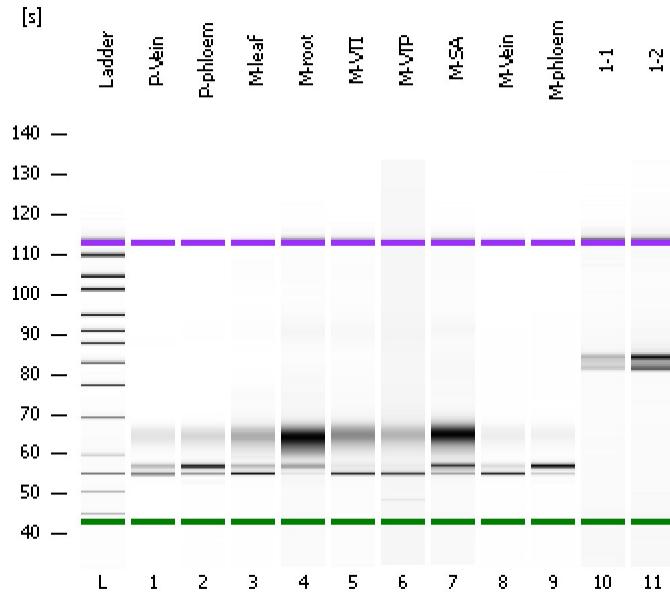


Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-08\2012-08-08\_001.xad

Created: 8/8/2012 9:22:57 AM  
 Modified: 8/8/2012 1:49:14 PM

**Electrophoresis File Run Summary**



Instrument Information:

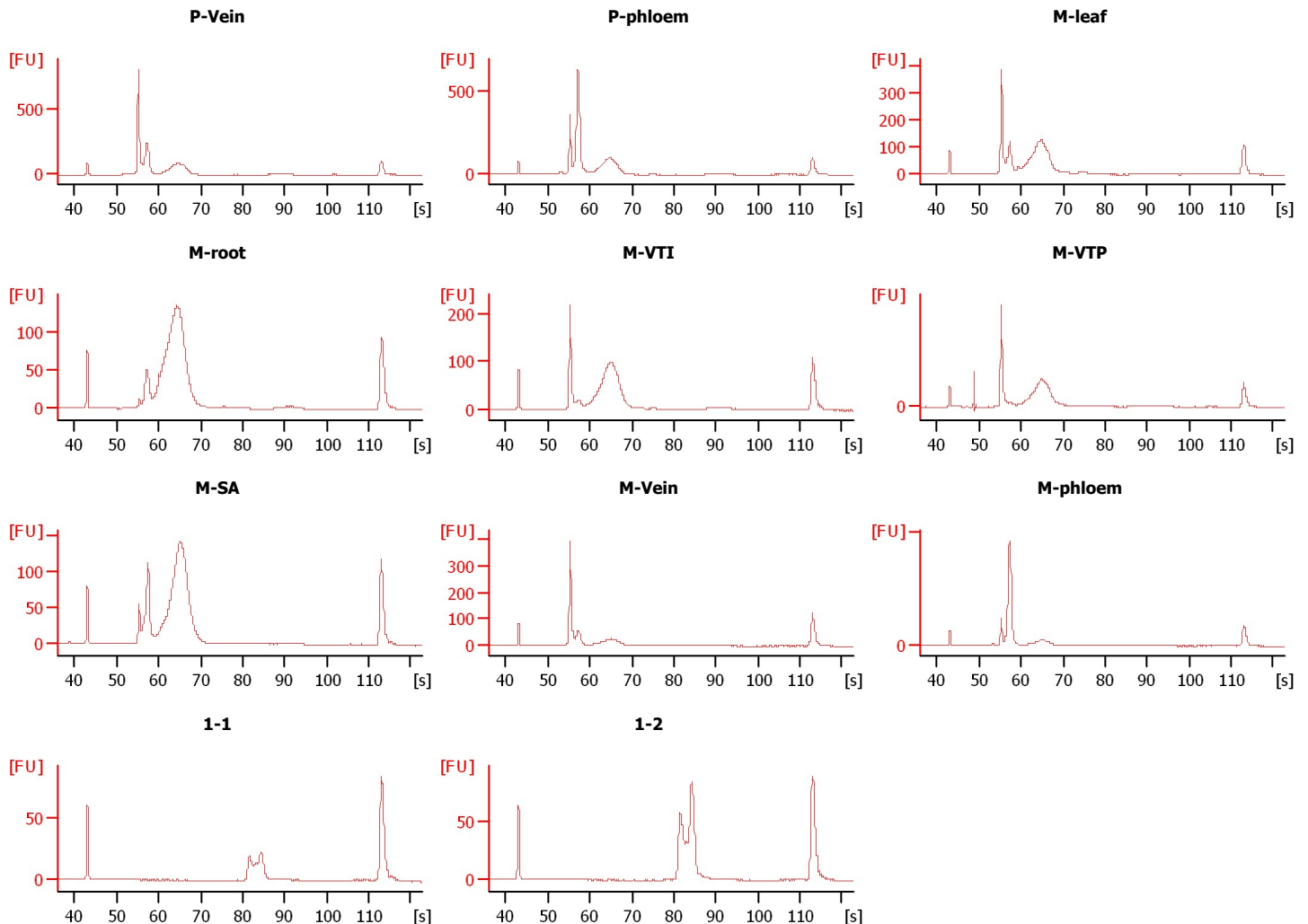
Instrument Name: DE13701086      Firmware: C.01.069  
 Serial#: DE13701086      Type: G2938B

