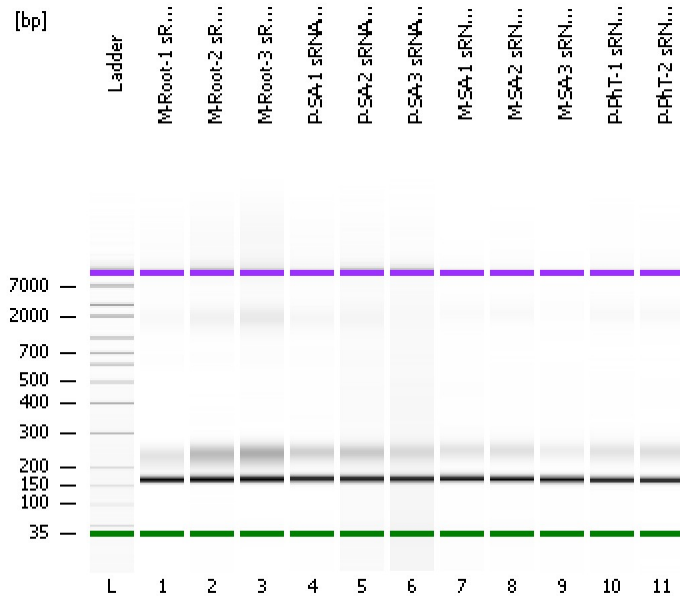


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-12\2013-08-12_005.xad

Created: 8/12/2013 4:22:15 PM
Modified: 8/12/2013 5:08:34 PM

Electrophoresis File Run Summary



Instrument Information:

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

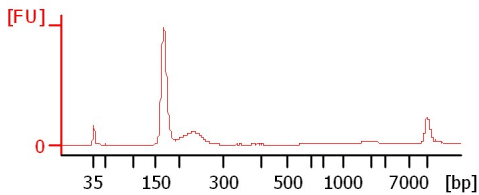
Assay Information:

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

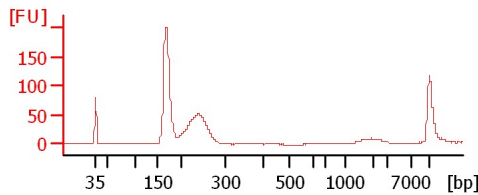
Chip Information:

