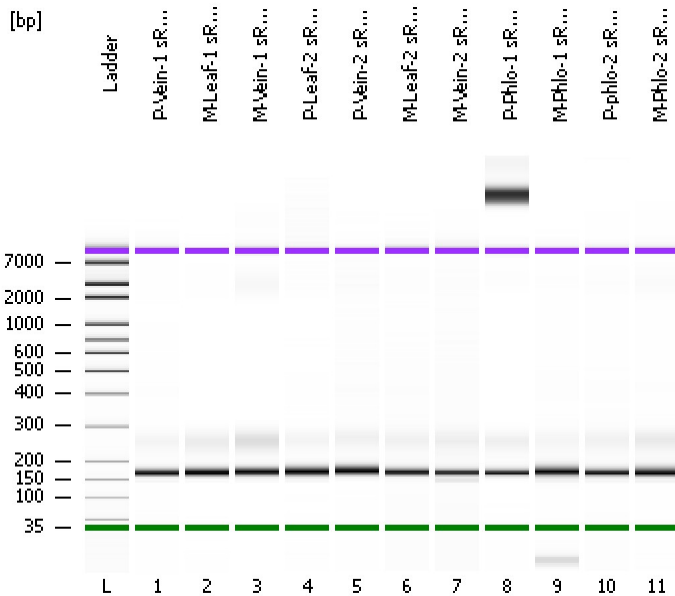


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-04\2013-02-04\_003.xad

Created: 2/4/2013 1:57:31 PM  
Modified: 2/4/2013 2:42:41 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

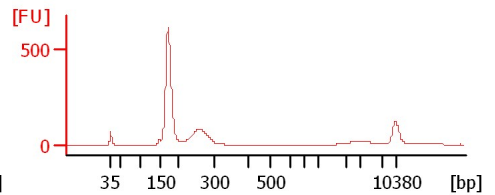
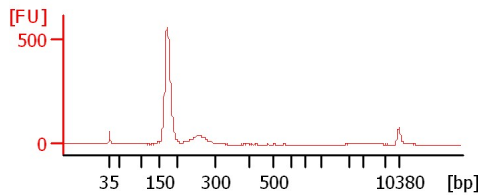
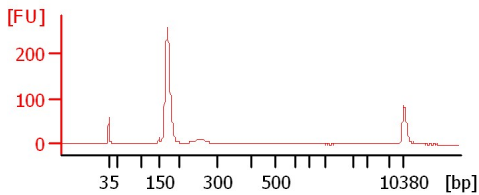
Chip Information:

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

**P-Vein-1 sRNA Lib**

**M-Leaf-1 sRNA Lib**

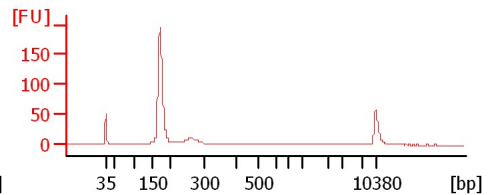
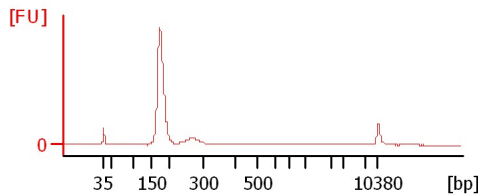
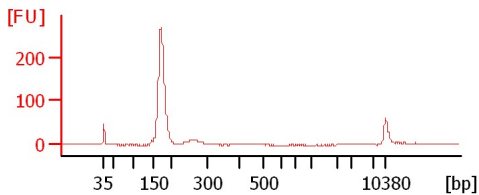
**M-Vein-1 sRNA Lib**



**P-Leaf-2 sRNA Lib 1:2**

**P-Vein-2 sRNA Lib 1:2**

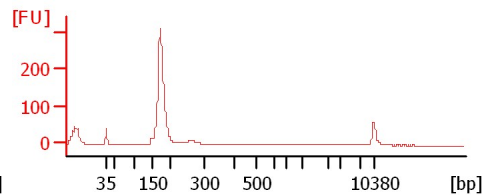
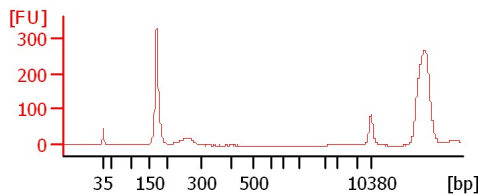
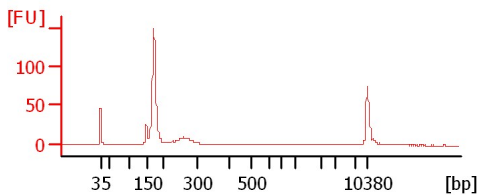
**M-Leaf-2 sRNA Lib**



**M-Vein-2 sRNA Lib**

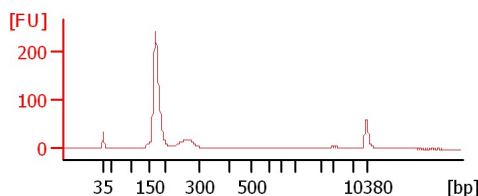
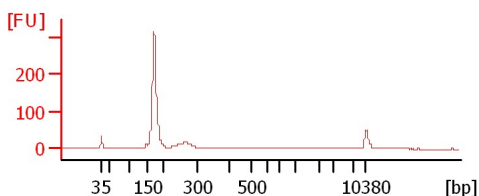
**P-Phlo-1 sRNA Lib**

**M-Phlo-1 sRNA Lib 1:2**



**P-phlo-2 sRNA Lib**

**M-Phlo-2 sRNA Lib 1:2**



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-04\2013-02-04\_003.xad

Created: 2/4/2013 1:57:31 PM  
Modified: 2/4/2013 2:42:41 PM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
P-Vein-1 sRNA Lib		<input type="checkbox"/>	✓			
M-Leaf-1 sRNA Lib		<input type="checkbox"/>	✓			
M-Vein-1 sRNA Lib		<input type="checkbox"/>	✓			
P-Leaf-2 sRNA Lib 1:2		<input type="checkbox"/>	✓			
P-Vein-2 sRNA Lib 1:2		<input type="checkbox"/>	✓			
M-Leaf-2 sRNA Lib		<input type="checkbox"/>	✓			
M-Vein-2 sRNA Lib		<input type="checkbox"/>	✓			
P-Phlo-1 sRNA Lib		<input type="checkbox"/>	✓			
M-Phlo-1 sRNA Lib 1:2		<input type="checkbox"/>	✓			
P-phlo-2 sRNA Lib		<input type="checkbox"/>	✓			
M-Phlo-2 sRNA Lib 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\2013-02-04\2013-02-04\_003.xad