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\2012-08-08\2012-08-08\_001.xad

Created: 8/8/2012 9:22:57 AM  
 Modified: 8/8/2012 1:49:14 PM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
P-Vein		<input type="checkbox"/>	✓			
P-phloem		<input type="checkbox"/>	✓			
M-leaf		<input type="checkbox"/>	✓			
M-root		<input type="checkbox"/>	✓			
M-VTI		<input type="checkbox"/>	✓			
M-VTP		<input type="checkbox"/>	✓			
M-SA		<input type="checkbox"/>	✓			
M-Vein		<input type="checkbox"/>	✓			
M-phloem		<input type="checkbox"/>	✓			
1-1		<input type="checkbox"/>	✓			
1-2		<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\2012-08-08\2012-08-08\_001.xad

Created: 8/8/2012 9:22:57 AM  
Modified: 8/8/2012 1:49:14 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

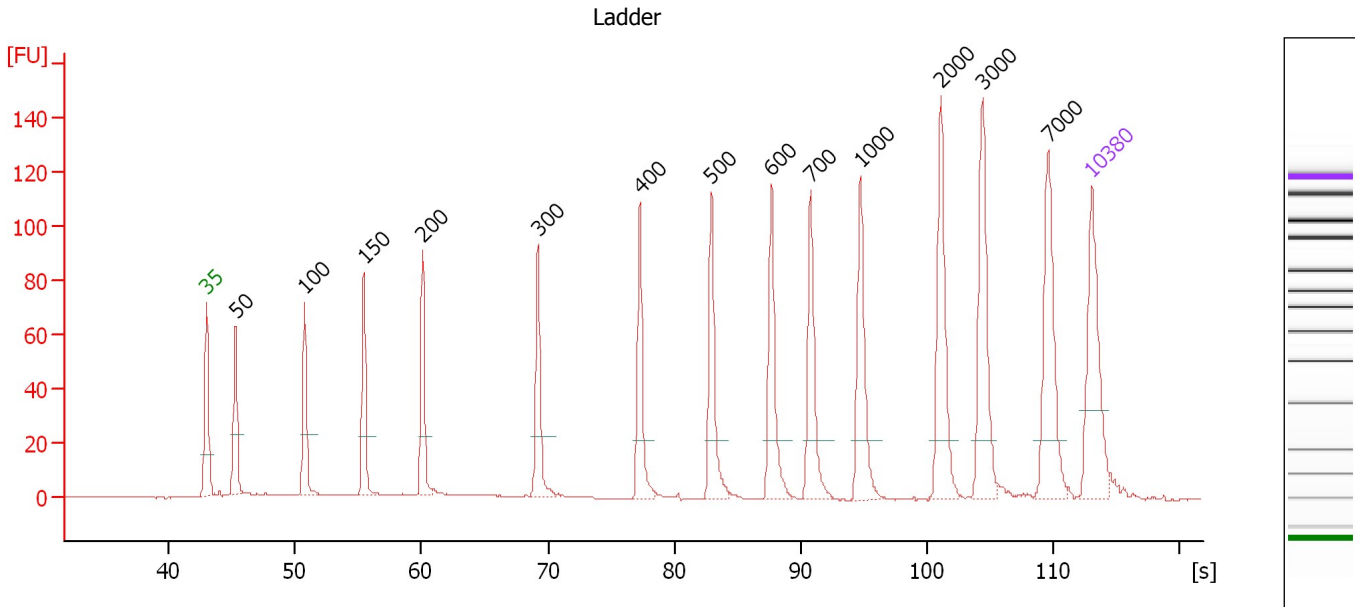
**Ladder**

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\2012-08-08\2012-08-08\_001.xad

Created: 8/8/2012 9:22:57 AM  
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**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.2