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

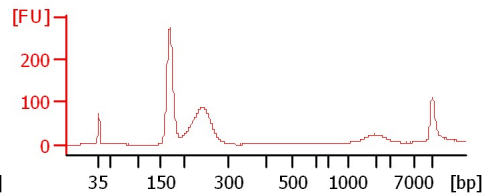
M-Root-1 sRNA Lib



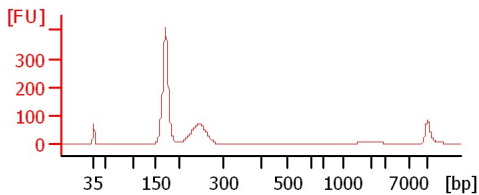
M-Root-2 sRNA Lib



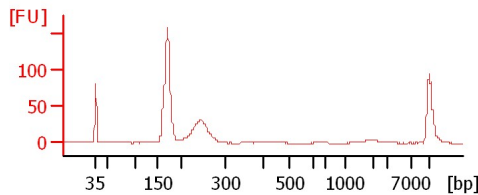
M-Root-3 sRNA Lib



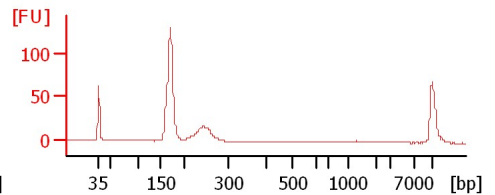
P-SA-1 sRNA Lib



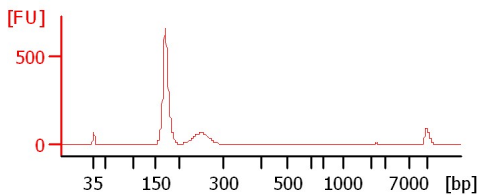
P-SA-2 sRNA Lib 1:2



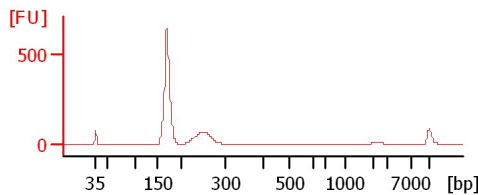
P-SA-3 sRNA Lib 1:2



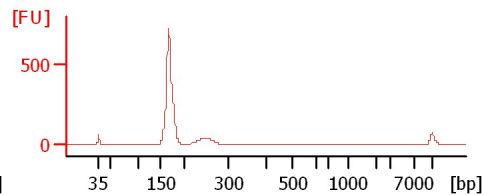
M-SA-1 sRNA Lib



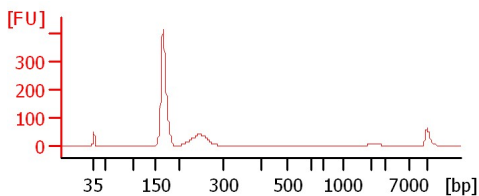
M-SA-2 sRNA Lib



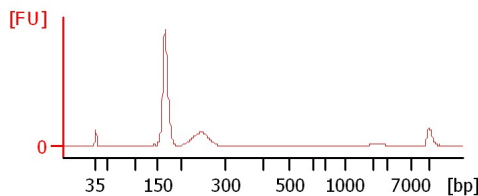
M-SA-3 sRNA Lib



P-PhT-1 sRNA Lib



P-PhT-2 sRNA Lib



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-12\2013-08-12_005.xad

Created: 8/12/2013 4:22:15 PM
Modified: 8/12/2013 5:08:34 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
M-Root-1 sRNA Lib		<input type="checkbox"/>	✓			
M-Root-2 sRNA Lib		<input type="checkbox"/>	✓			
M-Root-3 sRNA Lib		<input type="checkbox"/>	✓			
P-SA-1 sRNA Lib		<input type="checkbox"/>	✓			
P-SA-2 sRNA Lib 1:2		<input type="checkbox"/>	✓			
P-SA-3 sRNA Lib 1:2		<input type="checkbox"/>	✓			
M-SA-1 sRNA Lib		<input type="checkbox"/>	✓			
M-SA-2 sRNA Lib		<input type="checkbox"/>	✓			
M-SA-3 sRNA Lib		<input type="checkbox"/>	✓			
P-PhT-1 sRNA Lib		<input type="checkbox"/>	✓			
P-PhT-2 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\2013-08-12\2013-08-12_005.xad

Created: 8/12/2013 4:22:15 PM
 Modified: 8/12/2013 5:08:34 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

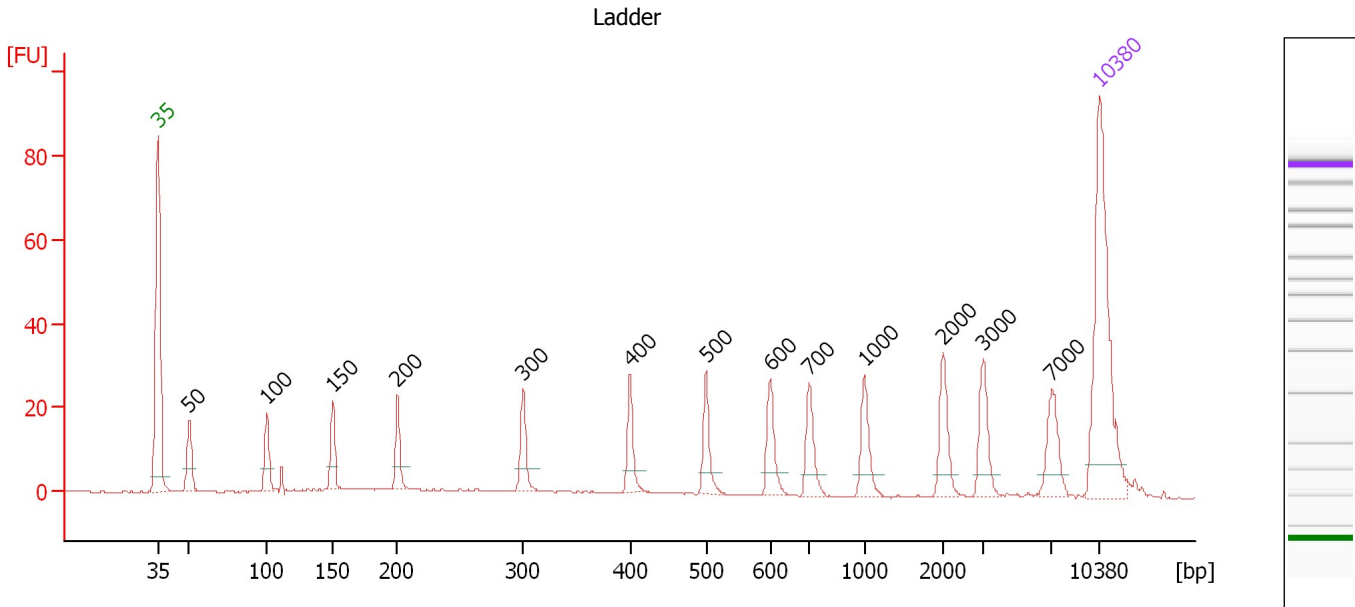
Ladder

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\2013-08-12\2013-08-12_005.xad

Created: 8/12/2013 4:22:15 PM
 Modified: 8/12/2013 5:08:34 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

