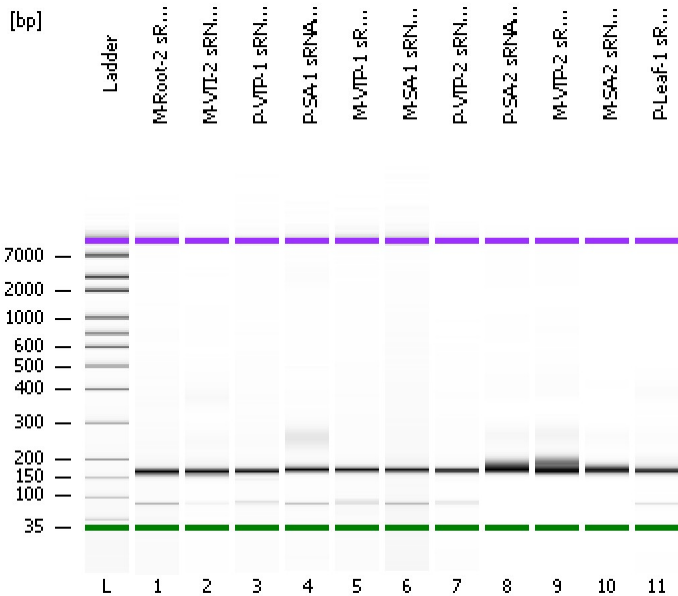


Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-04\2013-02-04_002.xad

Created: 2/4/2013 1:03:36 PM
 Modified: 2/4/2013 1:45:38 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

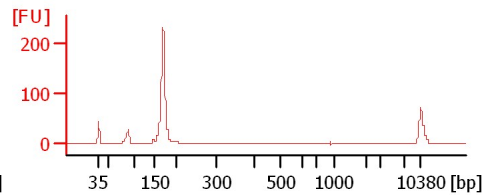
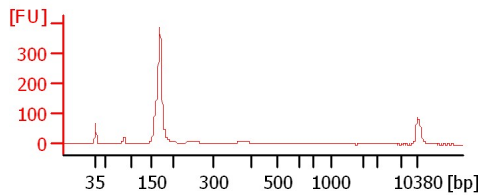
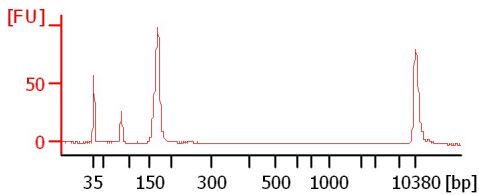
Chip Information:

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

M-Root-2 sRNA Lib 1:2

M-VTI-2 sRNA Lib 1:2

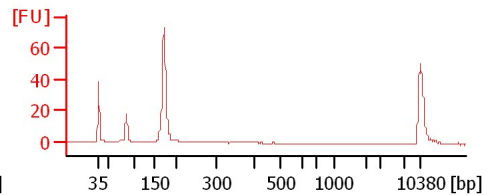
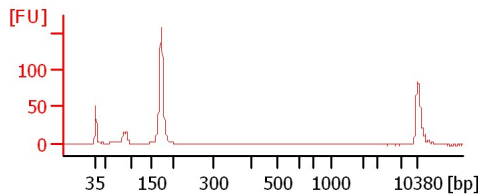
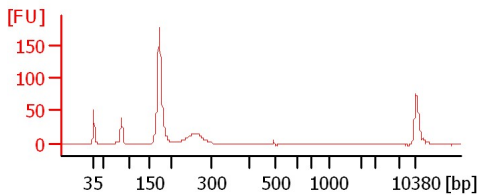
P-VTP-1 sRNA Lib



P-SA-1 sRNA Lib

M-VTP-1 sRNA Lib

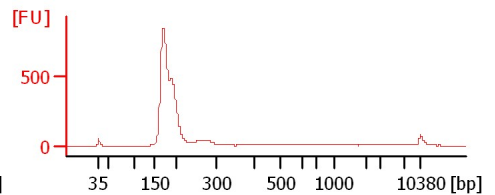
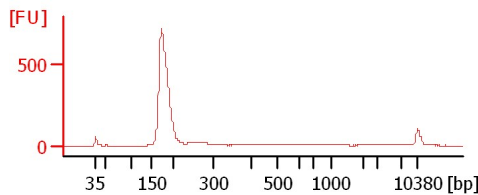
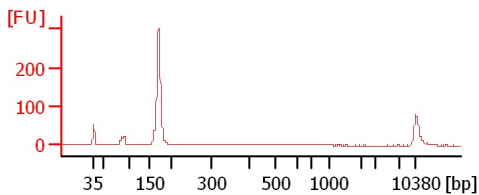
M-SA-1 sRNA Lib 1:2



P-VTP-2 sRNA Lib

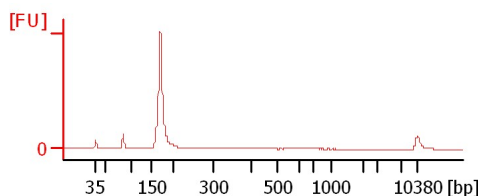
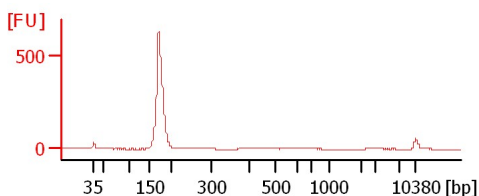
P-SA-2 sRNA Lib 1:2

M-VTP-2 sRNA Lib



M-SA-2 sRNA Lib

P-Leaf-1 sRNA Lib



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-04\2013-02-04_002.xad

Created: 2/4/2013 1:03:36 PM
 Modified: 2/4/2013 1:45:38 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
M-Root-2 sRNA Lib 1:2		<input type="checkbox"/>	✓			
M-VTI-2 sRNA Lib 1:2		<input type="checkbox"/>	✓			
P-VTP-1 sRNA Lib		<input type="checkbox"/>	✓			
P-SA-1 sRNA Lib		<input type="checkbox"/>	✓			
M-VTP-1 sRNA Lib		<input type="checkbox"/>	✓			
M-SA-1 sRNA Lib 1:2		<input type="checkbox"/>	✓			
P-VTP-2 sRNA Lib		<input type="checkbox"/>	✓			
P-SA-2 sRNA Lib 1:2		<input type="checkbox"/>	✓			
M-VTP-2 sRNA Lib		<input type="checkbox"/>	✓			
M-SA-2 sRNA Lib		<input type="checkbox"/>	✓			
P-Leaf-1 sRNA 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\2013-02-04\2013-02-04_002.xad