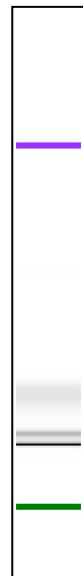
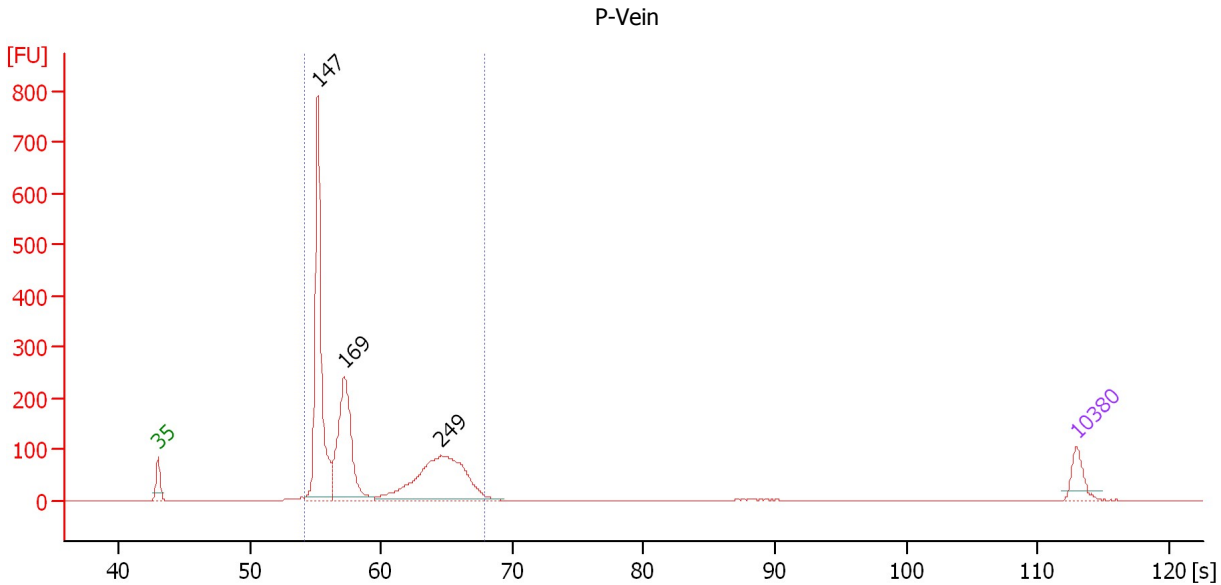
**Peak table for Ladder**

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	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\2012-08-08\2012-08-08\_001.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : P-Vein**

Number of peaks found: 3                      Corr. Area 1: 2,030.1  
 Noise: 0.2

**Peak table for sample 1 : P-Vein**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	147	1,183.81	12,192.2	
3	169	742.84	6,662.7	
4	249	786.16	4,782.7	
5	10,380	75.00	10.9	Upper Marker

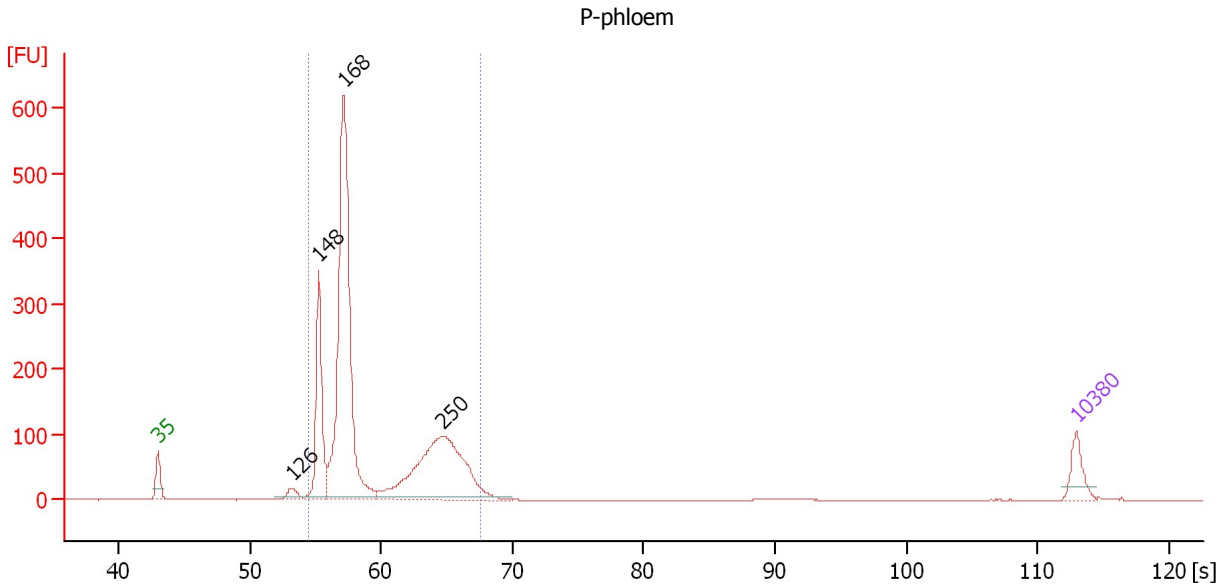
**Region table for sample 1 : P-Vein**

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area % of Total	Size distribution in CV [%]	Color
54.16	67.90	188	23,542.8	2,710.72	2,030.1 97	24.1	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-08\2012-08-08\_001.xad

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 Modified: 8/8/2012 1:49:14 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : P-phloem**

Number of peaks found: 4                      Corr. Area 1: 2,207.5  
 Noise: 0.2

**Peak table for sample 2 : P-phloem**

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	126	48.56	585.3	
3	148	513.77	5,264.3	
4	168	1,704.20	15,341.3	
5	250	913.20	5,537.3	
6	10,380	75.00	10.9	Upper Marker