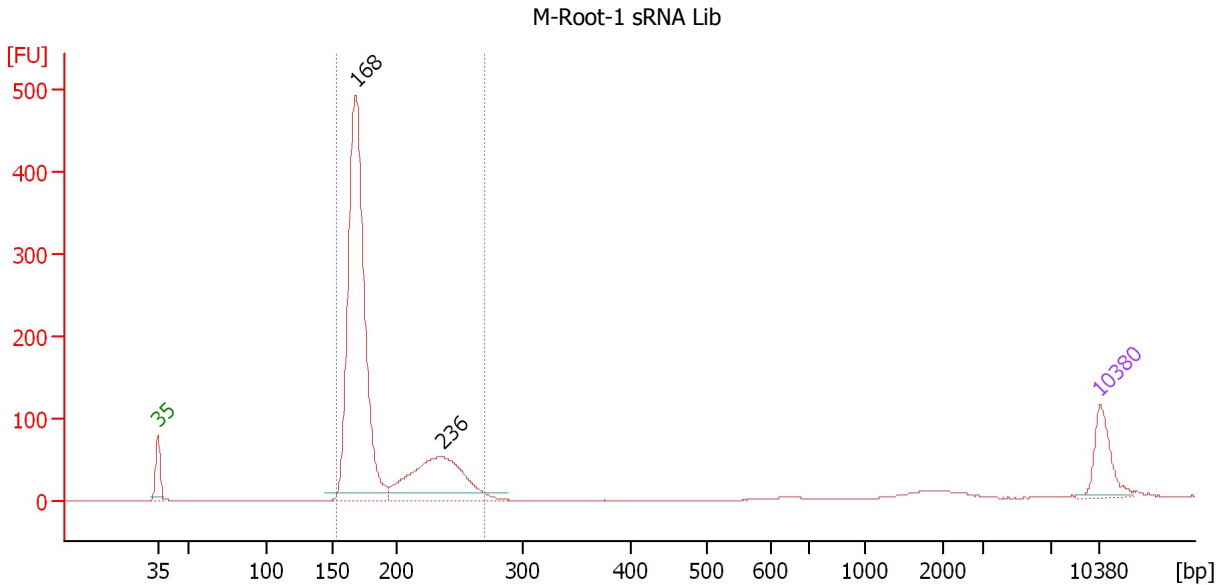
Peak table for Ladder

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\2013-08-12\2013-08-12_005.xad

Created: 8/12/2013 4:22:15 PM
 Modified: 8/12/2013 5:08:34 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 1 : M-Root-1 sRNA Lib

Height Threshold [FU] : 10

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

Number of peaks found: 2 Corr. Area 1: 1,665.5
 Noise: 0.2

Peak table for sample 1 : M-Root-1 sRNA Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	168	1,231.92	11,141.9	
3	236	361.93	2,327.2	
4	10,380	75.00	10.9	Upper Marker

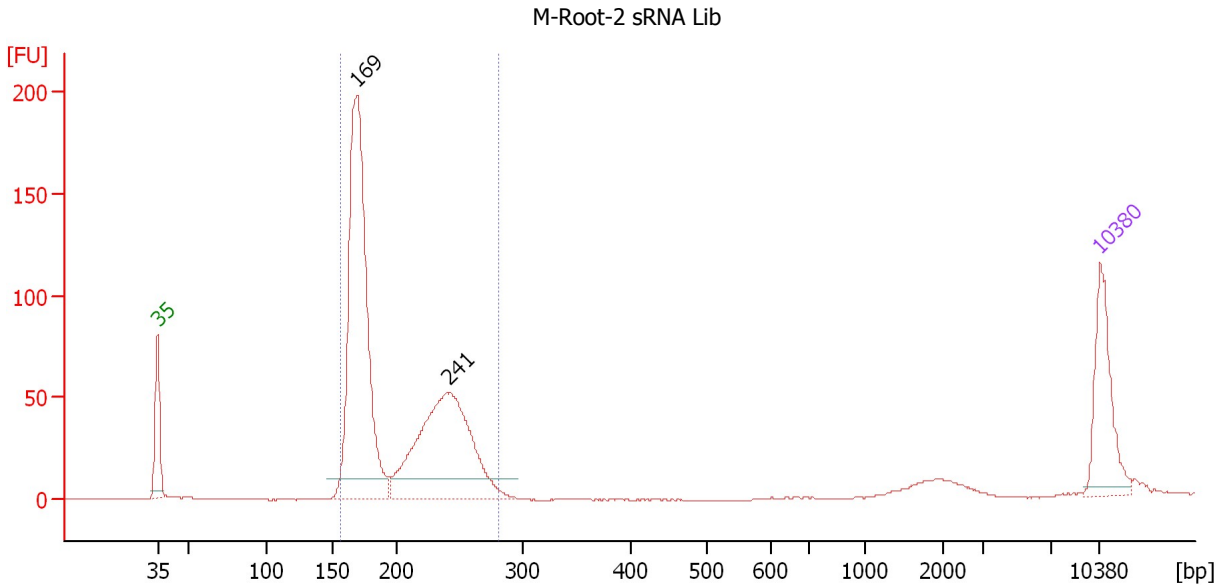
Region table for sample 1 : M-Root-1 sRNA Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
153	270	185	13,366.7	1,587.76	1,665.5	88	15.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-12\2013-08-12_005.xad

Created: 8/12/2013 4:22:15 PM
 Modified: 8/12/2013 5:08:34 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 2 : M-Root-2 sRNA Lib

Height Threshold [FU] : 10

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

Number of peaks found: 2 Corr. Area 1: 933.3
 Noise: 0.2

Peak table for sample 2 : M-Root-2 sRNA Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	169	551.66	4,954.0	
3	241	358.31	2,250.0	
4	10,380	75.00	10.9	Upper Marker