Created: 2/4/2013 1:57:31 PM  
Modified: 2/4/2013 2:42:41 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/ $\mu$ l] : 1950  
Uses Standard Area for Ladder Fragments  
Lower Marker Concentration [pg/ $\mu$ l] : 125  
Upper Marker Concentration [pg/ $\mu$ l] : 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

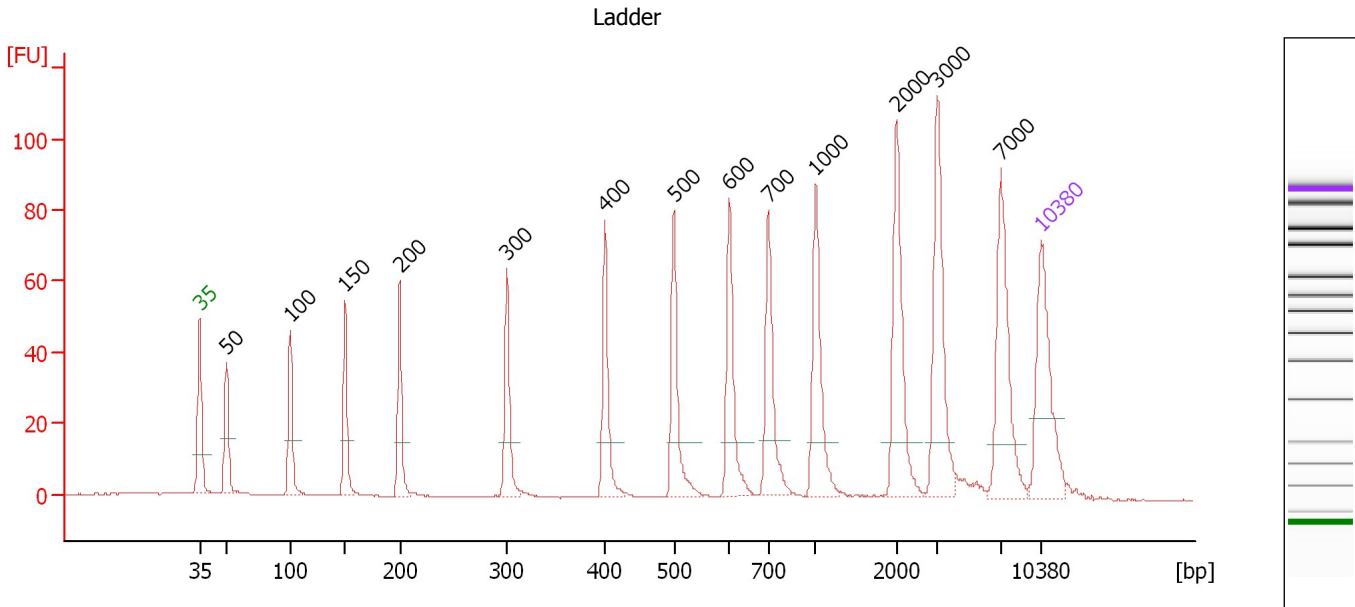
### Ladder

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\2013-02-04\2013-02-04\_003.xad

Created: 2/4/2013 1:57:31 PM  
 Modified: 2/4/2013 2:42:41 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.1

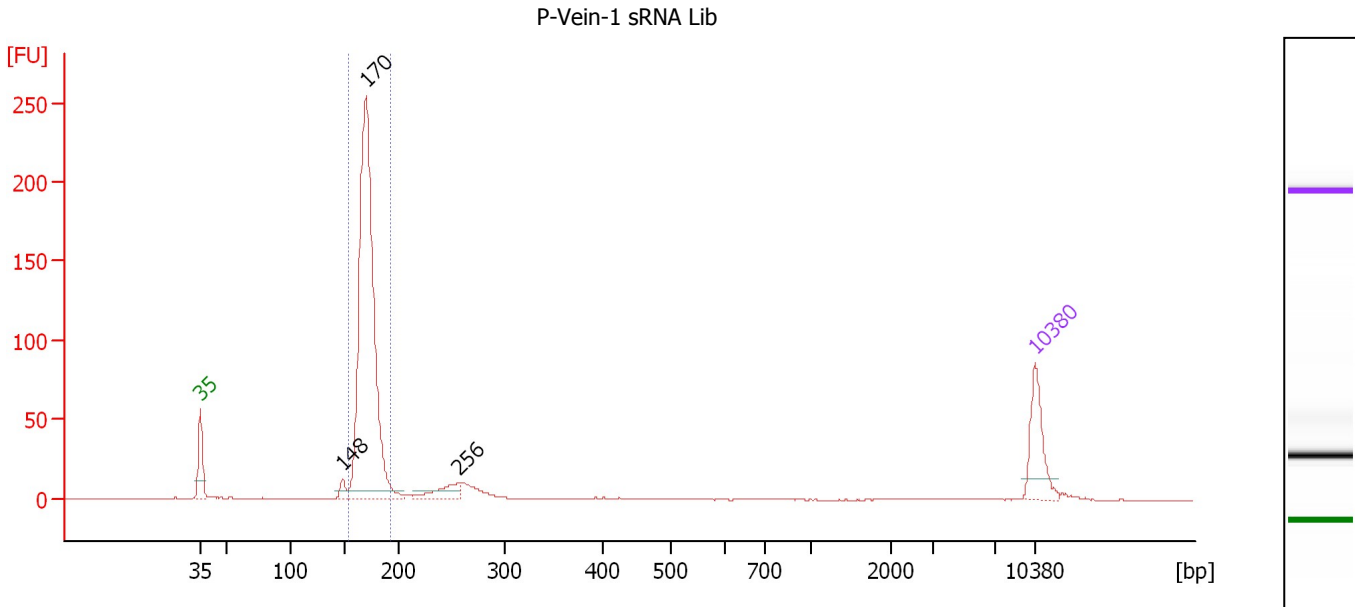
**Peak table for Ladder**

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\2013-02-04\2013-02-04\_003.xad