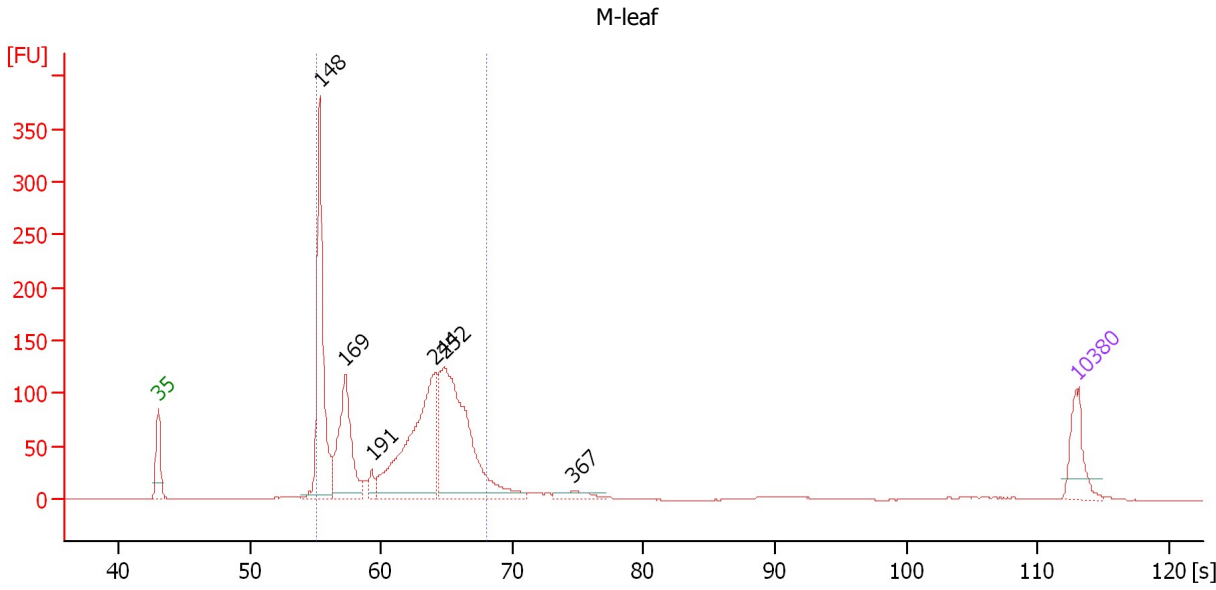
**Region table for sample 2 : P-phloem**

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
54.45	67.50	192	25,898.5	3,095.52	2,207.5	96	21.2	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-08\2012-08-08\_001.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : M-leaf**

Number of peaks found: 6      Corr. Area 1: 1,636.4  
 Noise: 0.2

**Peak table for sample 3 : M-leaf**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	148	541.76	5,527.6	
3	169	324.04	2,898.0	
4	191	31.68	250.9	
5	244	534.45	3,318.6	
6	252	630.69	3,793.4	
7	367	29.07	119.9	
8	10,380	75.00	10.9	Upper Marker

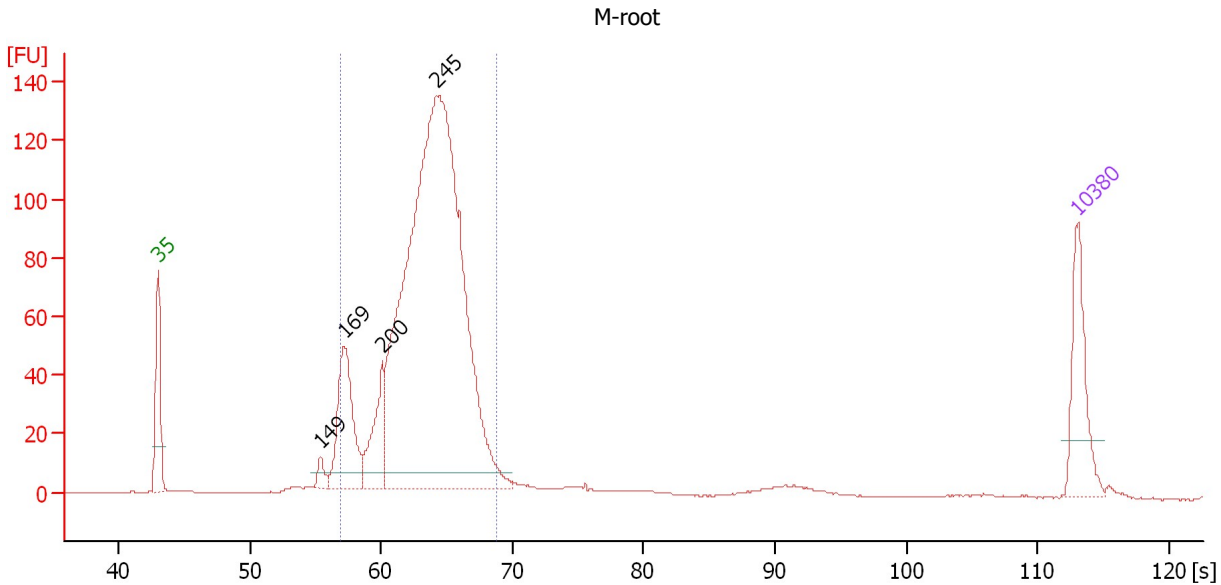
**Region table for sample 3 : M-leaf**

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
55.03	68.05	213	15,492.5	2,026.68	1,636.4	89	21.3	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-08\2012-08-08\_001.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : M-root**