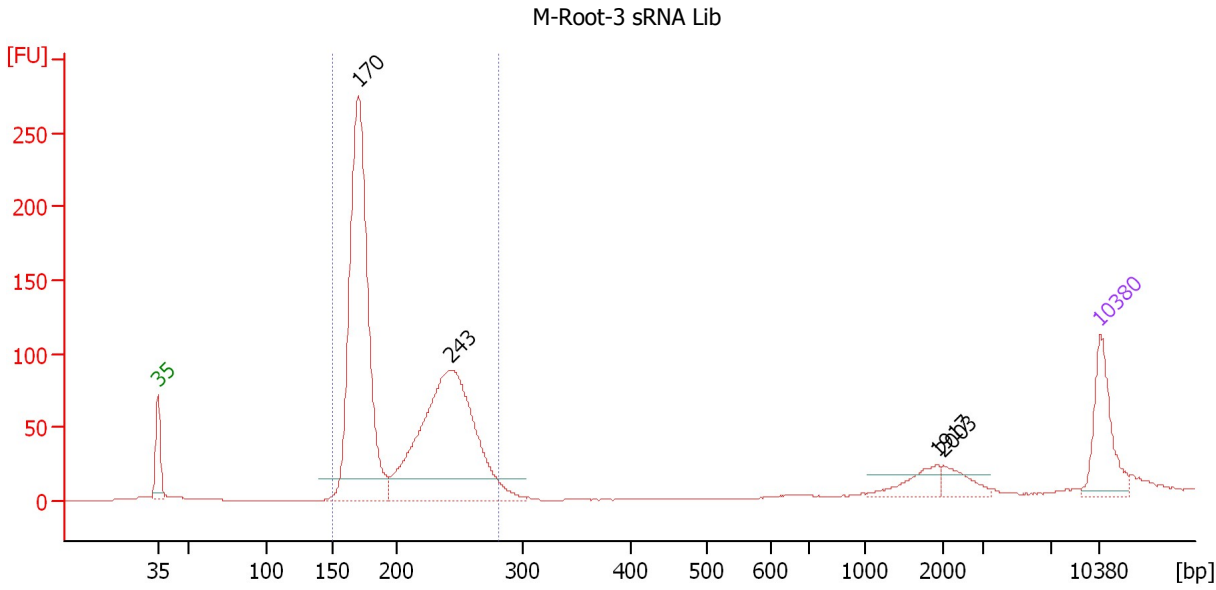
Region table for sample 2 : M-Root-2 sRNA Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
156	280	200	7,110.3	898.56	933.3	88	17.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-12\2013-08-12_005.xad

Created: 8/12/2013 4:22:15 PM
 Modified: 8/12/2013 5:08:34 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 3 : M-Root-3 sRNA Lib

Height Threshold [FU] : 15

Overall Results for sample 3 : M-Root-3 sRNA Lib

Number of peaks found: 4 Corr. Area 1: 1,434.5
 Noise: 0.1

Peak table for sample 3 : M-Root-3 sRNA Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	170	742.60	6,623.4	
3	243	588.33	3,668.8	
4	1,917	32.65	25.8	
5	2,003	27.12	20.5	
6	10,380	75.00	10.9	Upper Marker

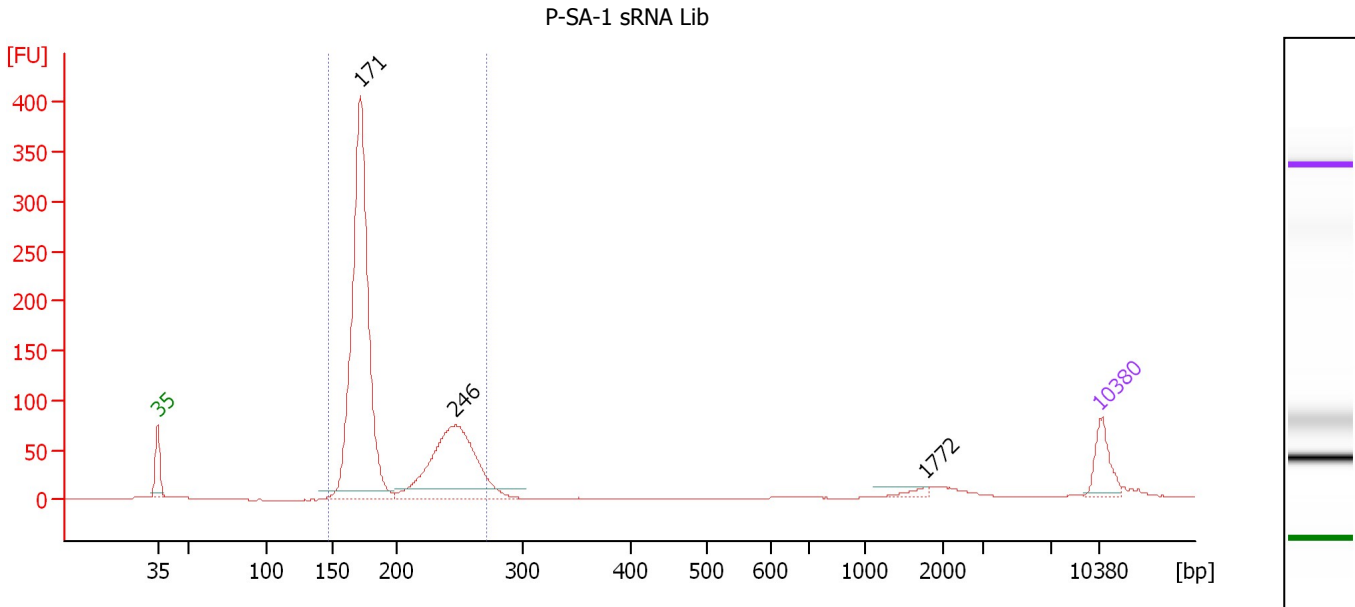
Region table for sample 3 : M-Root-3 sRNA Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
150	280	204	10,253.4	1,320.09	1,434.5	79	18.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-12\2013-08-12_005.xad

