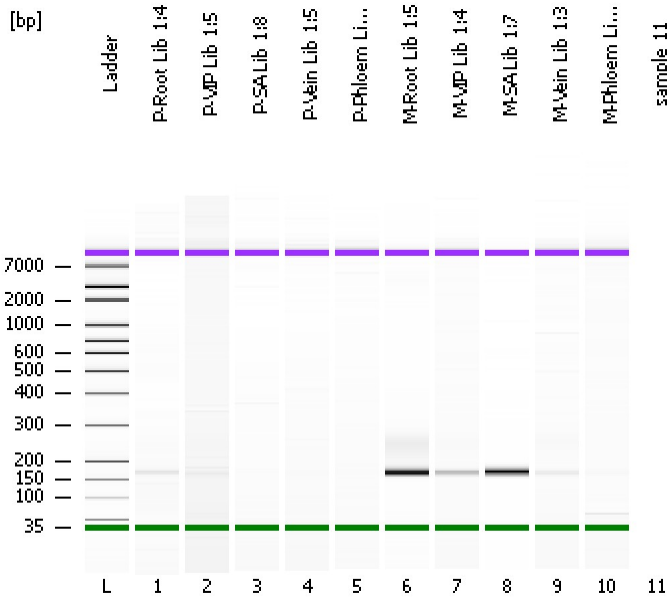


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-23\2012-08-23\_001.xad

Created: 8/23/2012 10:06:36 AM  
Modified: 8/23/2012 10:47:00 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

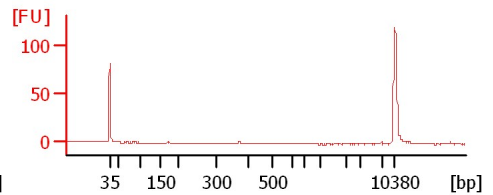
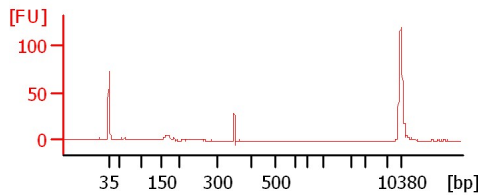
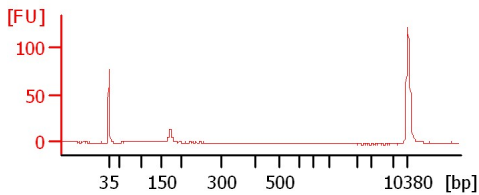
Chip Information:

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

**P-Root Lib 1:4**

**P-VIP Lib 1:5**

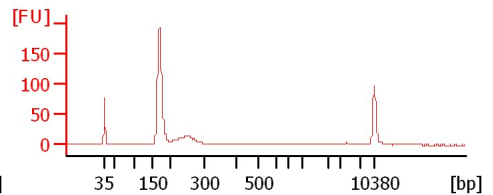
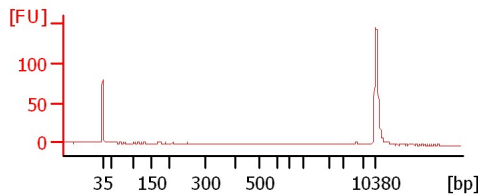
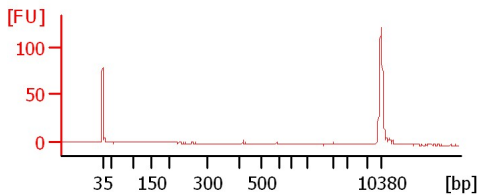
**P-SA Lib 1:8**



**P-Vein Lib 1:5**

**P-Phloem Lib 1:5**

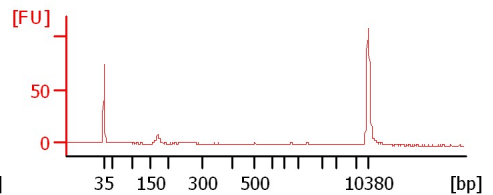
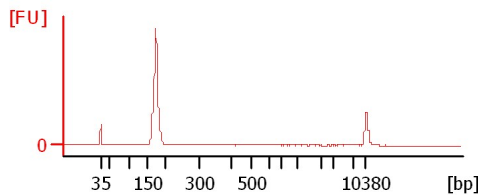
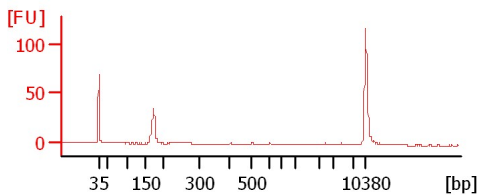
**M-Root Lib 1:5**



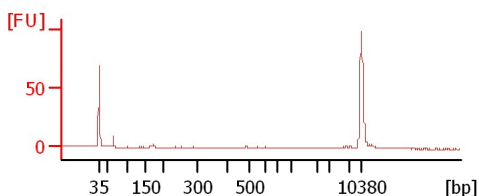
**M-VIP Lib 1:4**

**M-SA Lib 1:7**

**M-Vein Lib 1:3**



**M-Phloem Lib 1:6**



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-23\2012-08-23\_001.xad

Created: 8/23/2012 10:06:36 AM  
 Modified: 8/23/2012 10:47:00 AM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
P-Root Lib 1:4		<input type="checkbox"/>	✓			
P-VIP Lib 1:5		<input type="checkbox"/>	✓			
P-SA Lib 1:8		<input type="checkbox"/>	✓			
P-Vein Lib 1:5		<input type="checkbox"/>	✓			
P-Phloem Lib 1:5		<input type="checkbox"/>	✓			
M-Root Lib 1:5		<input type="checkbox"/>	✓			
M-VIP Lib 1:4		<input type="checkbox"/>	✓			
M-SA Lib 1:7		<input type="checkbox"/>	✓			
M-Vein Lib 1:3		<input type="checkbox"/>	✓			
M-Phloem Lib 1:6		<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\2012-08-23\2012-08-23\_001.xad