Number of peaks found: 4      Corr. Area 1: 1,276.6  
 Noise: 0.1

**Peak table for sample 4 : M-root**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	149	17.57	178.5	
3	169	171.30	1,539.6	
4	200	96.67	732.4	
5	245	1,358.30	8,384.6	
6	10,380	75.00	10.9	Upper Marker

**Region table for sample 4 : M-root**

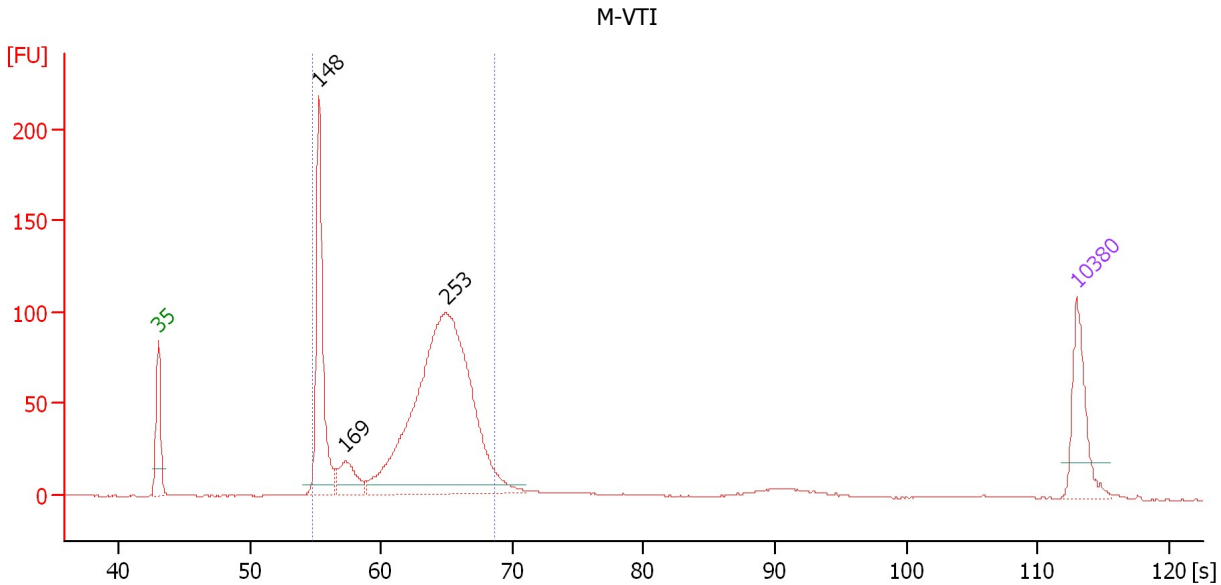
From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area % of Total	Size distribution in CV [%]	Color
56.89	68.79	236	10,726.0	1,642.60	1,276.6	90	12.1



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-08\2012-08-08\_001.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : M-VTI**

Number of peaks found: 3                      Corr. Area 1: 1,110.1  
 Noise: 0.2

**Peak table for sample 5 : M-VTI**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	148	307.42	3,142.8	
3	169	65.34	585.7	
4	253	886.14	5,305.3	
5	10,380	75.00	10.9	Upper Marker

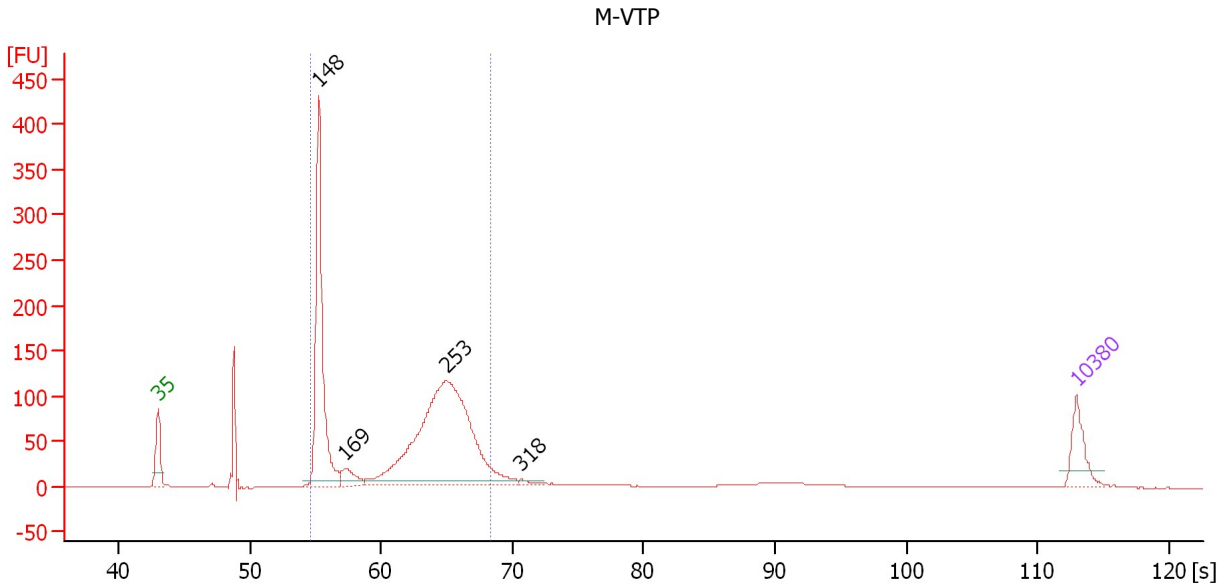
**Region table for sample 5 : M-VTI**

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area % of Total	Size distribution in CV [%]	Color
54.69	68.63	225	9,330.4	1,289.74	1,110.1 89	20.0	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-08\2012-08-08\_001.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : M-VTP**