Created: 8/12/2013 4:22:15 PM
 Modified: 8/12/2013 5:08:34 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 4 : P-SA-1 sRNA Lib

Height Threshold [FU] : 10

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

Number of peaks found: 3 Corr. Area 1: 1,449.4
 Noise: 0.2

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	171	1,545.67	13,660.7	
3	246	659.36	4,060.1	
4	1,772	15.74	13.5	
5	10,380	75.00	10.9	Upper Marker

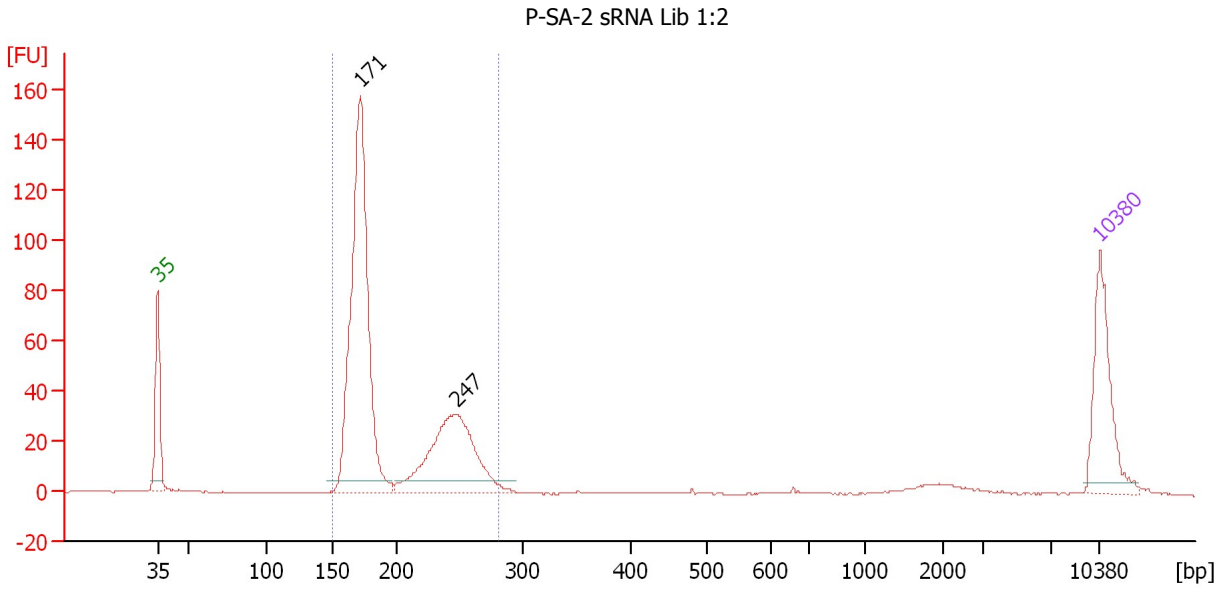
Region table for sample 4 : P-SA-1 sRNA Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
146	270	194	17,559.3	2,165.00	1,449.4	84	17.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-12\2013-08-12_005.xad

Created: 8/12/2013 4:22:15 PM
 Modified: 8/12/2013 5:08:34 PM

Electropherogram Summary Continued ...



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

Number of peaks found: 2 Corr. Area 1: 597.6
 Noise: 0.1

Peak table for sample 5 : 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	171	463.43	4,102.8	
3	247	211.20	1,297.5	
4	10,380	75.00	10.9	Upper Marker