Created: 8/23/2012 10:06:36 AM  
Modified: 8/23/2012 10:47:00 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

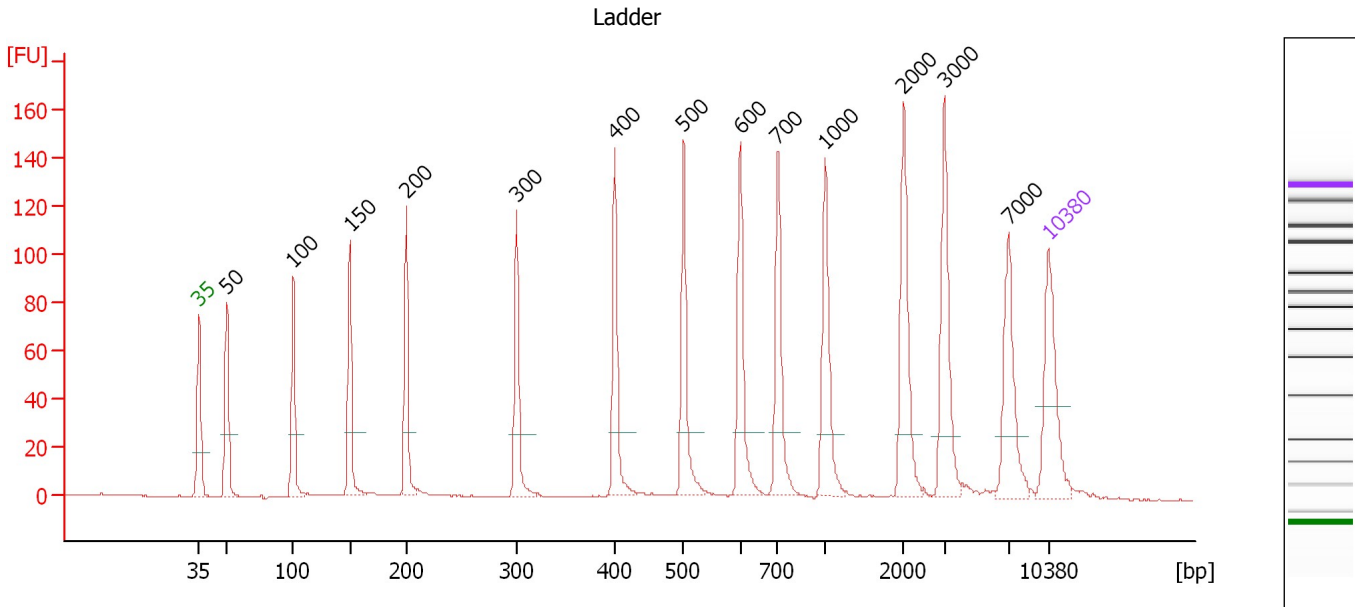
**Ladder**

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\2012-08-23\2012-08-23\_001.xad

Created: 8/23/2012 10:06:36 AM  
 Modified: 8/23/2012 10:47:00 AM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.2

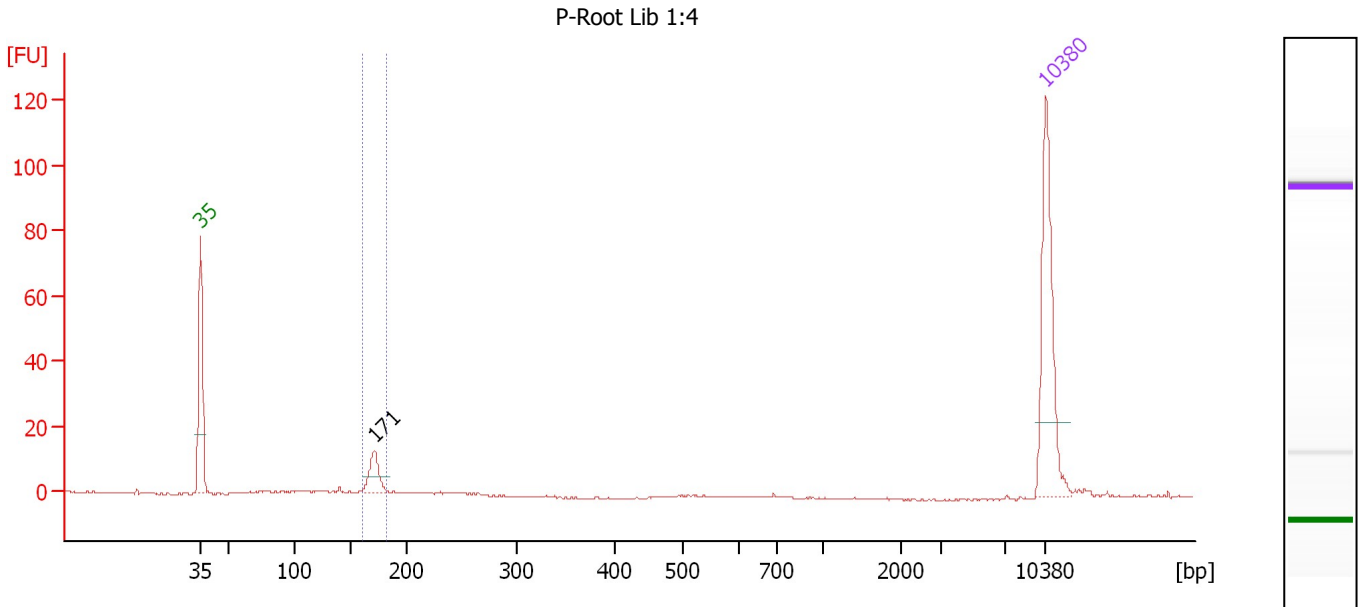
**Peak table for Ladder**

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\2012-08-23\2012-08-23\_001.xad