Number of peaks found: 4                      Corr. Area 1: 1,404.9  
 Noise: 0.2

**Peak table for sample 6 : M-VTP**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	148	703.86	7,209.0	
3	169	63.22	565.2	
4	253	1,121.70	6,710.3	
5	318	9.60	45.7	
6	10,380	75.00	10.9	Upper Marker

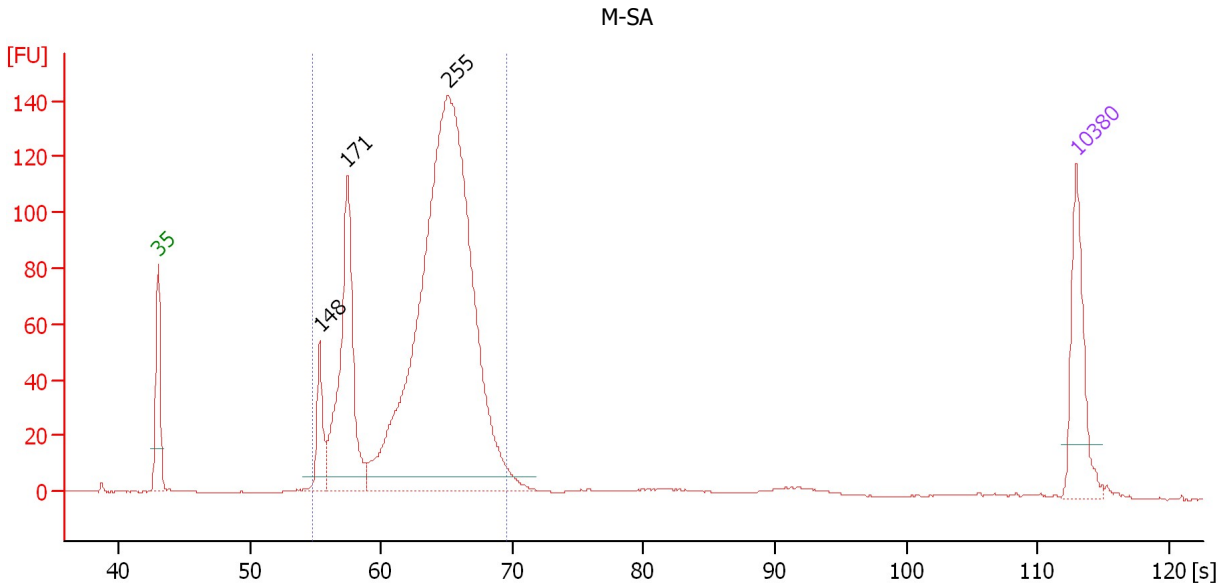
**Region table for sample 6 : M-VTP**

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
54.62	68.33	216	14,677.1	1,908.02	1,404.9	84	22.8	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-08\2012-08-08\_001.xad

Created: 8/8/2012 9:22:57 AM  
 Modified: 8/8/2012 1:49:14 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : M-SA**

Number of peaks found: 3                      Corr. Area 1: 1,361.7  
 Noise: 0.1

**Peak table for sample 7 : M-SA**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	148	66.73	681.1	
3	171	277.40	2,454.3	
4	255	1,121.07	6,660.5	
5	10,380	75.00	10.9	Upper Marker