Created: 2/4/2013 1:57:31 PM  
 Modified: 2/4/2013 2:42:41 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 3                      Corr. Area 1: 650.0  
 Noise: 0.1

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

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	148	22.23	227.4	
3	170	1,017.78	9,082.0	
4	256	50.34	298.4	
5	10,380	75.00	10.9	Upper Marker

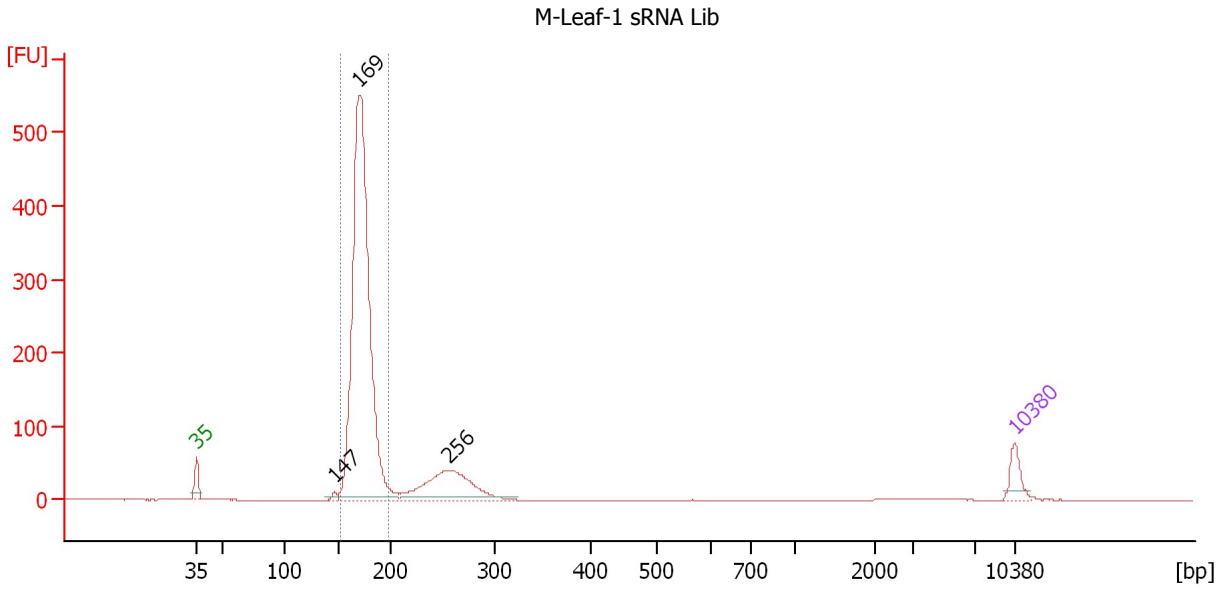
**Region table for sample 1 : P-Vein-1 sRNA Lib**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
154	192	171	8,864.0	999.00	650.0	82	3.8	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-04\2013-02-04\_003.xad

Created: 2/4/2013 1:57:31 PM  
 Modified: 2/4/2013 2:42:41 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : M-Leaf-1 sRNA Lib**

Number of peaks found: 3                      Corr. Area 1: 1,654.0  
 Noise: 0.1

**Peak table for sample 2 : M-Leaf-1 sRNA Lib**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	147	21.14	218.2	
3	169	3,218.85	28,794.6	
4	256	531.83	3,149.3	
5	10,380	75.00	10.9	Upper Marker

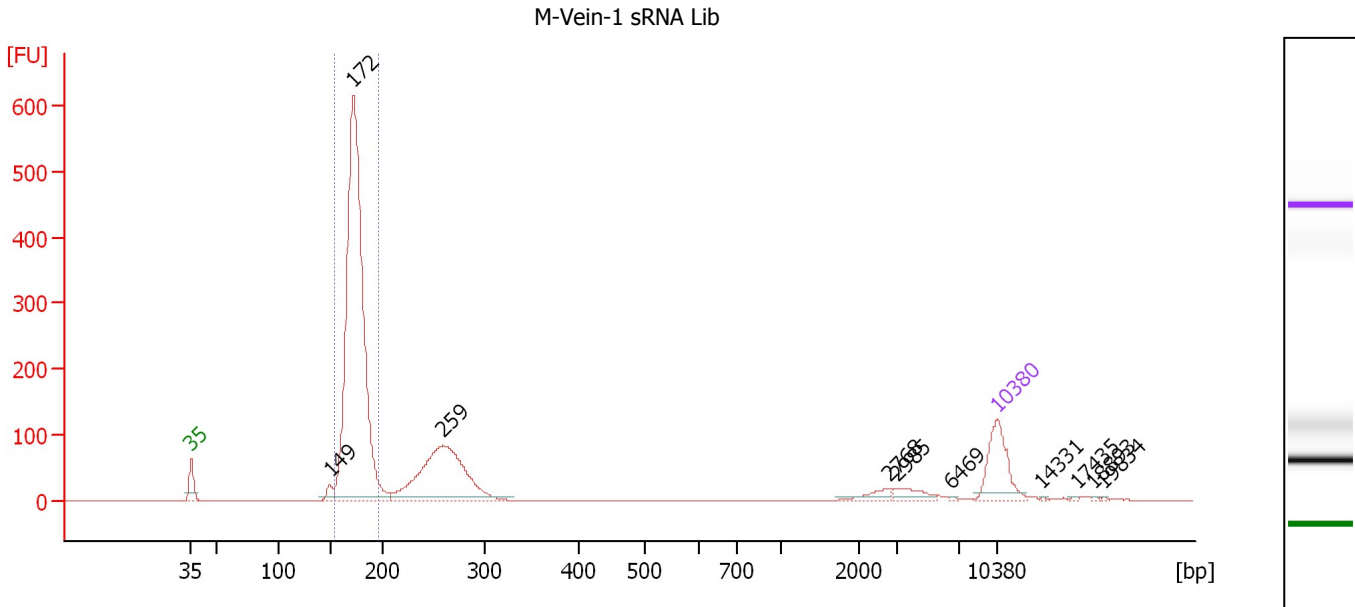
**Region table for sample 2 : M-Leaf-1 sRNA Lib**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
152	197	172	27,654.6	3,142.93	1,654.0	81	4.4	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-04\2013-02-04\_003.xad