Created: 8/23/2012 10:06:36 AM  
 Modified: 8/23/2012 10:47:00 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : P-Root Lib 1:4**

Number of peaks found: 1                      Corr. Area 1: 22.4  
 Noise: 0.2

**Peak table for sample 1 : P-Root Lib 1:4**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	171	27.48	243.3	
3	10,380	75.00	10.9	Upper Marker

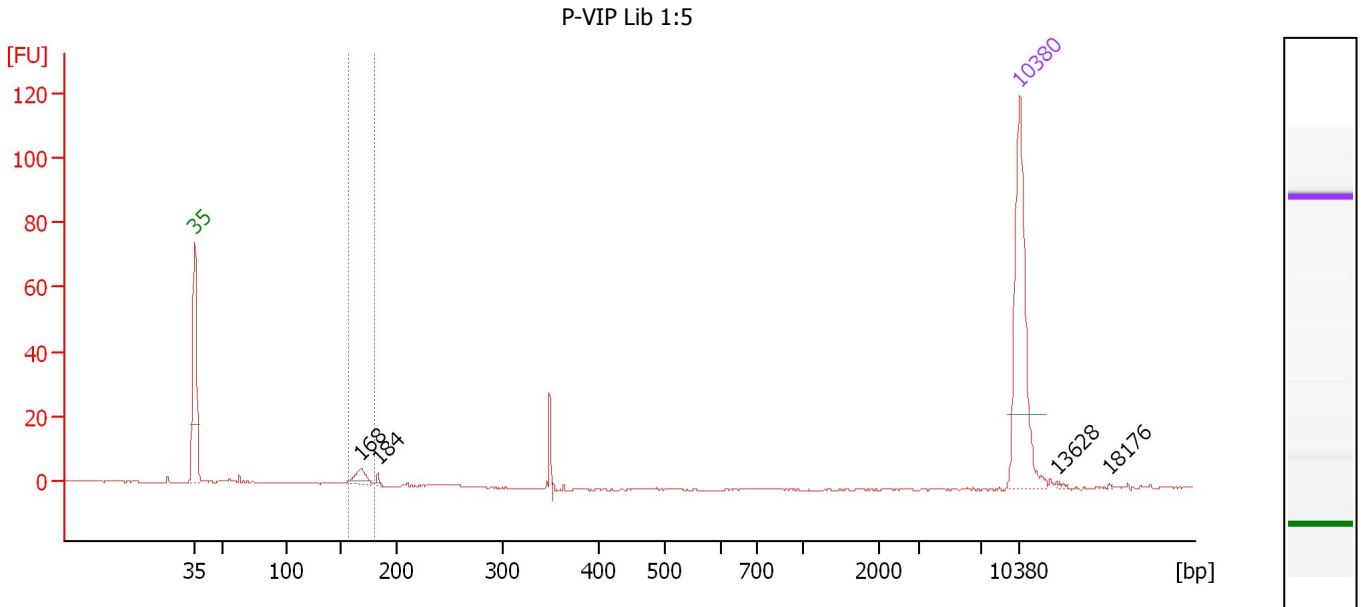
**Region table for sample 1 : P-Root Lib 1:4**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
161	182	171	249.4	28.16	22.4	61	2.4	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-23\2012-08-23\_001.xad

Created: 8/23/2012 10:06:36 AM  
 Modified: 8/23/2012 10:47:00 AM

**Electropherogram Summary Continued ...**



**Setpoint Deviations for sample 2 : P-VIP Lib 1:5**

Height Threshold [FU] : 1

**Overall Results for sample 2 : P-VIP Lib 1:5**

Number of peaks found: 4                      Corr. Area 1: 7.2  
 Noise: 0.2

**Peak table for sample 2 : P-VIP Lib 1:5**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	168	12.65	114.1	
3	184	2.46	20.3	
4	10,380	75.00	10.9	Upper Marker
5	13,628	0.00	0.0	
6	18,176	0.00	0.0	

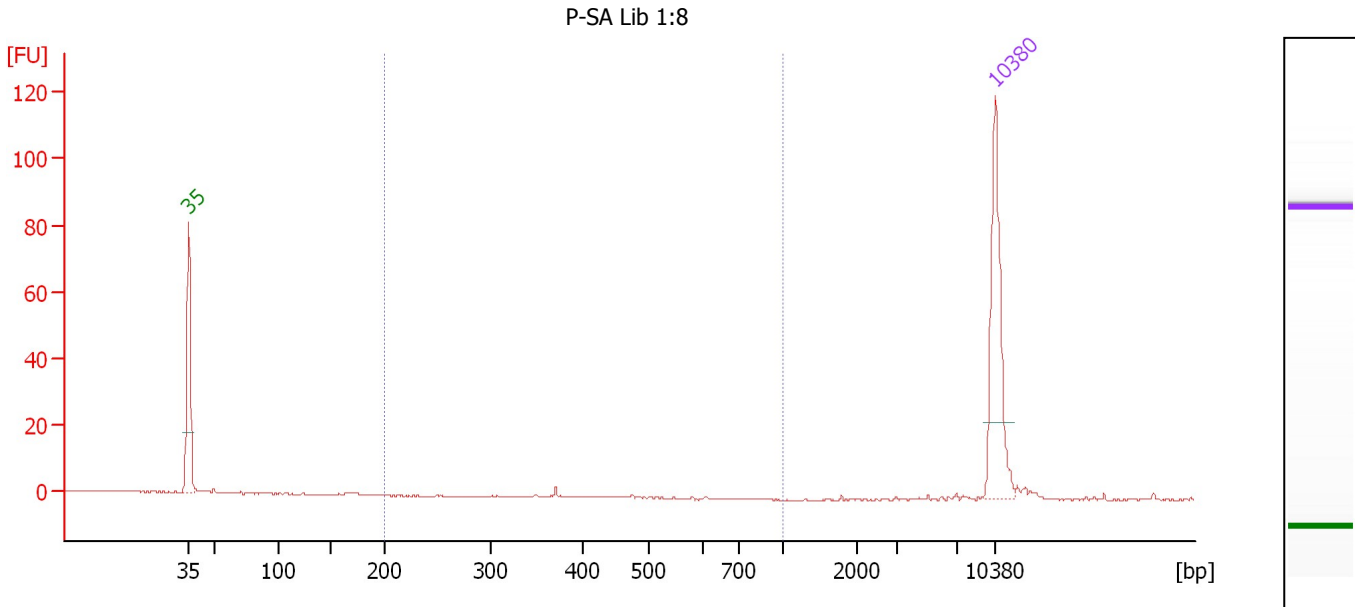
**Region table for sample 2 : P-VIP Lib 1:5**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
156	181	167	80.1	8.85	7.2	39	2.4	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-23\2012-08-23\_001.xad