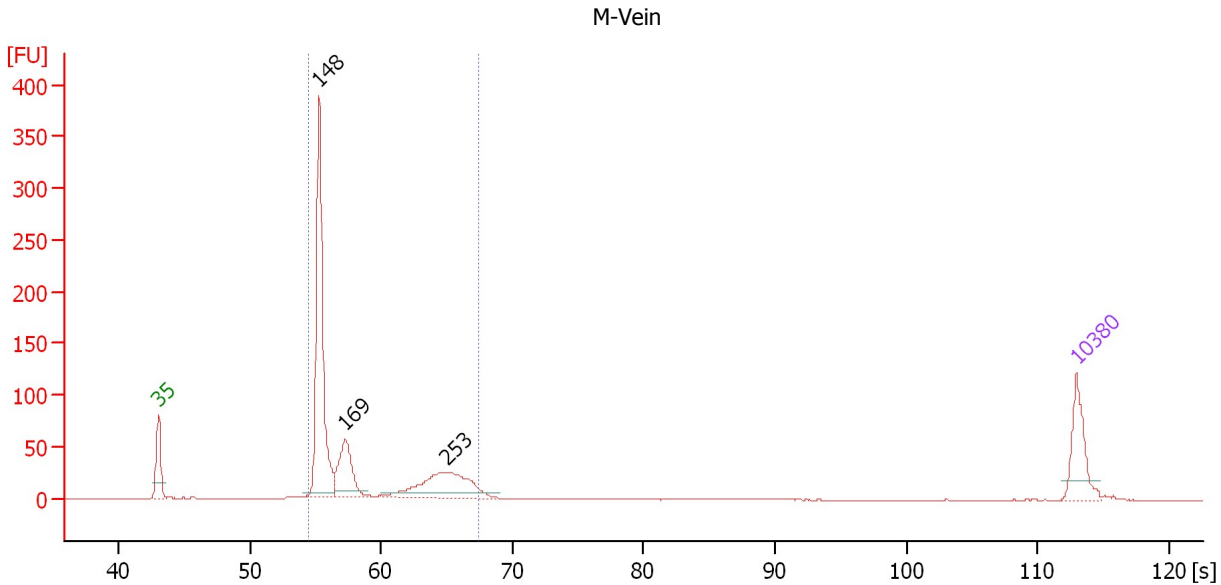
**Region table for sample 7 : M-SA**

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
54.72	69.51	234	10,185.7	1,500.91	1,361.7	93	16.9	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-08\2012-08-08\_001.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : M-Vein**

Number of peaks found: 3                      Corr. Area 1: 730.6  
 Noise: 0.1

**Peak table for sample 8 : M-Vein**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	148	512.76	5,248.0	
3	169	137.81	1,232.6	
4	253	181.55	1,087.1	
5	10,380	75.00	10.9	Upper Marker

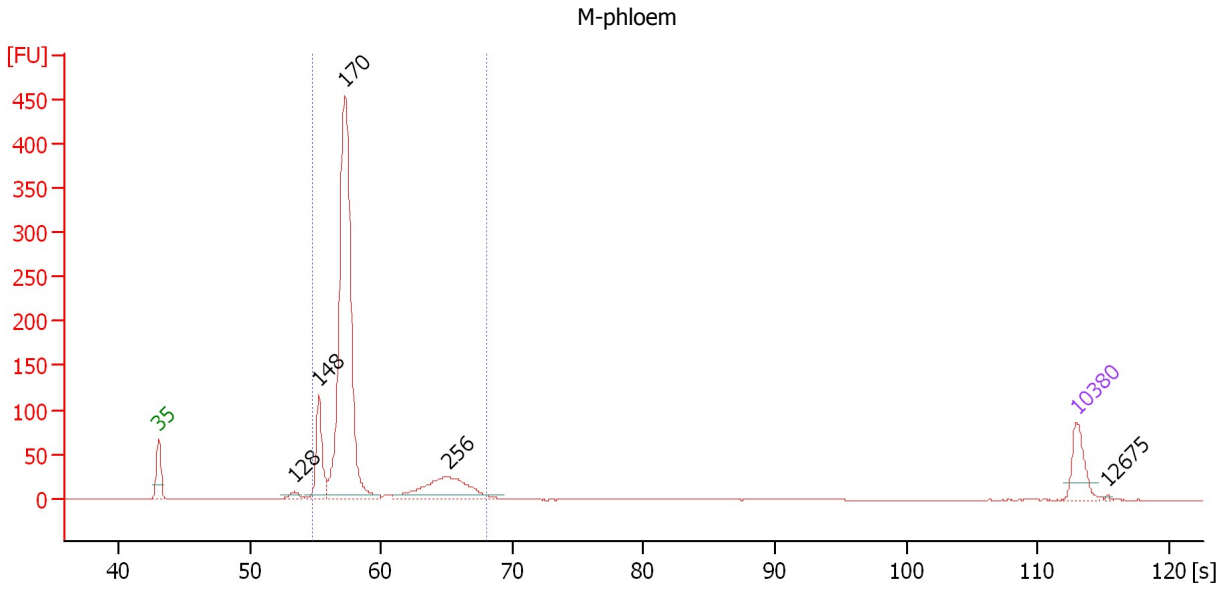
**Region table for sample 8 : M-Vein**

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area % of Total	Size distribution in CV [%]	Color
54.40	67.41	181	7,904.7	879.82	730.6 93	24.4	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-08\2012-08-08\_001.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : M-phloem**

Number of peaks found: 5                      Corr. Area 1: 1,126.6  
 Noise: 0.1

**Peak table for sample 9 : M-phloem**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	128	24.07	285.4	
3	148	197.64	2,022.1	
4	170	1,393.05	12,443.0	
5	256	241.59	1,432.3	
6	10,380	75.00	10.9	Upper Marker
7	12,675	0.00	0.0	