Created: 2/4/2013 1:57:31 PM  
 Modified: 2/4/2013 2:42:41 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 10      Corr. Area 1: 1,806.1  
 Noise: 0.1

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

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	149	20.34	206.6	
3	172	1,199.30	10,582.8	
4	259	359.69	2,108.1	
5	2,768	16.34	8.9	
6	2,985	21.09	10.7	
7	6,469	1.58	0.4	
8	10,380	75.00	10.9	Upper Marker
9	14,331	0.00	0.0	
10	17,435	0.00	0.0	
11	18,893	0.00	0.0	
12	19,834	0.00	0.0	

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

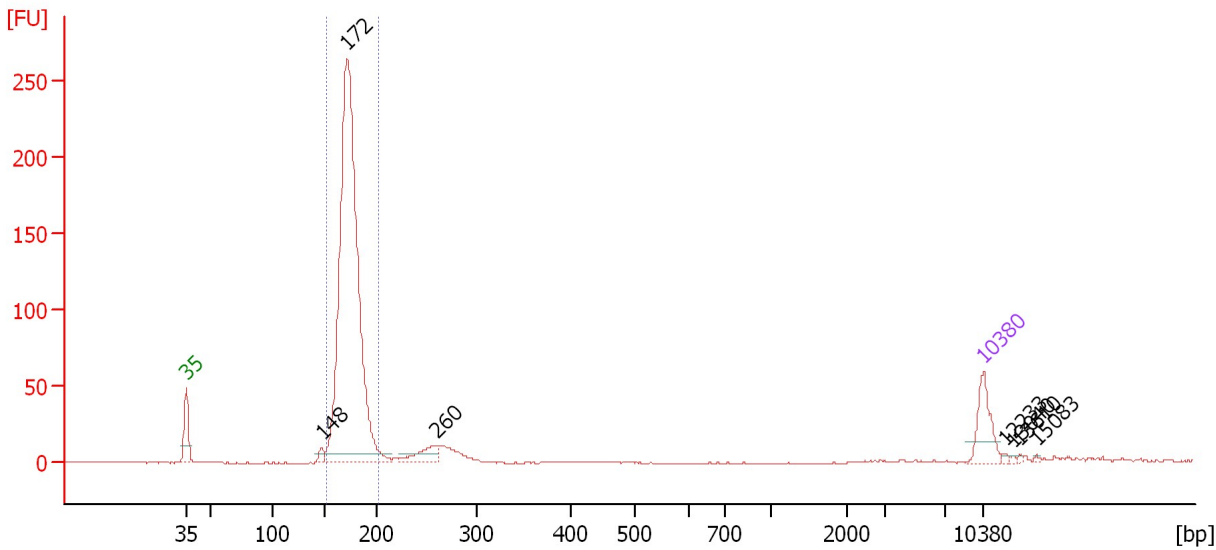
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
153	197	174	10,218.1	1,171.34	1,806.1	69	4.4	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-04\2013-02-04\_003.xad

Created: 2/4/2013 1:57:31 PM  
 Modified: 2/4/2013 2:42:41 PM

**Electropherogram Summary Continued ...**

P-Leaf-2 sRNA Lib 1:2



**Overall Results for sample 4 : P-Leaf-2 sRNA Lib 1:2**

Number of peaks found: 7                      Corr. Area 1: 865.8  
 Noise: 0.3

**Peak table for sample 4 : P-Leaf-2 sRNA Lib 1:2**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	148	20.71	212.0	
3	172	1,787.30	15,723.2	
4	260	64.08	373.6	
5	10,380	75.00	10.9	Upper Marker
6	12,233	0.00	0.0	
7	13,040	0.00	0.0	
8	13,610	0.00	0.0	
9	15,083	0.00	0.0	

**Region table for sample 4 : P-Leaf-2 sRNA 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
152	204	175	15,174.8	1,750.46	865.8	89	5.0	Blue

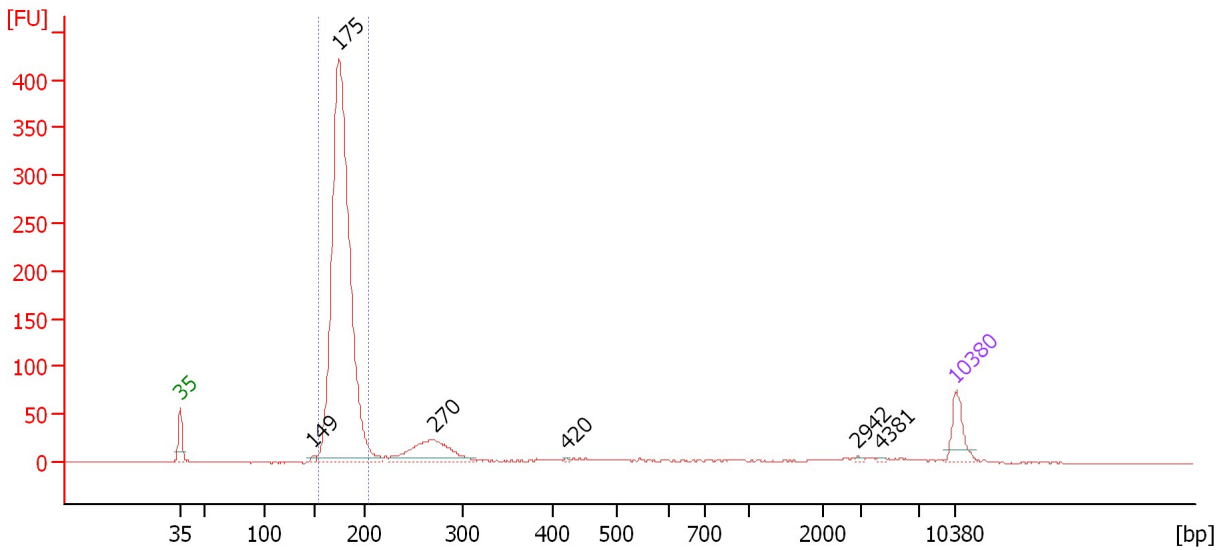


Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-04\2013-02-04\_003.xad

Created: 2/4/2013 1:57:31 PM  
 Modified: 2/4/2013 2:42:41 PM

**Electropherogram Summary Continued ...**

P-Vein-2 sRNA Lib 1:2



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

Number of peaks found: 6                      Corr. Area 1: 1,405.8  
 Noise: 0.3