Created: 8/23/2012 10:06:36 AM  
 Modified: 8/23/2012 10:47:00 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : P-SA Lib 1:8**

Number of peaks found: 0                      Corr. Area 1: 0.6  
 Noise: 0.1

**Peak table for sample 3 : P-SA Lib 1:8**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	10,380	75.00	10.9	Upper Marker

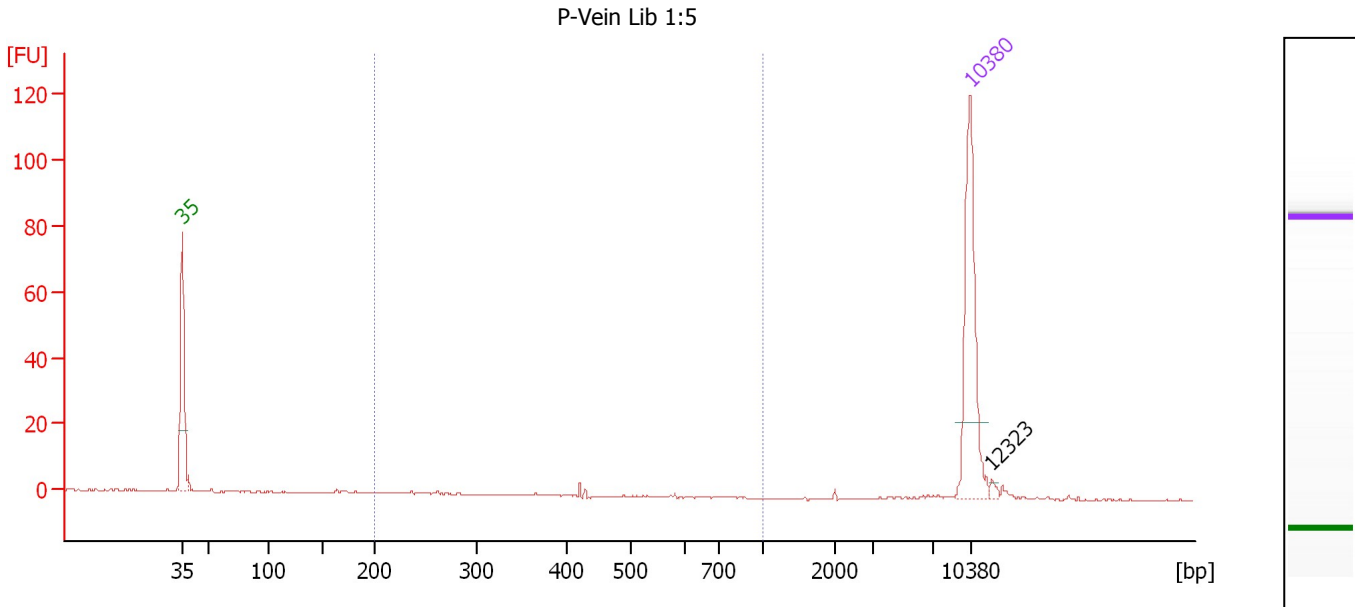
**Region table for sample 3 : P-SA Lib 1:8**

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	372	2.5	0.62	0.6	6	2.9	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-23\2012-08-23\_001.xad

Created: 8/23/2012 10:06:36 AM  
 Modified: 8/23/2012 10:47:00 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : P-Vein Lib 1:5**

Number of peaks found: 1      Corr. Area 1: 1.8  
 Noise: 0.1

**Peak table for sample 4 : P-Vein Lib 1:5**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	10,380	75.00	10.9	Upper Marker
3	12,323	0.00	0.0	