Created: 2/4/2013 1:03:36 PM
Modified: 2/4/2013 1:45:38 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

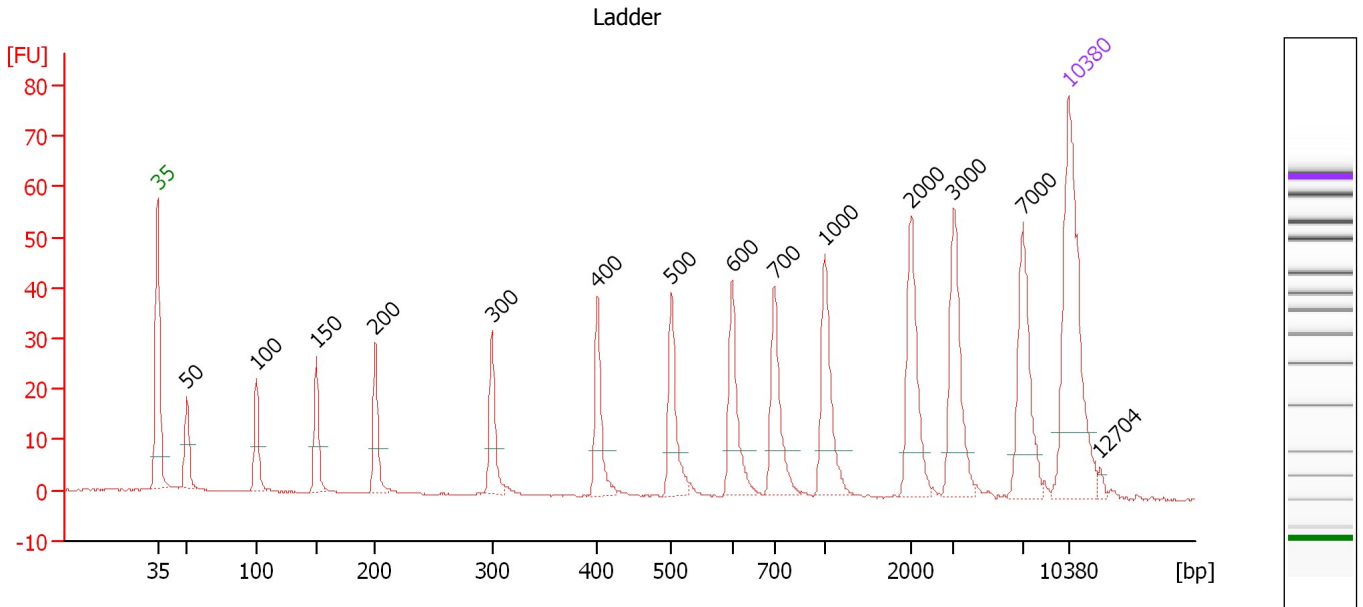
Ladder

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\2013-02-04\2013-02-04_002.xad

Created: 2/4/2013 1:03:36 PM
 Modified: 2/4/2013 1:45:38 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

Peak table for Ladder

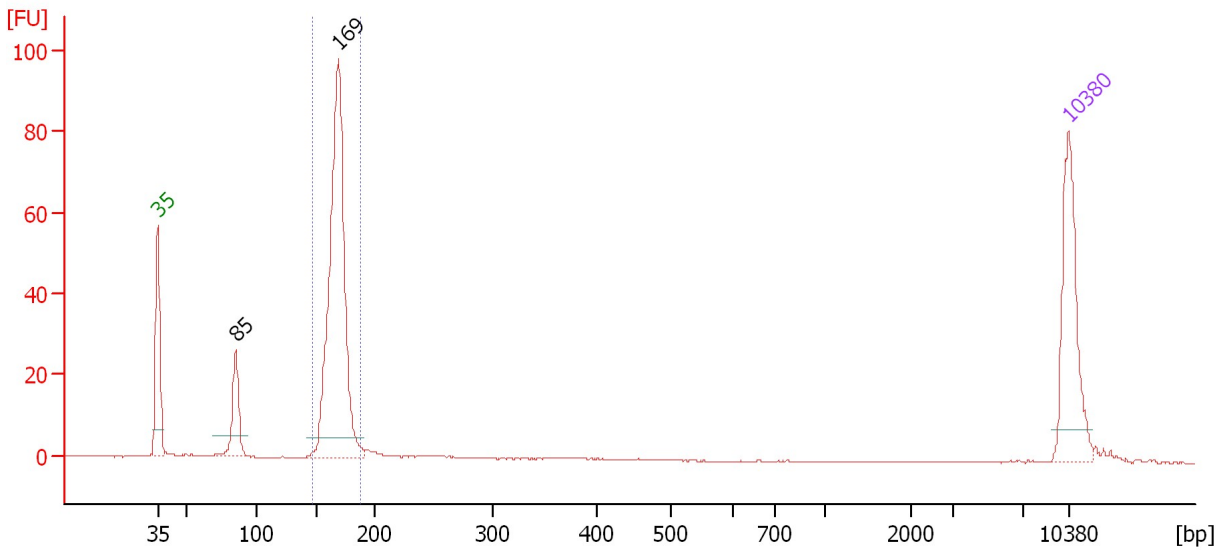
Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	50	150.00	4,545.5	Ladder Peak
3	100	150.00	2,272.7	Ladder Peak
4	150	150.00	1,515.2	Ladder Peak
5	200	150.00	1,136.4	Ladder Peak
6	300	150.00	757.6	Ladder Peak
7	400	150.00	568.2	Ladder Peak
8	500	150.00	454.5	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
16	12,704	0.00	0.0	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-04\2013-02-04_002.xad

Created: 2/4/2013 1:03:36 PM
 Modified: 2/4/2013 1:45:38 PM

Electropherogram Summary Continued ...