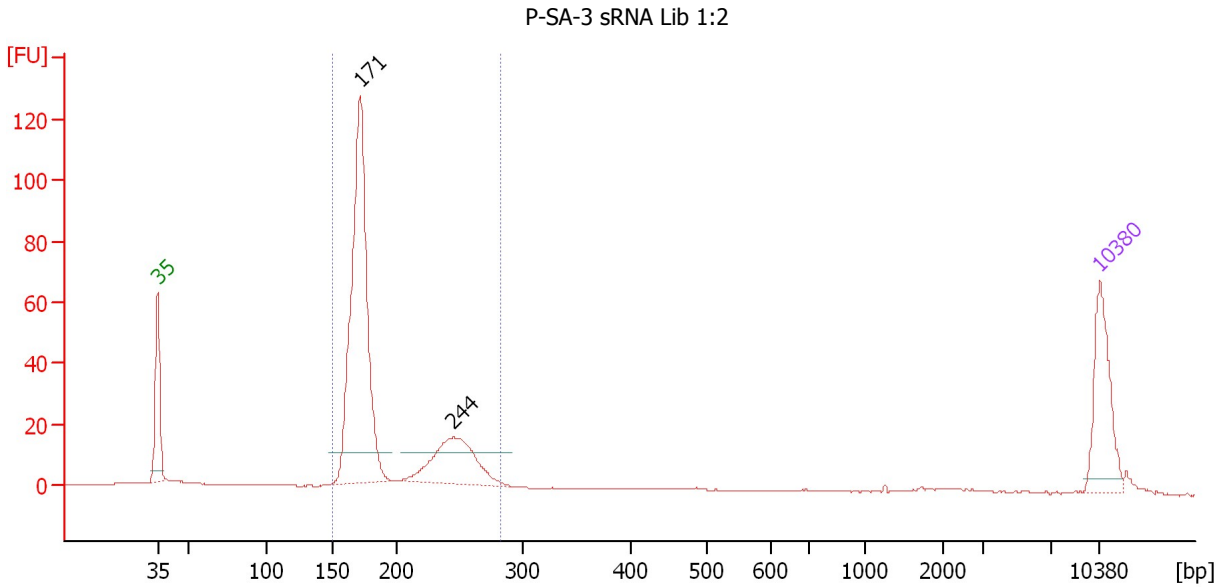
Region table for sample 5 : P-SA-2 sRNA Lib 1:2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
149	280	197	5,479.1	680.70	597.6	84	18.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-12\2013-08-12_005.xad

Created: 8/12/2013 4:22:15 PM
 Modified: 8/12/2013 5:08:34 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 6 : P-SA-3 sRNA Lib 1:2

Height Threshold [FU] : 10

Overall Results for sample 6 : P-SA-3 sRNA Lib 1:2

Number of peaks found: 2 Corr. Area 1: 426.0
 Noise: 0.1

Peak table for sample 6 : P-SA-3 sRNA Lib 1:2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	171	499.95	4,423.0	
3	244	134.34	833.2	
4	10,380	75.00	10.9	Upper Marker

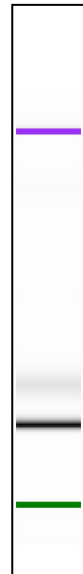
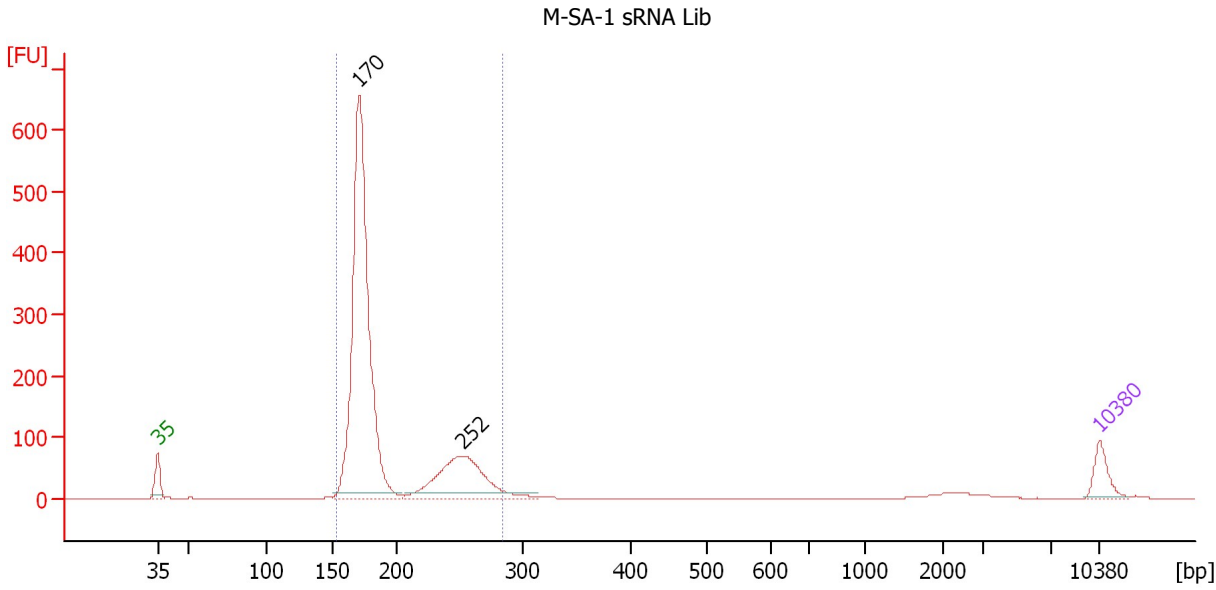
Region table for sample 6 : P-SA-3 sRNA Lib 1:2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
149	282	191	5,738.1	697.19	426.0	81	18.1	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-12\2013-08-12_005.xad

Created: 8/12/2013 4:22:15 PM
Modified: 8/12/2013 5:08:34 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 7 : M-SA-1 sRNA Lib