**Region table for sample 4 : P-Vein Lib 1:5**

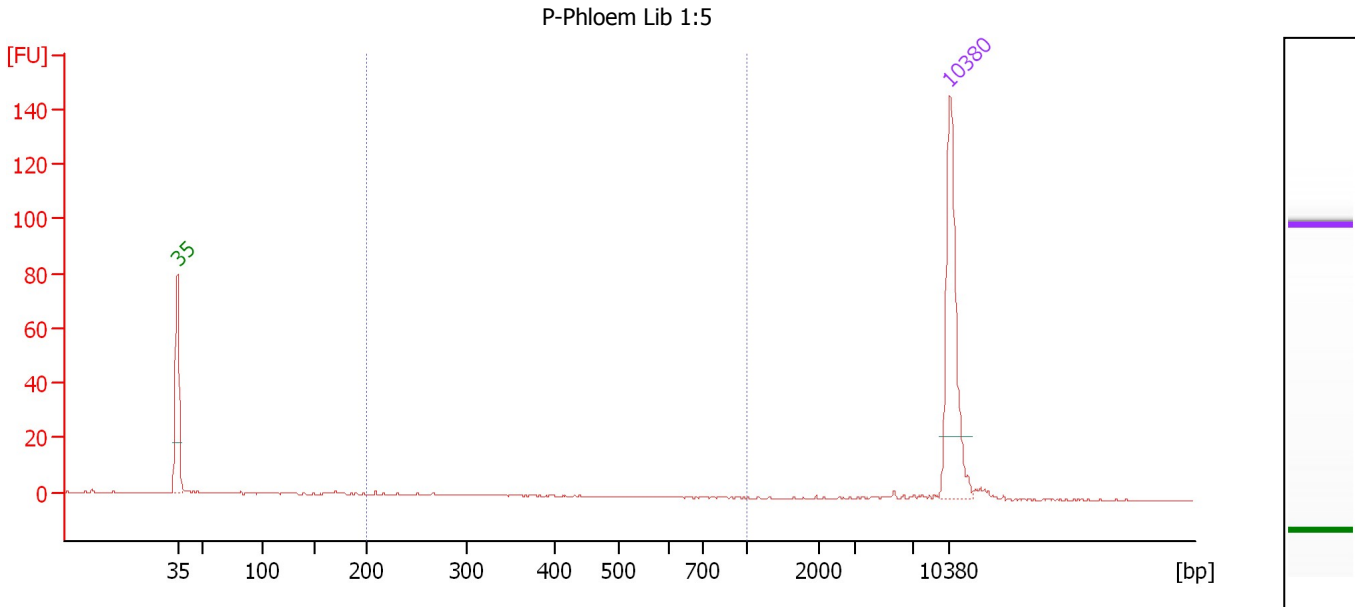
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	394	7.3	1.71	1.8	11	23.3	Blue



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-23\2012-08-23\_001.xad

Created: 8/23/2012 10:06:36 AM  
 Modified: 8/23/2012 10:47:00 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : P-Phloem Lib 1:5**

Number of peaks found: 0                      Corr. Area 1: 5.0  
 Noise: 0.2

**Peak table for sample 5 : P-Phloem Lib 1:5**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	10,380	75.00	10.9	Upper Marker

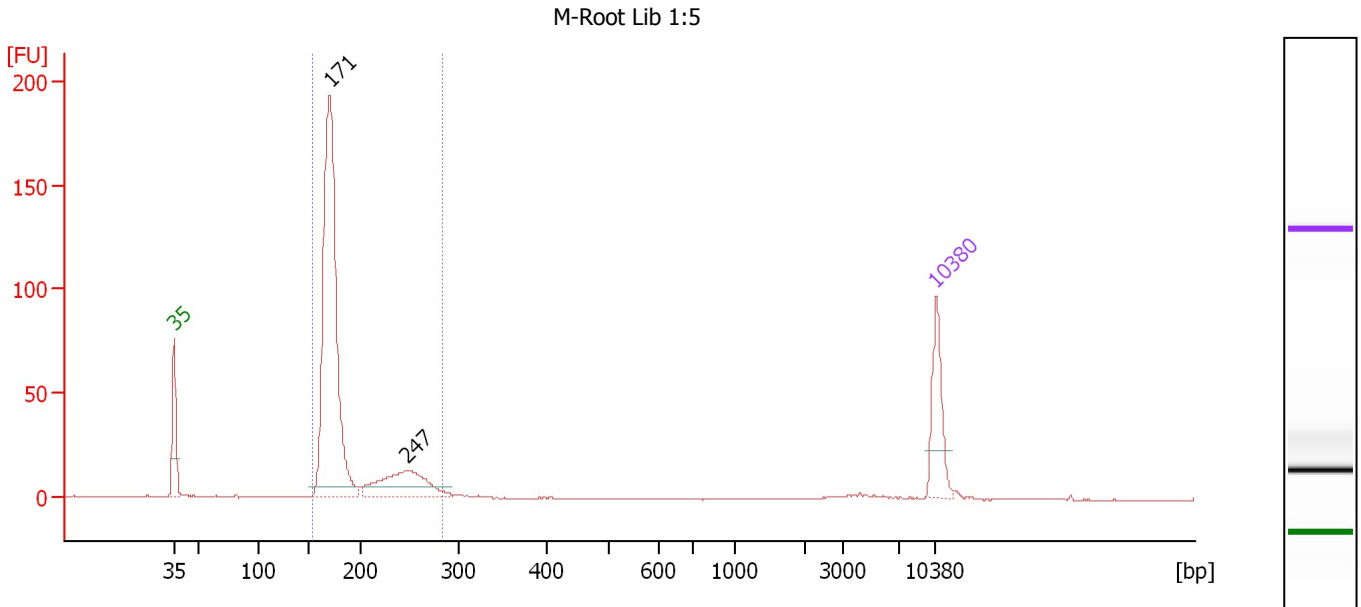
**Region table for sample 5 : P-Phloem Lib 1:5**

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	297	24.8	4.38	5.0	19	38.4	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-23\2012-08-23\_001.xad

Created: 8/23/2012 10:06:36 AM  
 Modified: 8/23/2012 10:47:00 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : M-Root Lib 1:5**

Number of peaks found: 2                      Corr. Area 1: 590.4  
 Noise: 0.1

**Peak table for sample 6 : M-Root Lib 1:5**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	171	768.97	6,828.2	
3	247	151.63	930.2	
4	10,380	75.00	10.9	Upper Marker