M-Root-2 sRNA Lib 1:2



Overall Results for sample 1 : M-Root-2 sRNA Lib 1:2

Number of peaks found: 2 Corr. Area 1: 237.7
 Noise: 0.1

Peak table for sample 1 : M-Root-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	85	55.28	985.7	
3	169	354.16	3,178.4	
4	10,380	75.00	10.9	Upper Marker

Region table for sample 1 : M-Root-2 sRNA Lib 1:2

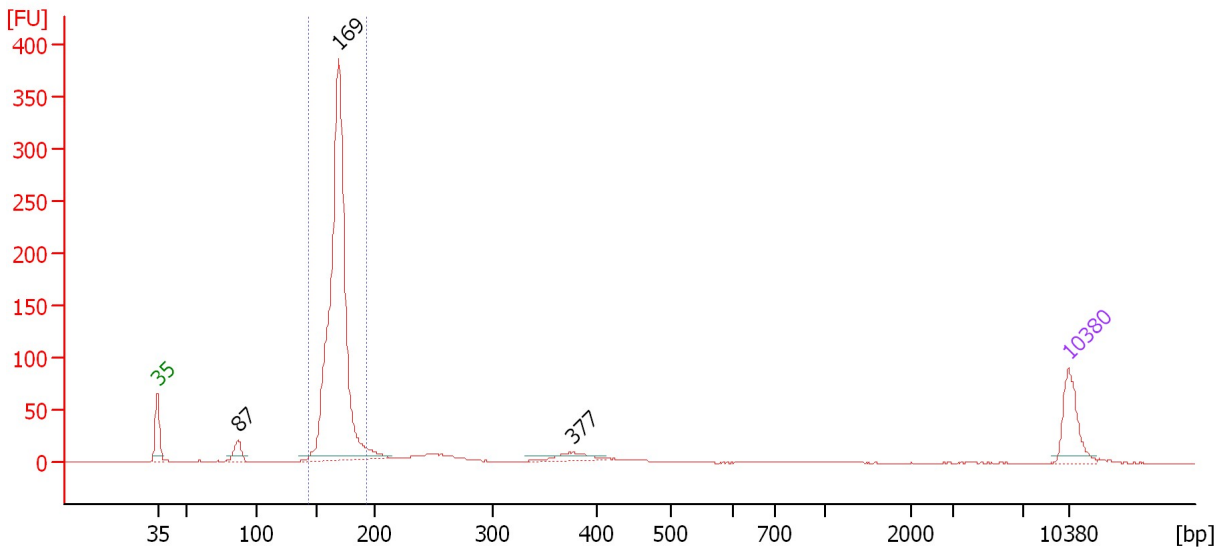
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
148	187	167	3,199.3	353.54	237.7	81	3.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-04\2013-02-04_002.xad

Created: 2/4/2013 1:03:36 PM
 Modified: 2/4/2013 1:45:38 PM

Electropherogram Summary Continued ...

M-VTI-2 sRNA Lib 1:2



Overall Results for sample 2 : M-VTI-2 sRNA Lib 1:2

Number of peaks found: 3 Corr. Area 1: 928.0
 Noise: 0.1

Peak table for sample 2 : M-VTI-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	87	42.51	741.3	
3	169	1,251.79	11,202.6	
4	377	35.52	142.6	
5	10,380	75.00	10.9	Upper Marker

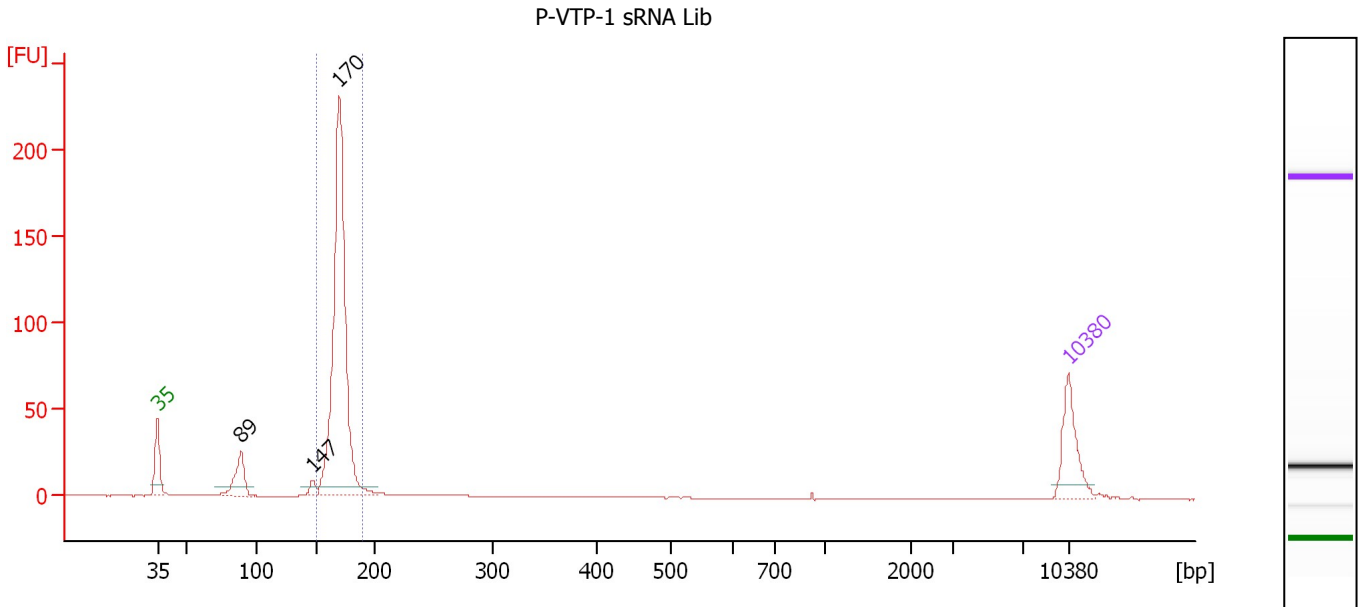
Region table for sample 2 : M-VTI-2 sRNA Lib 1:2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
144	192	168	11,313.3	1,253.13	928.0	80	4.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-04\2013-02-04_002.xad