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

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	149	14.44	146.8	
3	175	2,515.36	21,826.3	
4	270	257.44	1,443.2	
5	420	4.22	15.2	
6	2,942	4.45	2.3	
7	4,381	4.06	1.4	
8	10,380	75.00	10.9	Upper Marker

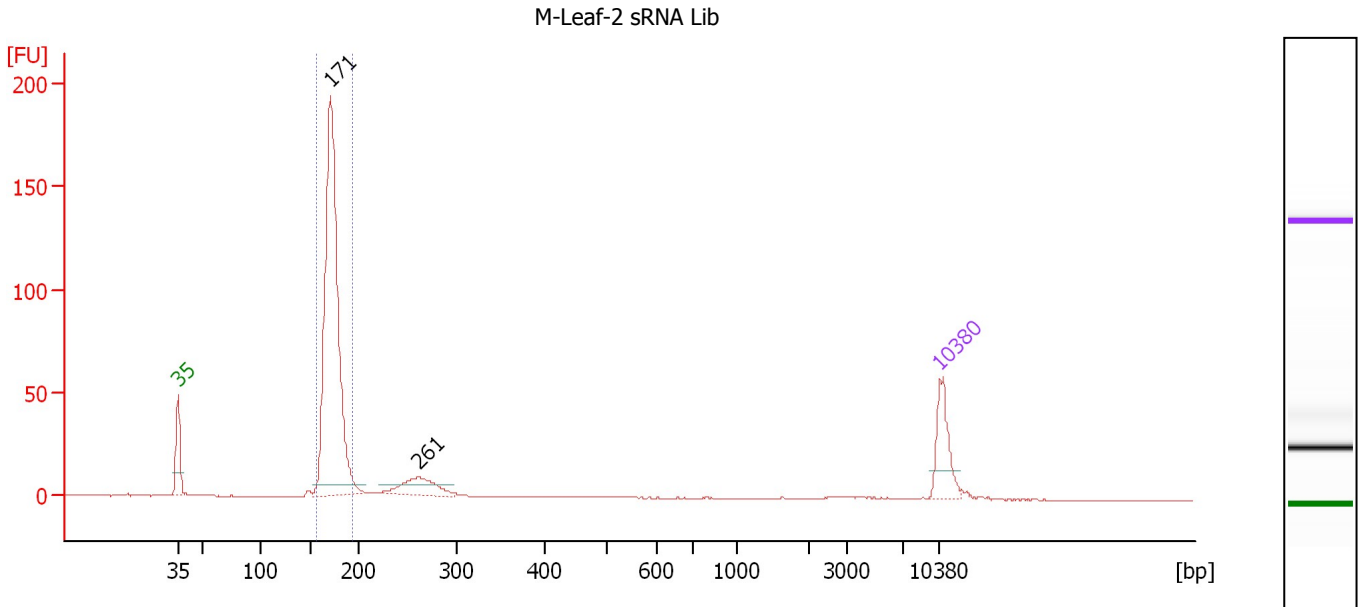
**Region table for sample 5 : P-Vein-2 sRNA Lib 1:2**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
154	205	177	21,001.1	2,458.46	1,405.8	79	4.9	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-04\2013-02-04\_003.xad

Created: 2/4/2013 1:57:31 PM  
 Modified: 2/4/2013 2:42:41 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : M-Leaf-2 sRNA Lib**

Number of peaks found: 2                      Corr. Area 1: 474.7  
 Noise: 0.2

**Peak table for sample 6 : M-Leaf-2 sRNA Lib**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	171	999.38	8,860.6	
3	261	88.41	513.1	
4	10,380	75.00	10.9	Upper Marker

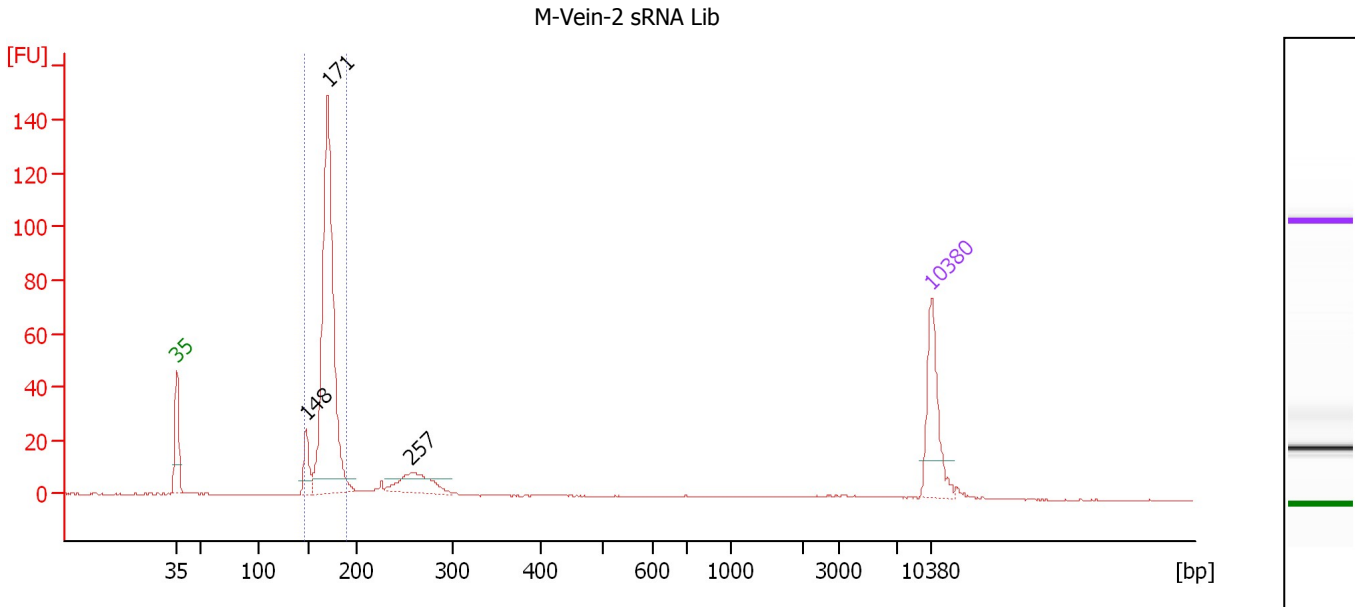
**Region table for sample 6 : M-Leaf-2 sRNA Lib**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
156	193	173	8,693.6	990.89	474.7	81	3.9	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-04\2013-02-04\_003.xad