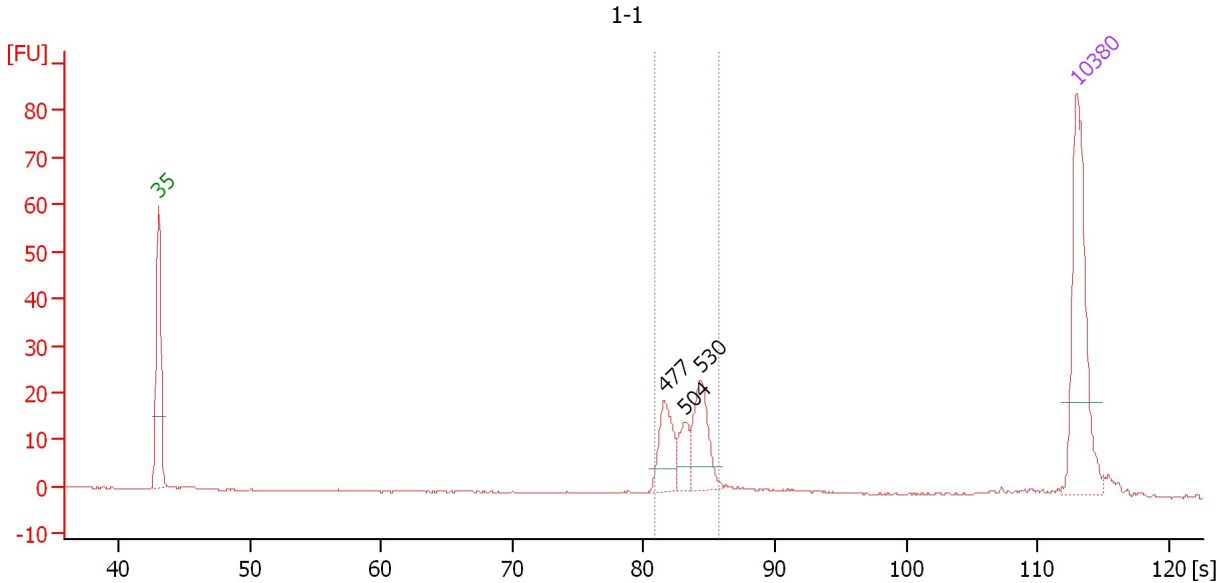
**Region table for sample 9 : M-phloem**

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area % of Total	Size distribution in CV [%]	Color
54.69	67.99	181	15,853.1	1,827.33	1,126.6 97	17.9	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-08\2012-08-08\_001.xad

Created: 8/8/2012 9:22:57 AM  
 Modified: 8/8/2012 1:49:14 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : 1-1**

Number of peaks found: 3                      Corr. Area 1: 85.1  
 Noise: 0.1

**Peak table for sample 10 : 1-1**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	477	34.21	108.8	
3	504	18.42	55.4	
4	530	41.39	118.4	
5	10,380	75.00	10.9	Upper Marker

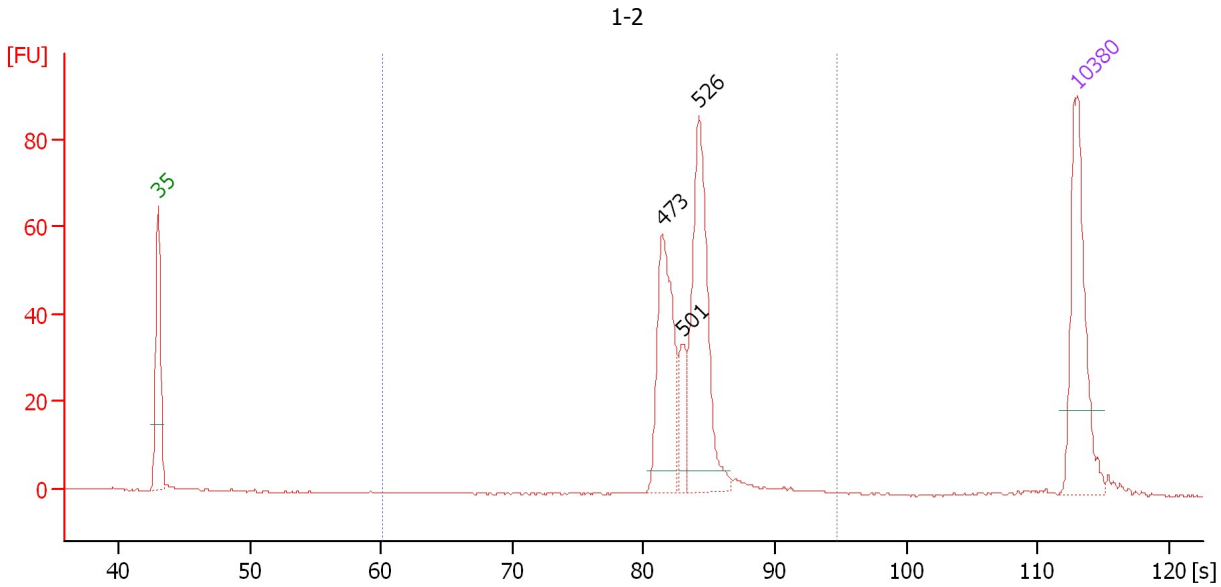
**Region table for sample 10 : 1-1**

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area % of Total	Size distribution in CV [%]	Color	
80.78	85.68	507	291.5	97.28	85.1	78	4.9	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-08\2012-08-08\_001.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : 1-2**

Number of peaks found: 3                      Corr. Area 1: 289.6  
 Noise: 0.1

**Peak table for sample 11 : 1-2**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	473	104.01	333.1	
3	501	26.33	79.6	
4	526	144.04	414.7	
5	10,380	75.00	10.9	Upper Marker

**Region table for sample 11 : 1-2**

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area % of Total	Size distribution in CV [%]	Color
60.08	94.69	517	860.3	290.67	289.6 93	10.2	Blue

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-08\2012-08-08\_001.xad

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**Gel Image**