Created: 2/4/2013 1:03:36 PM
 Modified: 2/4/2013 1:45:38 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : P-VTP-1 sRNA Lib

Number of peaks found: 3 Corr. Area 1: 444.4
 Noise: 0.1

Peak table for sample 3 : P-VTP-1 sRNA Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	89	86.99	1,484.2	
3	147	17.57	181.2	
4	170	787.08	7,031.6	
5	10,380	75.00	10.9	Upper Marker

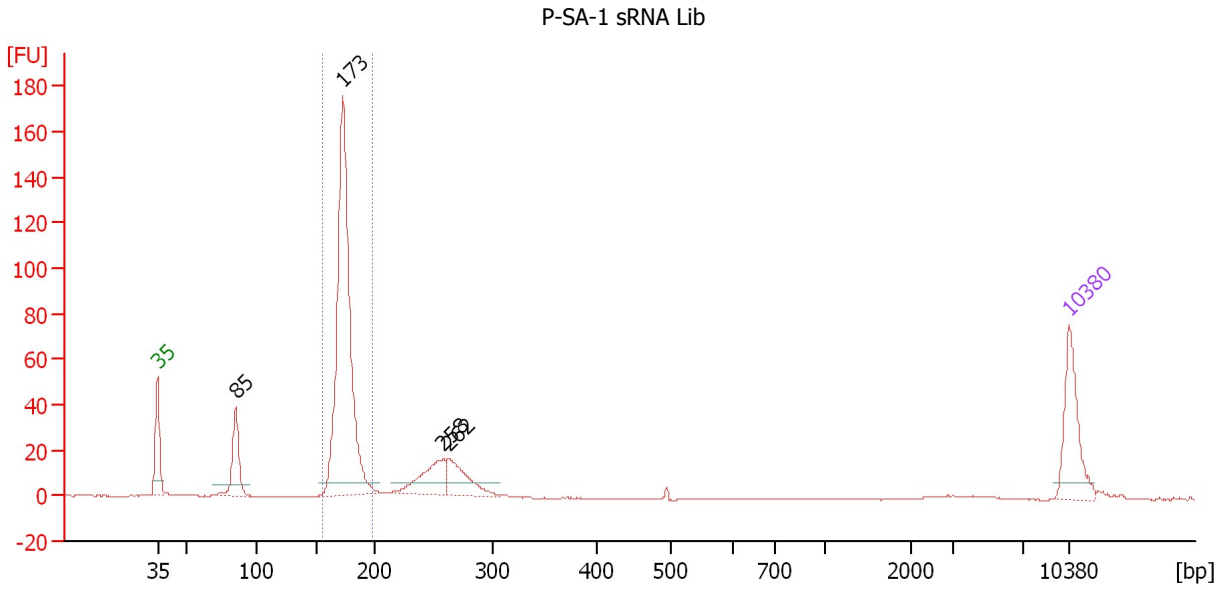
Region table for sample 3 : P-VTP-1 sRNA Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
150	189	170	7,011.3	784.76	444.4	82	3.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-04\2013-02-04_002.xad

Created: 2/4/2013 1:03:36 PM
 Modified: 2/4/2013 1:45:38 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : P-SA-1 sRNA Lib

Number of peaks found: 4 Corr. Area 1: 359.1
 Noise: 0.1

Peak table for sample 4 : P-SA-1 sRNA Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	85	95.04	1,694.9	
3	173	606.52	5,321.6	
4	258	76.35	448.3	
5	262	69.02	398.8	
6	10,380	75.00	10.9	Upper Marker

Region table for sample 4 : P-SA-1 sRNA Lib

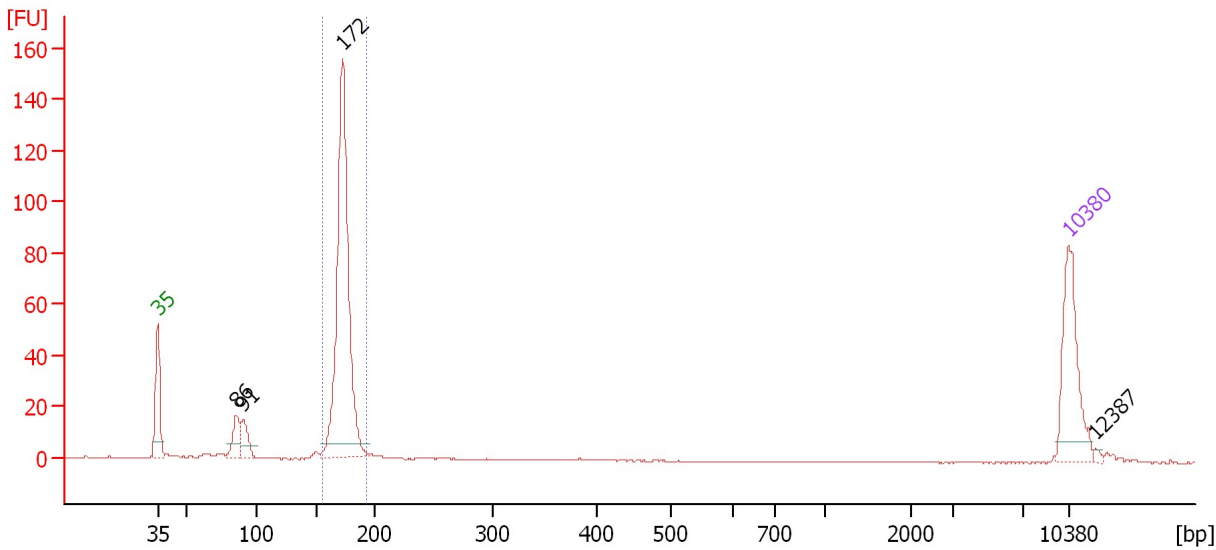
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
156	198	174	5,330.9	612.41	359.1	65	3.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-04\2013-02-04_002.xad

Created: 2/4/2013 1:03:36 PM
 Modified: 2/4/2013 1:45:38 PM

Electropherogram Summary Continued ...