Created: 2/4/2013 1:57:31 PM  
 Modified: 2/4/2013 2:42:41 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : M-Vein-2 sRNA Lib**

Number of peaks found: 3                      Corr. Area 1: 327.6  
 Noise: 0.2

**Peak table for sample 7 : M-Vein-2 sRNA Lib**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	148	45.81	468.1	
3	171	547.30	4,858.6	
4	257	67.80	399.3	
5	10,380	75.00	10.9	Upper Marker

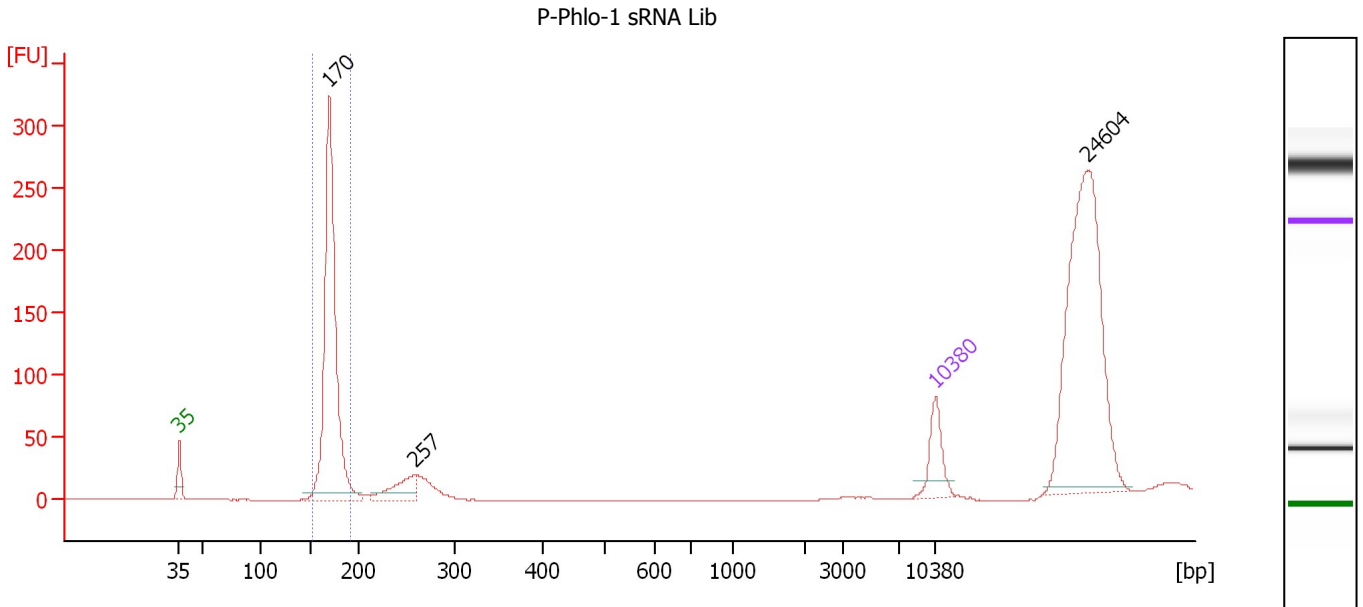
**Region table for sample 7 : M-Vein-2 sRNA Lib**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
148	190	170	5,241.4	587.49	327.6	74	4.5	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-04\2013-02-04\_003.xad

Created: 2/4/2013 1:57:31 PM  
 Modified: 2/4/2013 2:42:41 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : P-Phlo-1 sRNA Lib**

Number of peaks found: 3                      Corr. Area 1: 633.5  
 Noise: 0.1

**Peak table for sample 8 : P-Phlo-1 sRNA Lib**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	170	983.35	8,774.4	
3	257	97.25	572.7	
4	10,380	75.00	10.9	Upper Marker
5	24,604	0.00	0.0	

**Region table for sample 8 : P-Phlo-1 sRNA Lib**

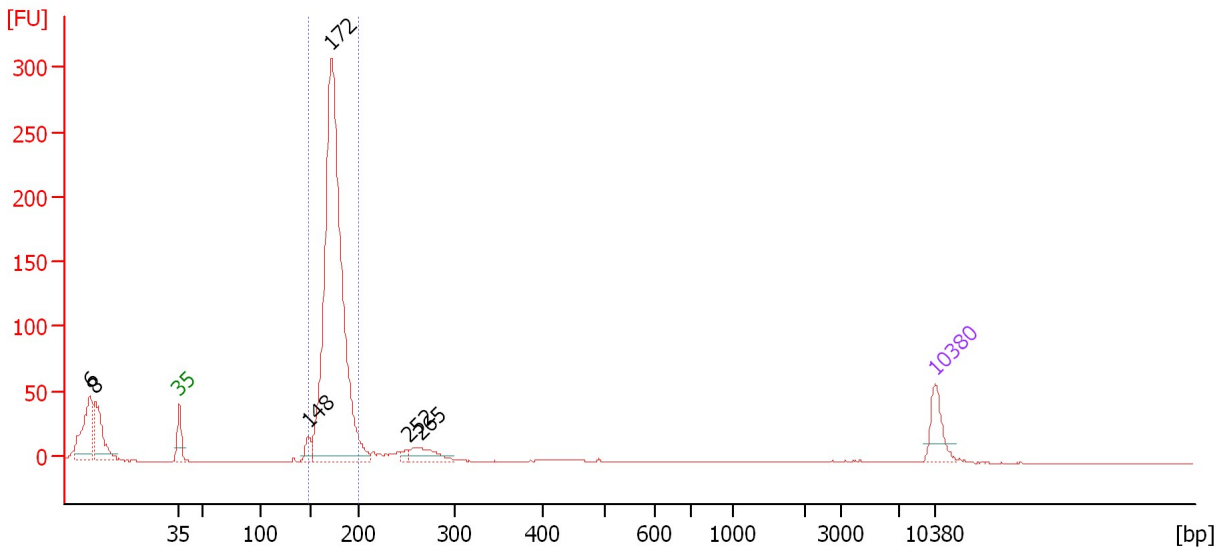
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
152	192	171	8,239.1	930.90	633.5	44	3.5	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-04\2013-02-04\_003.xad