Height Threshold [FU] : 10

Overall Results for sample 7 : M-SA-1 sRNA Lib

Number of peaks found: 2 Corr. Area 1: 1,995.1
Noise: 0.2

Peak table for sample 7 : M-SA-1 sRNA Lib

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	170	2,135.41	19,024.2	
3	252	545.12	3,283.2	
4	10,380	75.00	10.9	Upper Marker

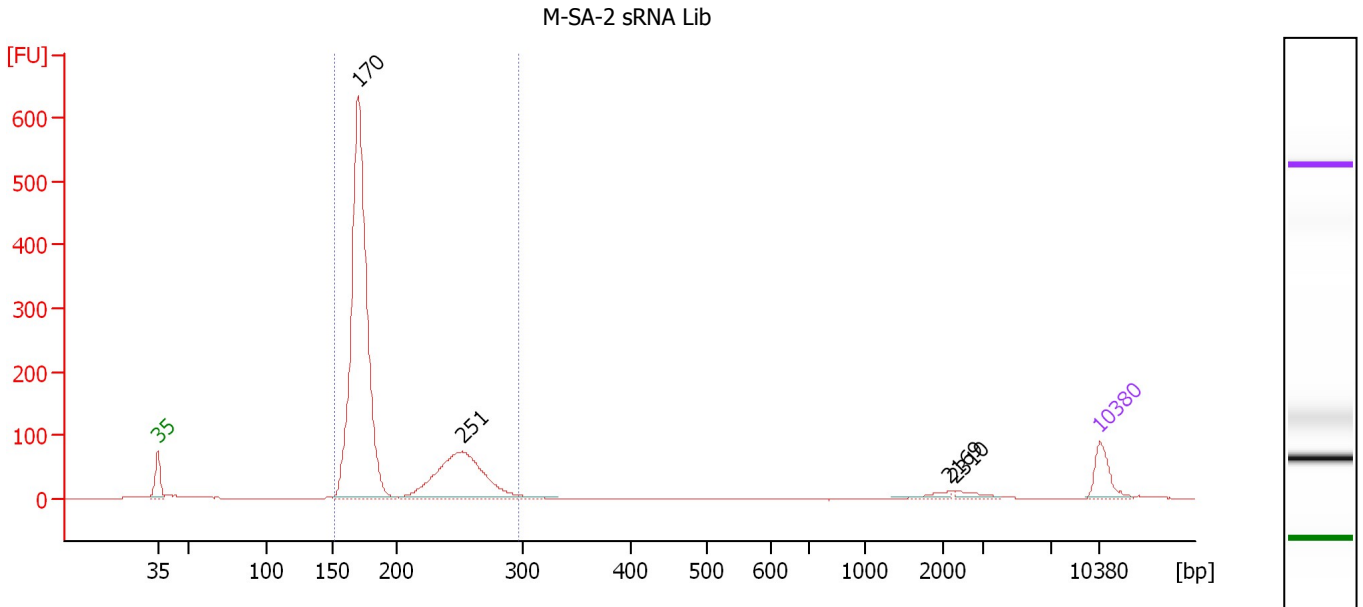
Region table for sample 7 : M-SA-1 sRNA Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
153	284	191	21,896.9	2,654.49	1,995.1	91	17.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-12\2013-08-12_005.xad

Created: 8/12/2013 4:22:15 PM
 Modified: 8/12/2013 5:08:34 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : M-SA-2 sRNA Lib

Number of peaks found: 4 Corr. Area 1: 1,923.4
 Noise: 0.2

Peak table for sample 8 : 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	170	1,955.11	17,450.7	
3	251	600.86	3,625.6	
4	2,169	17.31	12.1	
5	2,310	21.12	13.9	
6	10,380	75.00	10.9	Upper Marker

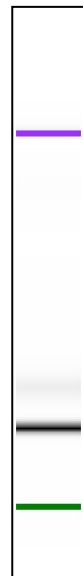
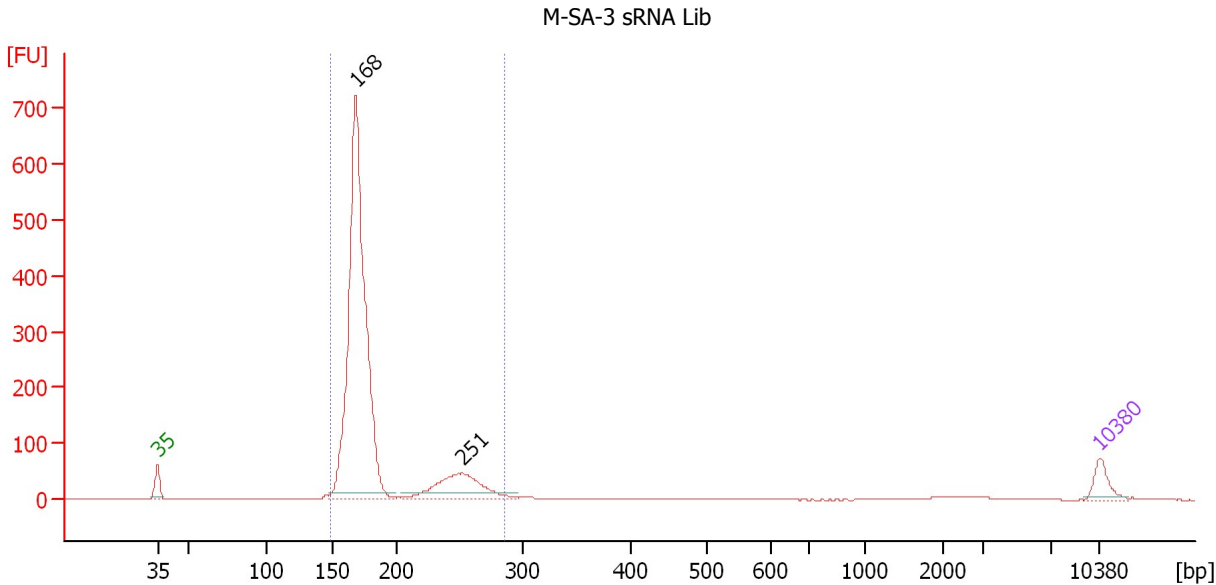
Region table for sample 8 : M-SA-2 sRNA Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
151	297	192	20,890.6	2,540.55	1,923.4	90	19.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-12\2013-08-12_005.xad