M-VTP-1 sRNA Lib



Overall Results for sample 5 : M-VTP-1 sRNA Lib

Number of peaks found: 4 Corr. Area 1: 285.9
 Noise: 0.1

Peak table for sample 5 : M-VTP-1 sRNA Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	86	32.66	577.3	
3	91	28.28	473.0	
4	172	386.85	3,403.8	
5	10,380	75.00	10.9	Upper Marker
6	12,387	0.00	0.0	

Region table for sample 5 : M-VTP-1 sRNA Lib

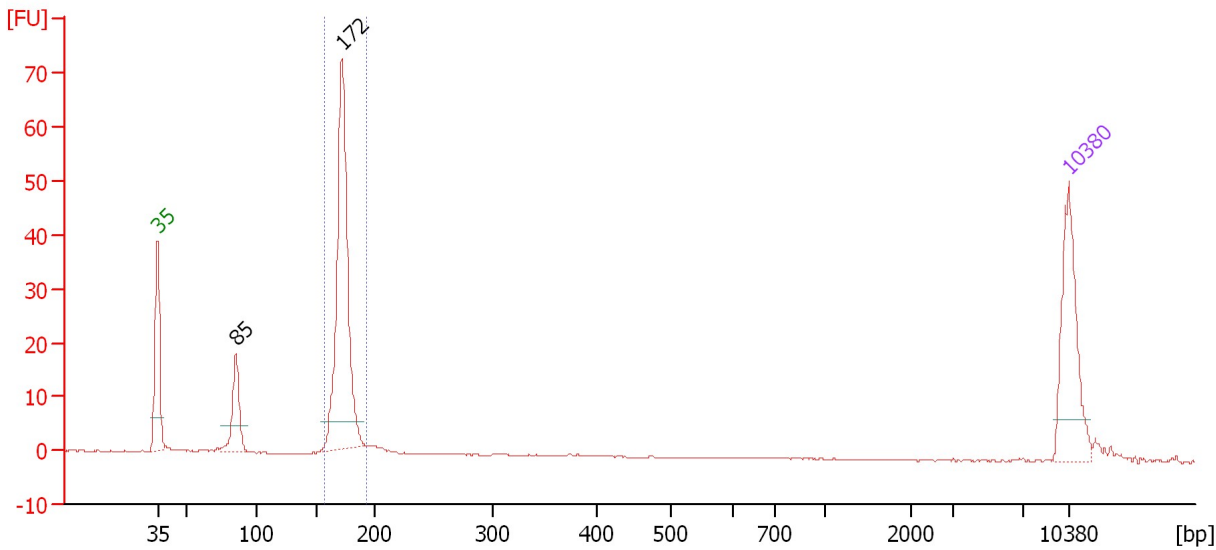
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
156	192	173	3,416.5	389.75	285.9	76	3.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-04\2013-02-04_002.xad

Created: 2/4/2013 1:03:36 PM
 Modified: 2/4/2013 1:45:38 PM

Electropherogram Summary Continued ...

M-SA-1 sRNA Lib 1:2



Overall Results for sample 6 : M-SA-1 sRNA Lib 1:2

Number of peaks found: 2 Corr. Area 1: 129.9
 Noise: 0.1

Peak table for sample 6 : M-SA-1 sRNA Lib 1:2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	85	60.73	1,078.8	
3	172	286.42	2,524.5	
4	10,380	75.00	10.9	Upper Marker

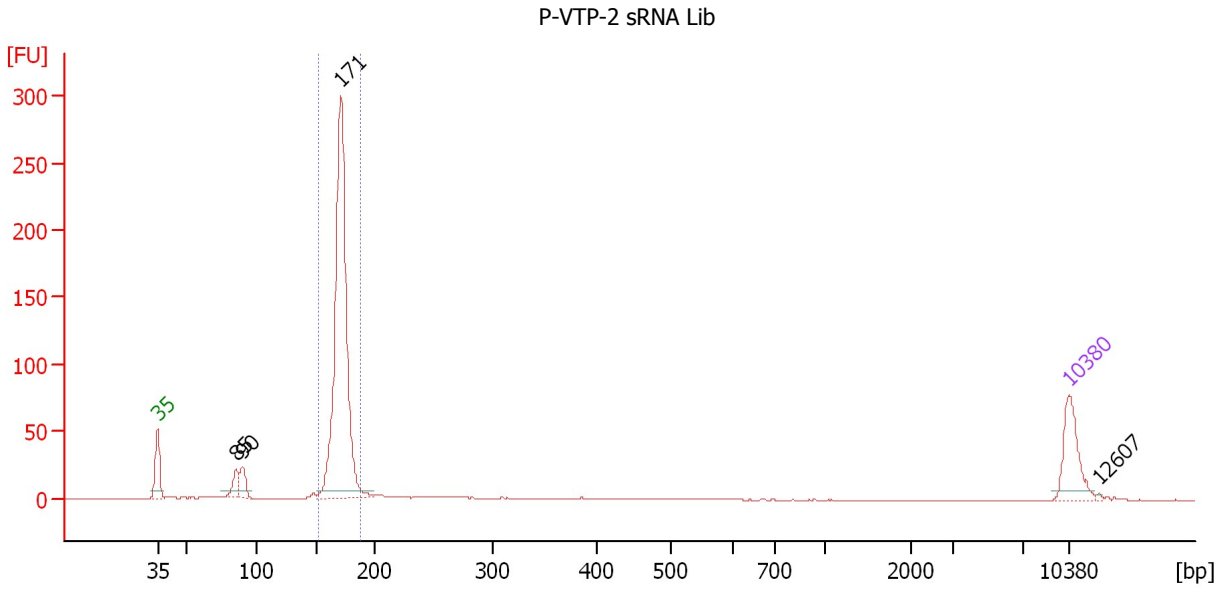
Region table for sample 6 : M-SA-1 sRNA Lib 1:2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
158	192	173	2,615.5	297.86	129.9	75	3.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-04\2013-02-04_002.xad