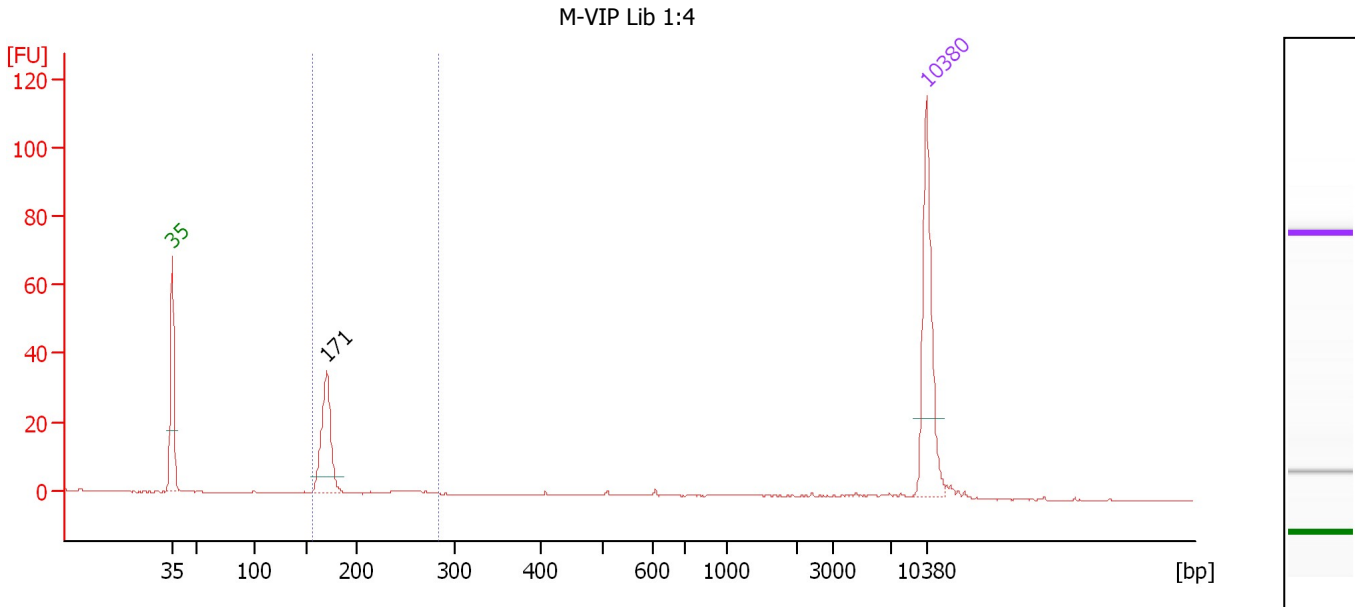
**Region table for sample 6 : M-Root Lib 1:5**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
153	285	185	7,703.5	916.48	590.4	95	16.2	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-23\2012-08-23\_001.xad

Created: 8/23/2012 10:06:36 AM  
 Modified: 8/23/2012 10:47:00 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : M-VIP Lib 1:4**

Number of peaks found: 1      Corr. Area 1: 69.1  
 Noise: 0.1

**Peak table for sample 7 : M-VIP Lib 1:4**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	171	93.82	830.9	
3	10,380	75.00	10.9	Upper Marker

**Region table for sample 7 : M-VIP Lib 1:4**

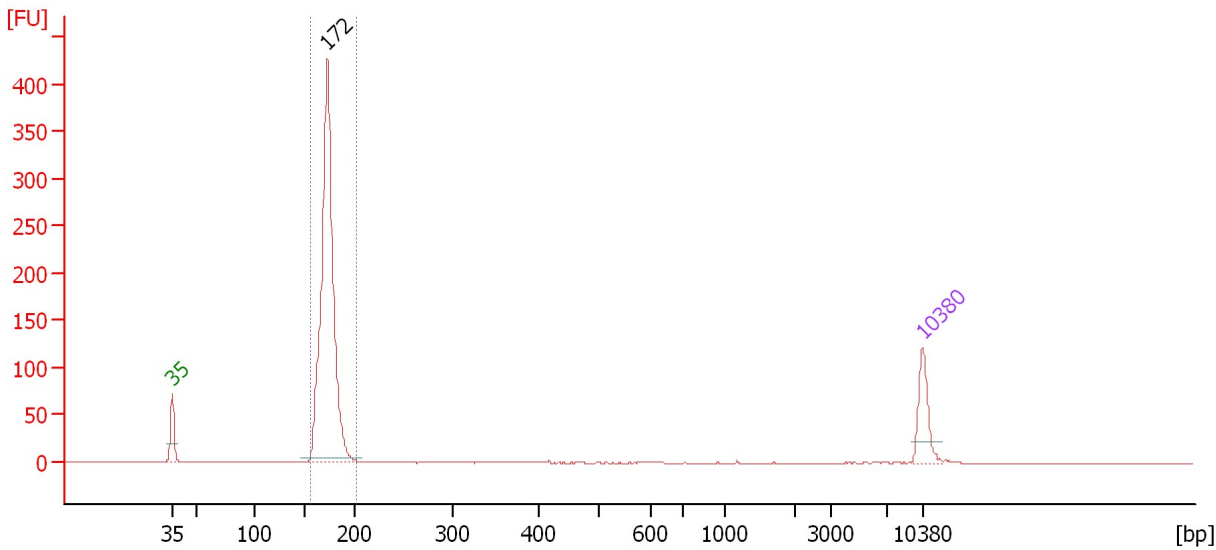
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
157	284	177	864.7	99.49	69.1	81	13.1	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-23\2012-08-23\_001.xad

Created: 8/23/2012 10:06:36 AM  
 Modified: 8/23/2012 10:47:00 AM

**Electropherogram Summary Continued ...**

M-SA Lib 1:7



**Overall Results for sample 8 : M-SA Lib 1:7**

Number of peaks found: 1                      Corr. Area 1: 931.4  
 Noise: 0.1

**Peak table for sample 8 : M-SA Lib 1:7**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	172	1,161.16	10,205.5	
3	10,380	75.00	10.9	Upper Marker

