	330	1,053.60	4,835.7	
5	470	21.75	70.2	
6	501	7.11	21.5	
7	10,380	75.00	10.9	Upper Marker

**Region table for sample 11 : TA-3 lib**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
250	491	342	8,660.4	1,913.18	1,116.5	97	13.7	Blue

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-14\2012-08-14\_003.xad

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Gel Image