Created: 2/4/2013 1:03:36 PM
 Modified: 2/4/2013 1:45:38 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : P-VTP-2 sRNA Lib

Number of peaks found: 4 Corr. Area 1: 543.1
 Noise: 0.1

Peak table for sample 7 : P-VTP-2 sRNA Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	85	41.45	735.9	
3	90	41.66	702.5	
4	171	831.55	7,360.6	
5	10,380	75.00	10.9	Upper Marker
6	12,607	0.00	0.0	

Region table for sample 7 : P-VTP-2 sRNA Lib

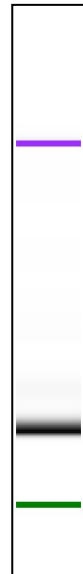
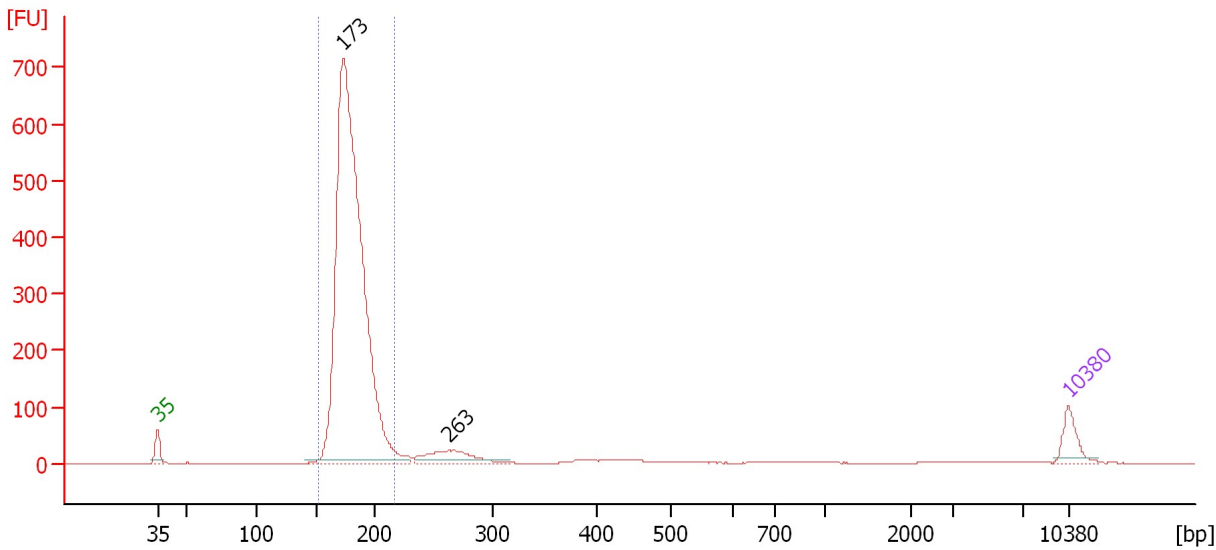
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
153	188	171	7,322.9	825.79	543.1	82	3.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-04\2013-02-04_002.xad

Created: 2/4/2013 1:03:36 PM
 Modified: 2/4/2013 1:45:38 PM

Electropherogram Summary Continued ...

P-SA-2 sRNA Lib 1:2



Overall Results for sample 8 : P-SA-2 sRNA Lib 1:2

Number of peaks found: 2 Corr. Area 1: 2,937.8
 Noise: 0.2

Peak table for sample 8 : P-SA-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	173	3,754.35	32,892.7	
3	263	165.41	952.0	
4	10,380	75.00	10.9	Upper Marker

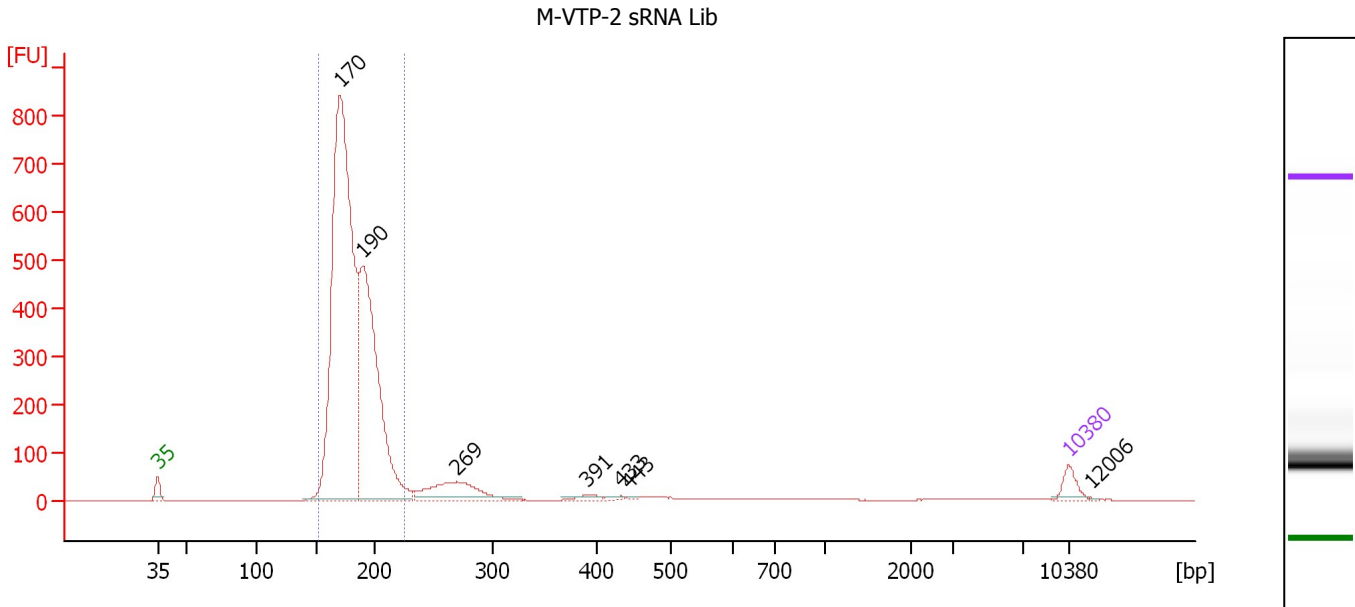
Region table for sample 8 : P-SA-2 sRNA Lib 1:2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
152	217	180	30,590.3	3,630.28	2,937.8	89	6.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-04\2013-02-04_002.xad