Created: 2/4/2013 1:57:31 PM  
 Modified: 2/4/2013 2:42:41 PM

**Electropherogram Summary Continued ...**

M-Phlo-1 sRNA Lib 1:2



**Overall Results for sample 9 : M-Phlo-1 sRNA Lib 1:2**

Number of peaks found: 6                      Corr. Area 1: 932.9  
 Noise: 0.2

**Peak table for sample 9 : M-Phlo-1 sRNA Lib 1:2**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	6	0.00	0.0	
2	8	0.00	0.0	
3	35	125.00	5,411.3	Lower Marker
4	148	48.85	499.4	
5	172	2,126.65	18,711.7	
6	252	20.90	125.9	
7	265	86.03	492.3	
8	10,380	75.00	10.9	Upper Marker

**Region table for sample 9 : M-Phlo-1 sRNA Lib 1:2**

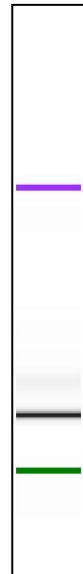
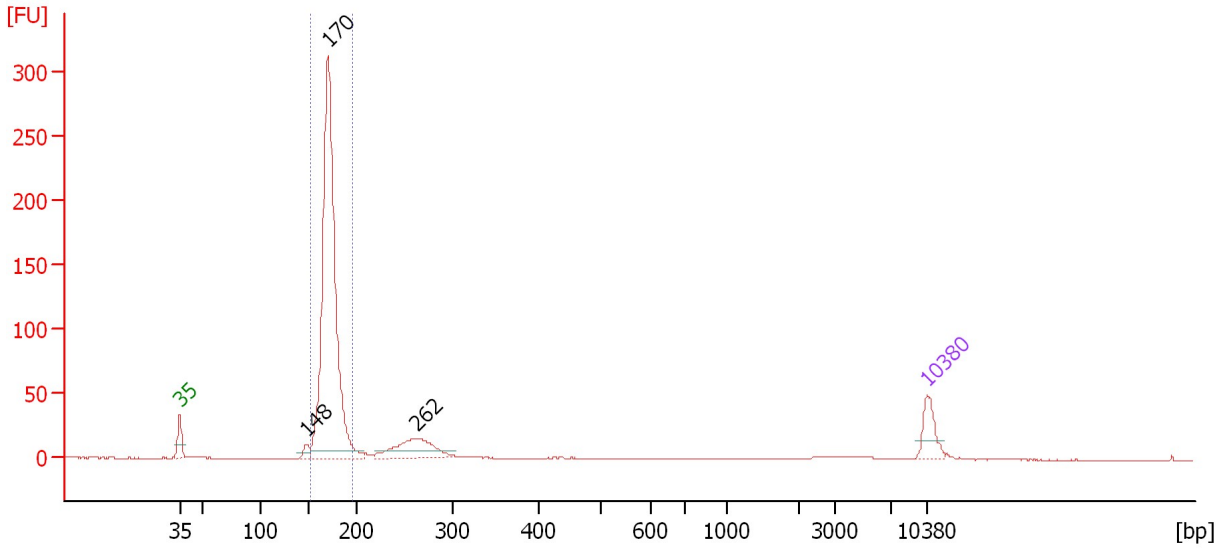
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
150	200	174	17,099.5	1,969.07	932.9	80	5.0	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-04\2013-02-04\_003.xad

Created: 2/4/2013 1:57:31 PM  
 Modified: 2/4/2013 2:42:41 PM

**Electropherogram Summary Continued ...**

P-phlo-2 sRNA Lib



**Overall Results for sample 10 : P-phlo-2 sRNA Lib**

Number of peaks found: 3                      Corr. Area 1: 733.6  
 Noise: 0.1

**Peak table for sample 10 : P-phlo-2 sRNA Lib**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	148	30.48	313.1	
3	170	1,879.53	16,794.0	
4	262	225.48	1,306.4	
5	10,380	75.00	10.9	Upper Marker

**Region table for sample 10 : P-phlo-2 sRNA Lib**

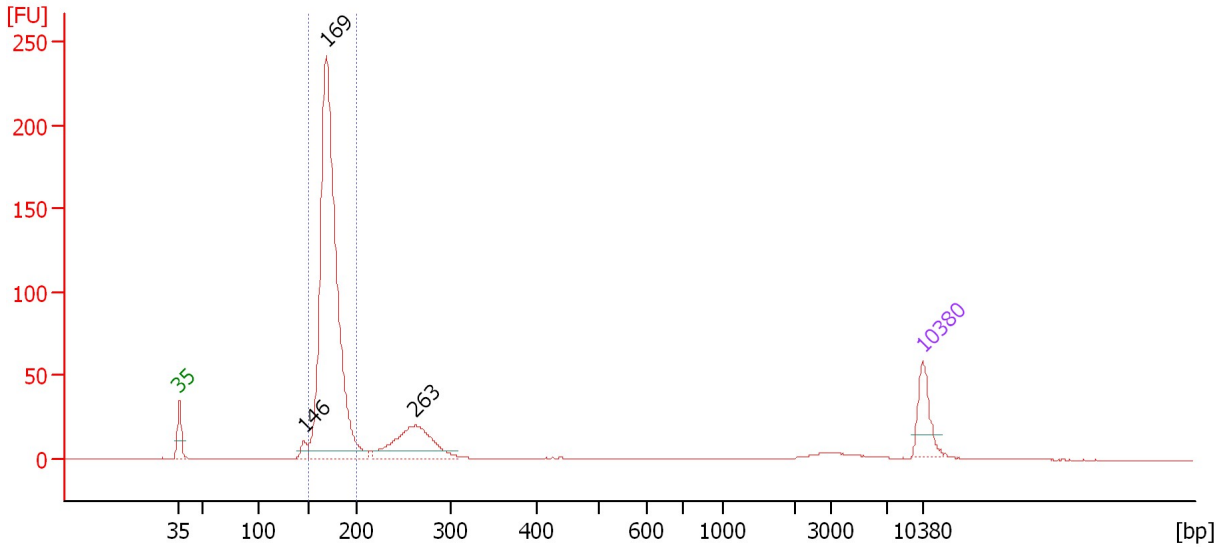
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
153	195	171	16,263.2	1,840.39	733.6	79	4.2	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-04\2013-02-04\_003.xad