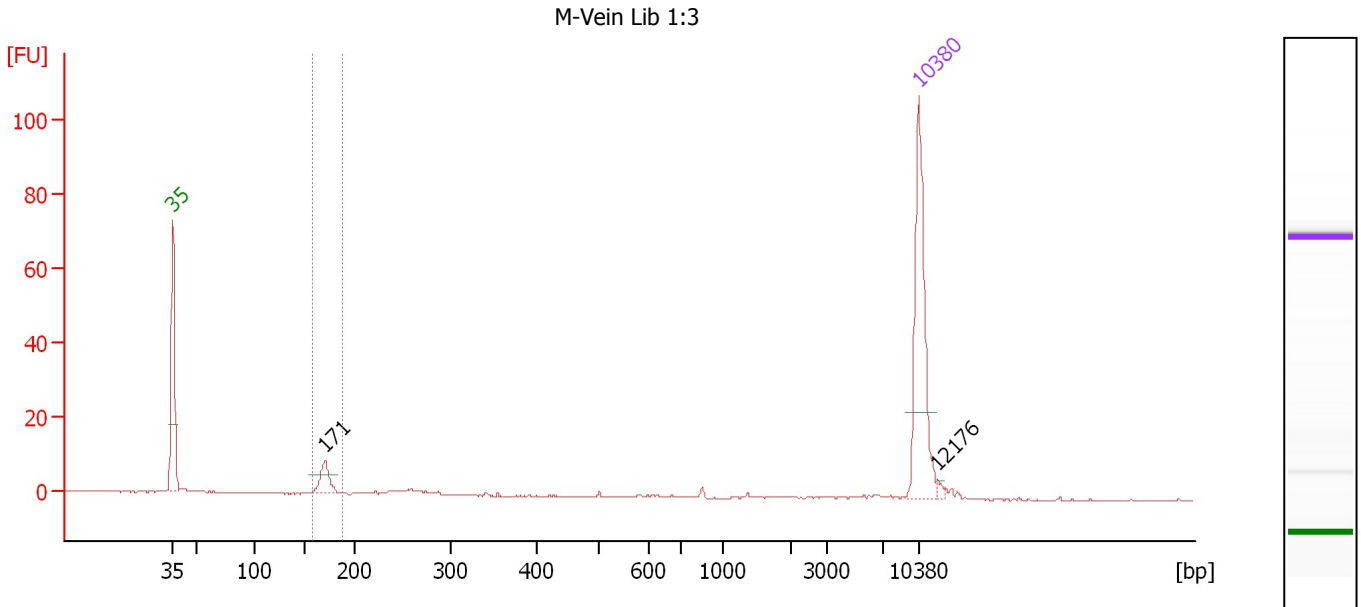
**Region table for sample 8 : M-SA Lib 1:7**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
156	201	173	10,143.8	1,156.93	931.4	98	3.9	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-23\2012-08-23\_001.xad

Created: 8/23/2012 10:06:36 AM  
 Modified: 8/23/2012 10:47:00 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : M-Vein Lib 1:3**

Number of peaks found: 2                      Corr. Area 1: 14.8  
 Noise: 0.2

**Peak table for sample 9 : M-Vein Lib 1:3**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	171	22.31	198.1	
3	10,380	75.00	10.9	Upper Marker
4	12,176	0.00	0.0	

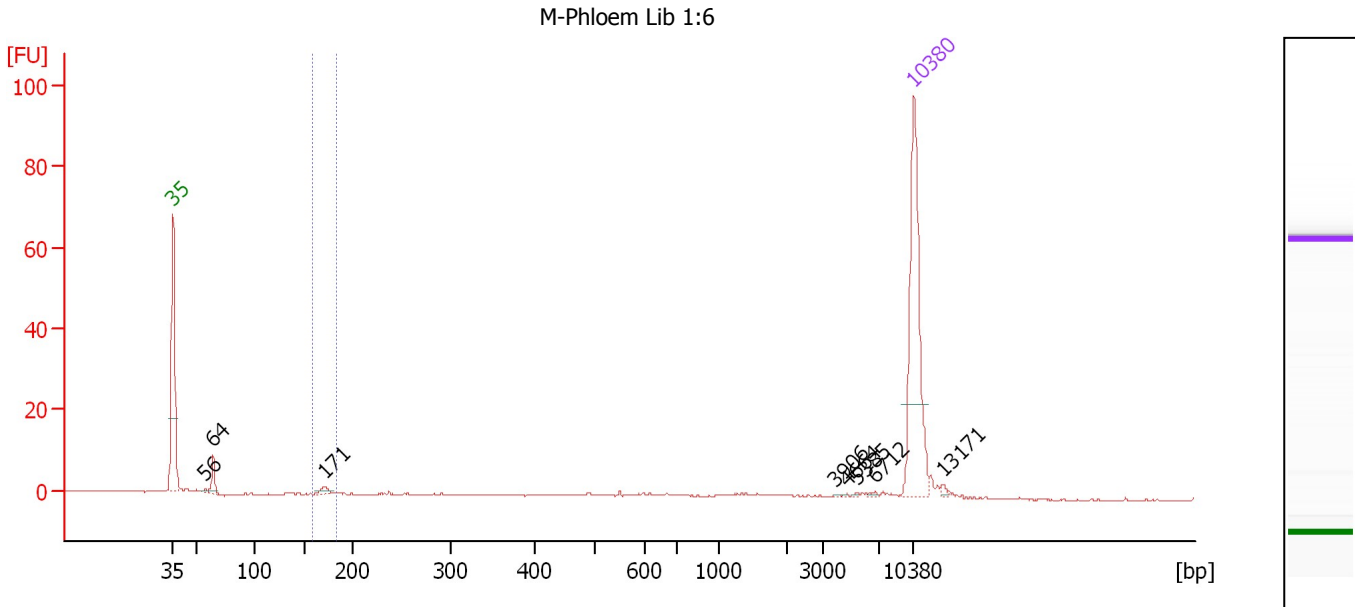
**Region table for sample 9 : M-Vein Lib 1:3**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
158	188	170	186.4	20.96	14.8	48	2.7	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-23\2012-08-23\_001.xad