Created: 2/4/2013 1:03:36 PM
 Modified: 2/4/2013 1:45:38 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : M-VTP-2 sRNA Lib

Number of peaks found: 7 Corr. Area 1: 4,288.0
 Noise: 0.2

Peak table for sample 9 : M-VTP-2 sRNA Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	170	4,943.78	44,008.4	
3	190	2,575.66	20,546.9	
4	269	421.52	2,369.8	
5	391	37.86	146.9	
6	433	20.81	72.8	
7	443	13.61	46.6	
8	10,380	75.00	10.9	Upper Marker
9	12,006	0.00	0.0	

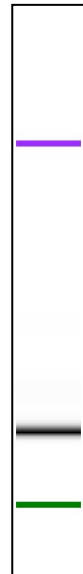
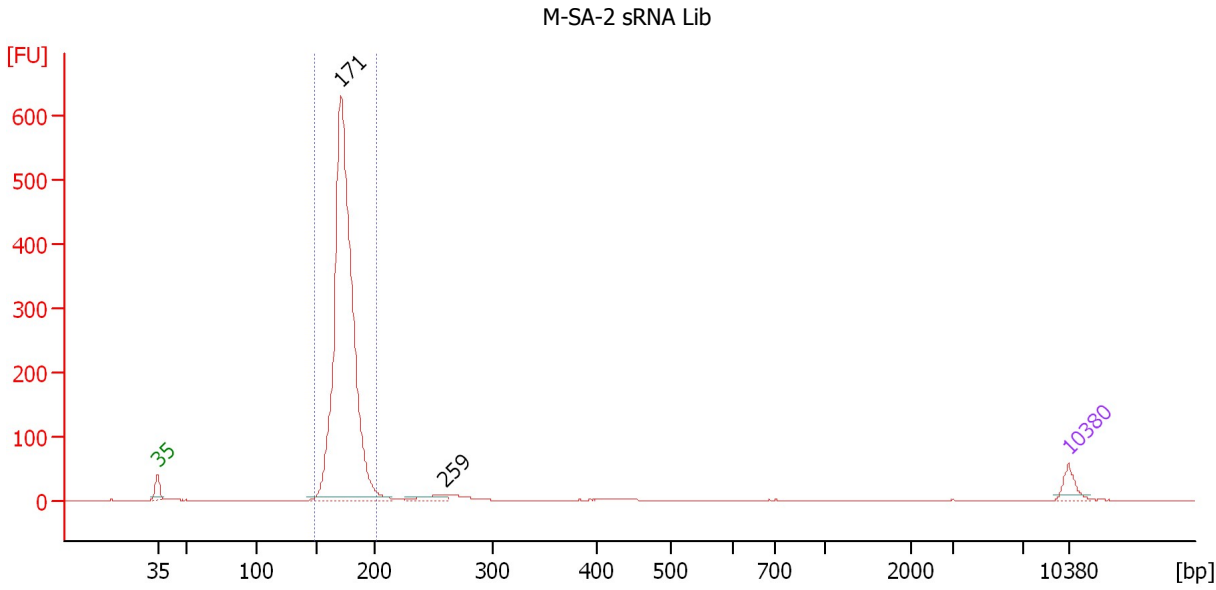
Region table for sample 9 : M-VTP-2 sRNA Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
152	224	181	61,924.7	7,375.62	4,288.0	87	7.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-04\2013-02-04_002.xad

Created: 2/4/2013 1:03:36 PM
 Modified: 2/4/2013 1:45:38 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : M-SA-2 sRNA Lib

Number of peaks found: 2 Corr. Area 1: 1,765.6
 Noise: 0.1

Peak table for sample 10 : M-SA-2 sRNA Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	171	4,780.78	42,449.7	
3	259	72.36	423.0	
4	10,380	75.00	10.9	Upper Marker

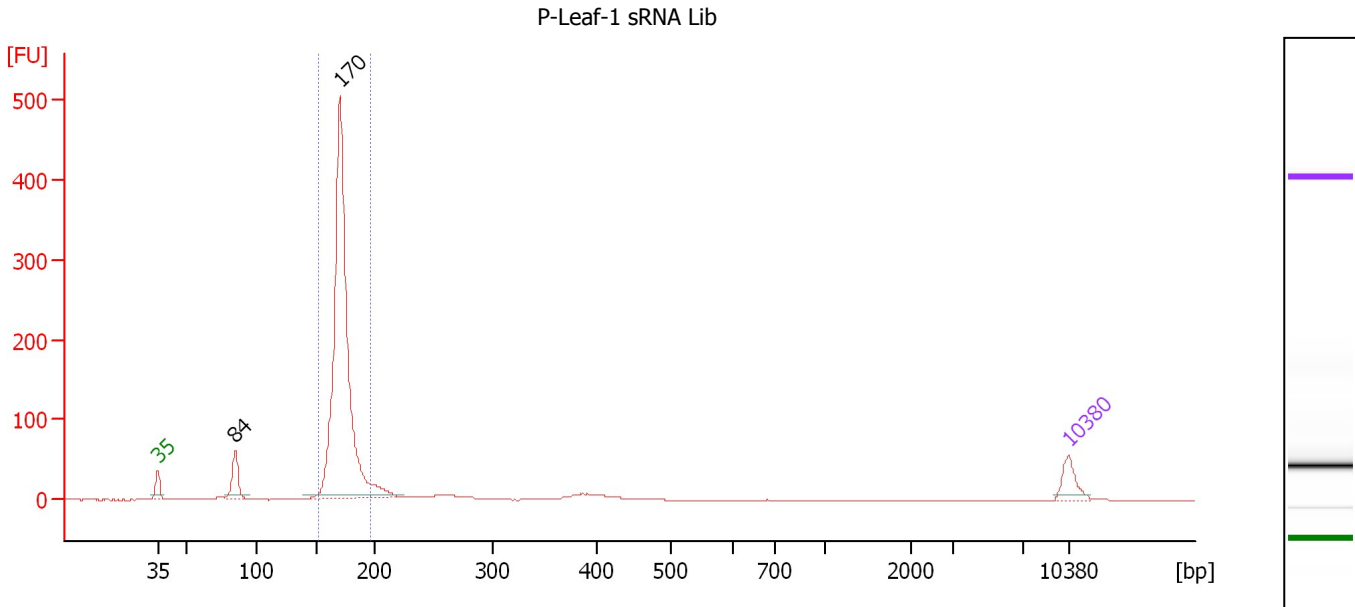
Region table for sample 10 : M-SA-2 sRNA Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
149	201	174	40,804.7	4,682.46	1,765.6	94	4.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-04\2013-02-04_002.xad