Created: 2/4/2013 1:57:31 PM  
 Modified: 2/4/2013 2:42:41 PM

**Electropherogram Summary Continued ...**

M-Phlo-2 sRNA Lib 1:2



**Overall Results for sample 11 : M-Phlo-2 sRNA Lib 1:2**

Number of peaks found: 3                      Corr. Area 1: 726.3  
 Noise: 0.1

**Peak table for sample 11 : M-Phlo-2 sRNA Lib 1:2**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	146	32.34	335.9	
3	169	1,644.36	14,731.7	
4	263	250.65	1,446.3	
5	10,380	75.00	10.9	Upper Marker

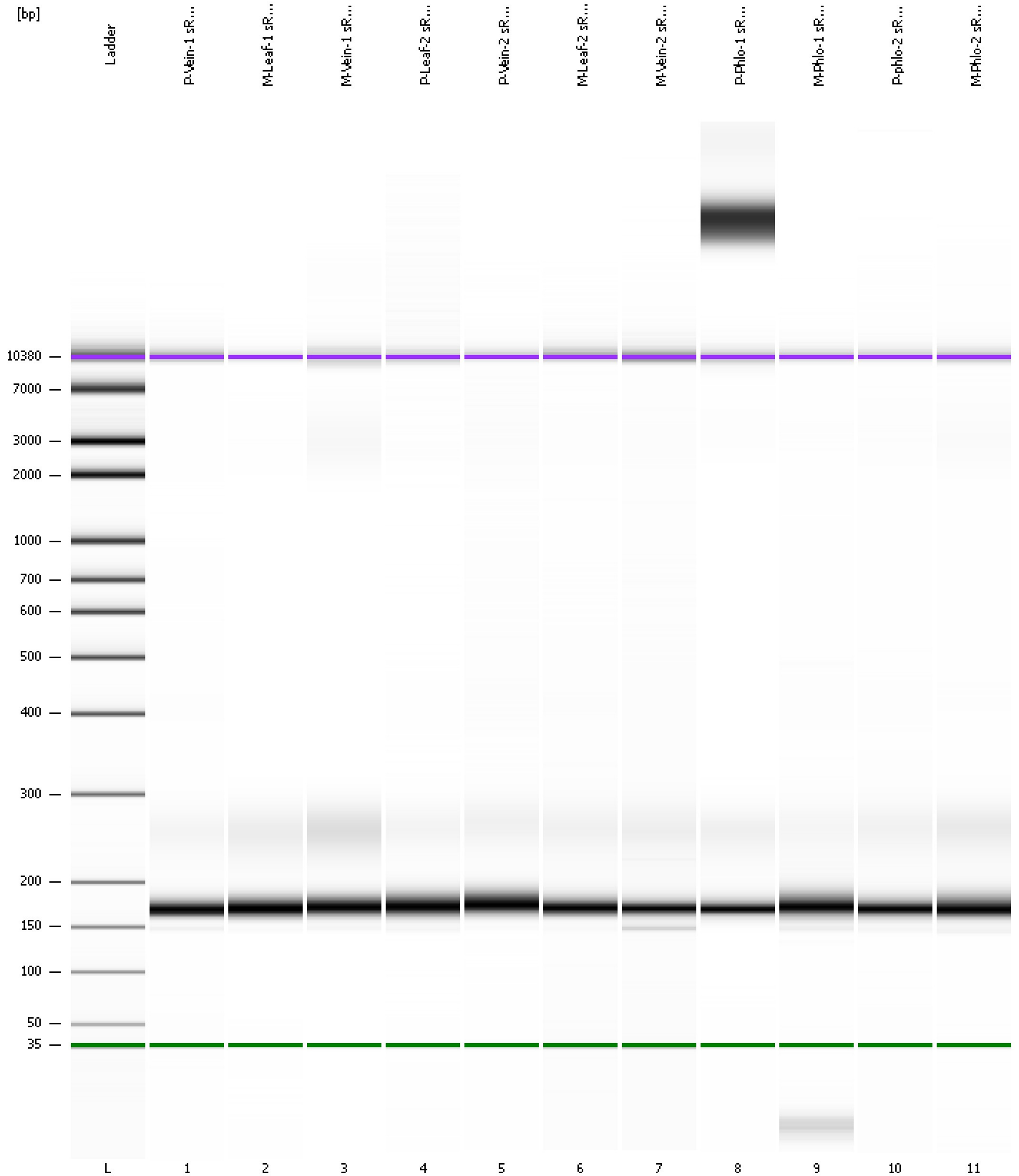
**Region table for sample 11 : M-Phlo-2 sRNA Lib 1:2**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
152	201	173	14,009.5	1,598.41	726.3	77	5.1	Blue

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-04\2013-02-04\_003.xad

Created: 2/4/2013 1:57:31 PM  
Modified: 2/4/2013 2:42:41 PM

**Gel Image**





Assay Class: High Sensitivity DNA Assay Created: 2/4/2013 1:57:31 PM  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-04\2013-02-04\_003.xad Modified: 2/4/2013 2:42:41 PM

**Run Logbook**

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 12)		Instrument	Run		2/4/2013 2:38:48 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-02-04\2013-02-04_003.xad)		Instrument	Run		2/4/2013 1:57:37 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		2/4/2013 1:57:37 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		2/4/2013 1:57:37 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		2/4/2013 1:57:37 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		2/4/2013 1:57:37 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		2/4/2013 1:57:37 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		2/4/2013 1:57:37 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1