Created: 8/23/2012 10:06:36 AM  
 Modified: 8/23/2012 10:47:00 AM

**Electropherogram Summary Continued ...**



**Setpoint Deviations for sample 10 : M-Phloem Lib 1:6**

Height Threshold [FU] : 0.5

**Overall Results for sample 10 : M-Phloem Lib 1:6**

Number of peaks found: 8                      Corr. Area 1: 1.8  
 Noise: 0.1

**Peak table for sample 10 : M-Phloem Lib 1:6**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	56	1.40	37.6	
3	64	10.88	258.8	
4	171	4.07	36.2	
5	3,906	0.28	0.1	
6	4,664	0.34	0.1	
7	5,385	0.35	0.1	
8	6,712	0.94	0.2	
9	10,380	75.00	10.9	Upper Marker
10	13,171	0.00	0.0	

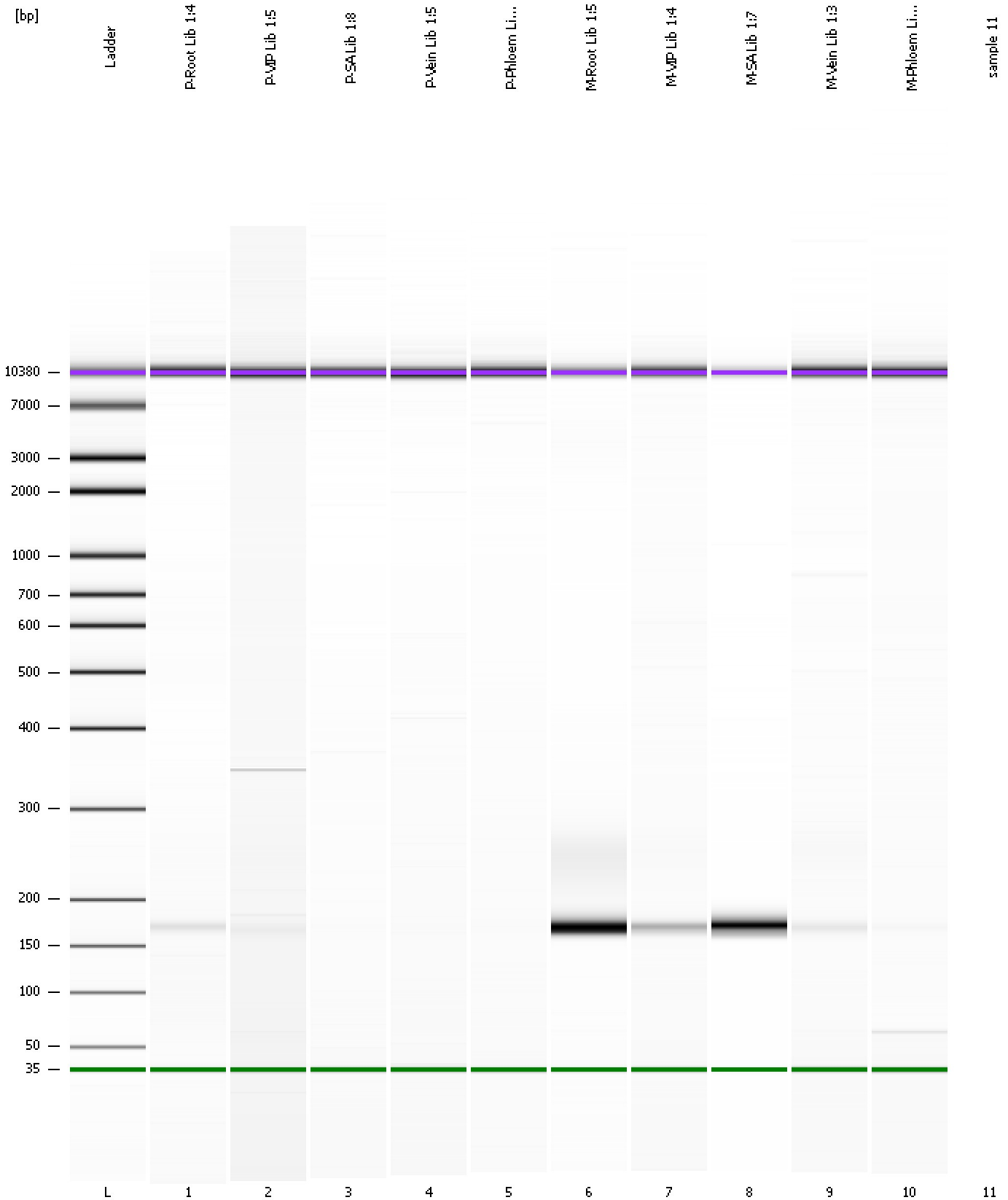
**Region table for sample 10 : M-Phloem Lib 1:6**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
158	182	171	25.1	2.84	1.8	6	1.7	Blue

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-23\2012-08-23\_001.xad

Created: 8/23/2012 10:06:36 AM  
Modified: 8/23/2012 10:47:00 AM

**Gel Image**



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-08-23\2012-08-23\_001.xad

Created: 8/23/2012 10:06:36 AM  
Modified: 8/23/2012 10:47:00 AM

**Invalid Samples**

Sample 11 has not been run, no results available.