Created: 2/4/2013 1:03:36 PM
 Modified: 2/4/2013 1:45:38 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : P-Leaf-1 sRNA Lib

Number of peaks found: 2 Corr. Area 1: 1,021.1
 Noise: 0.1

Peak table for sample 11 : P-Leaf-1 sRNA Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	84	178.46	3,200.2	
3	170	2,406.25	21,391.9	
4	10,380	75.00	10.9	Upper Marker

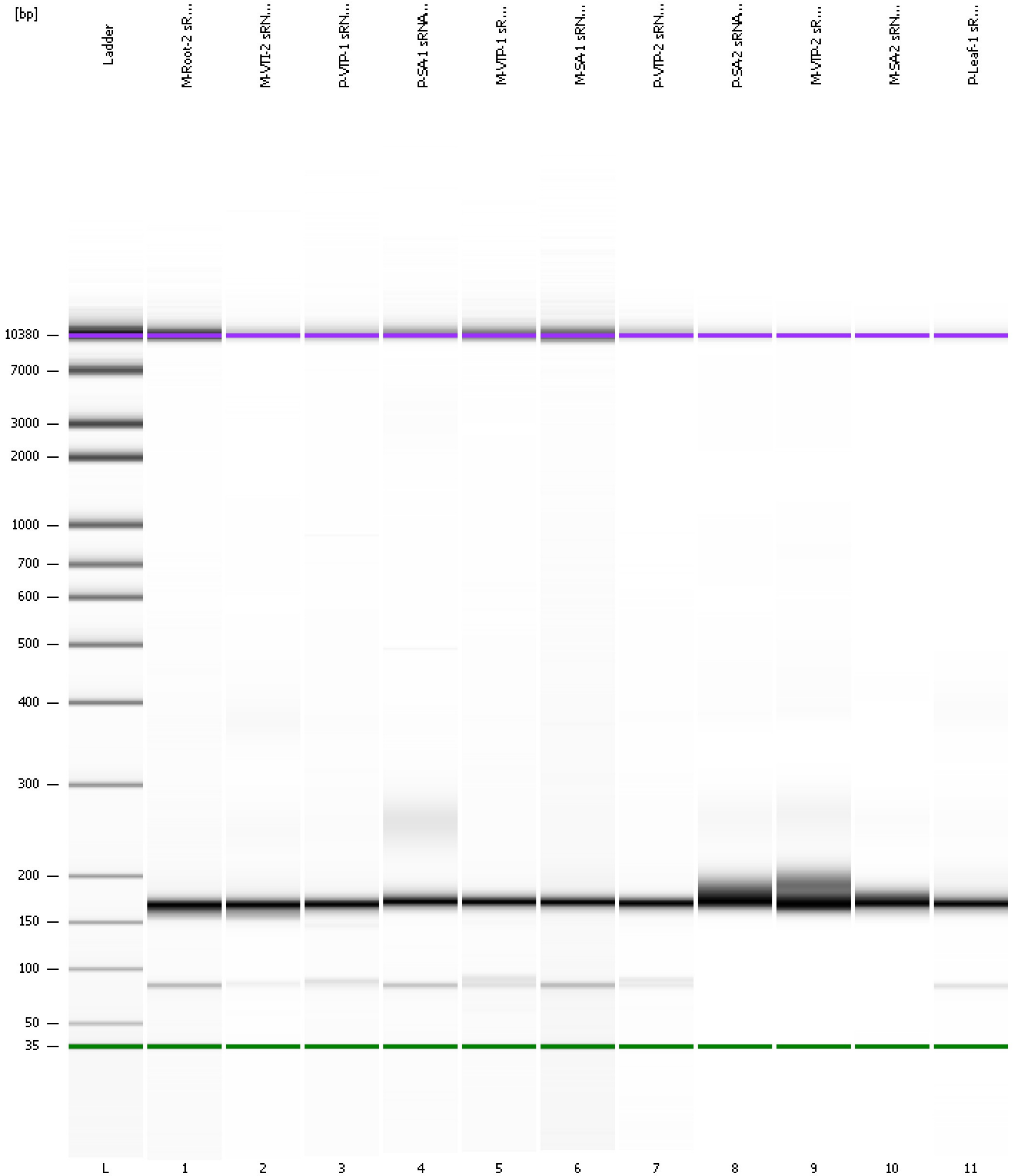
Region table for sample 11 : P-Leaf-1 sRNA Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
153	196	172	20,515.5	2,325.55	1,021.1	81	4.1	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-04\2013-02-04_002.xad

Created: 2/4/2013 1:03:36 PM
Modified: 2/4/2013 1:45:38 PM

Gel Image



Assay Class: High Sensitivity DNA Assay Created: 2/4/2013 1:03:36 PM
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-04\2013-02-04_002.xad Modified: 2/4/2013 1:45:38 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 1:44:50 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_002.xad)		Instrument	Run		2/4/2013 1:03:37 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		2/4/2013 1:03:37 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		2/4/2013 1:03:37 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		2/4/2013 1:03:37 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		2/4/2013 1:03:37 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		2/4/2013 1:03:37 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		2/4/2013 1:03:37 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1