Created: 8/12/2013 4:22:15 PM
 Modified: 8/12/2013 5:08:34 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 9 : M-SA-3 sRNA Lib

Height Threshold [FU] : 10

Overall Results for sample 9 : M-SA-3 sRNA Lib

Number of peaks found: 2 Corr. Area 1: 2,042.0
 Noise: 0.1

Peak table for sample 9 : M-SA-3 sRNA Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	168	3,019.89	27,284.0	
3	251	440.12	2,656.1	
4	10,380	75.00	10.9	Upper Marker

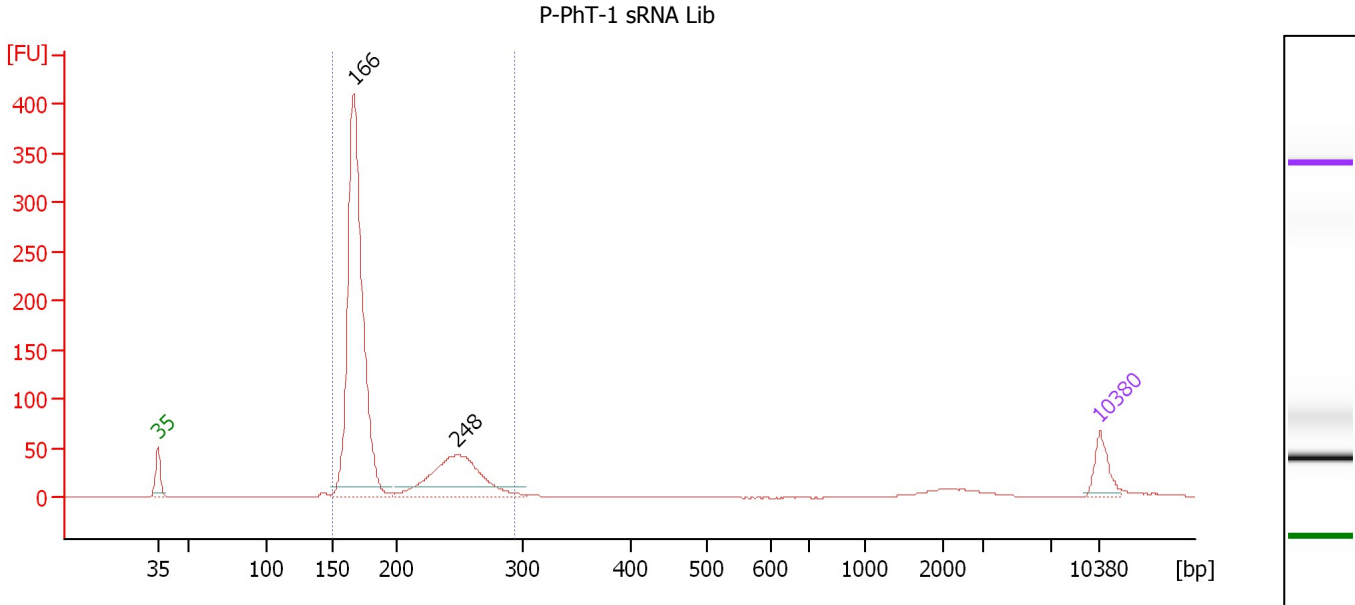
Region table for sample 9 : M-SA-3 sRNA Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
148	286	182	29,746.1	3,466.37	2,042.0	93	16.7	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-12\2013-08-12_005.xad

Created: 8/12/2013 4:22:15 PM
Modified: 8/12/2013 5:08:34 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 10 : P-PhT-1 sRNA Lib

Height Threshold [FU] : 10

Overall Results for sample 10 : P-PhT-1 sRNA Lib

Number of peaks found: 2 Corr. Area 1: 1,189.2
Noise: 0.1

Peak table for sample 10 : P-PhT-1 sRNA Lib

Table with 5 columns: Peak, Size [bp], Conc. [pg/µl], Molarity [pmol/l], Observations. Rows include peaks at 35, 166, 248, and 10,380 bp.

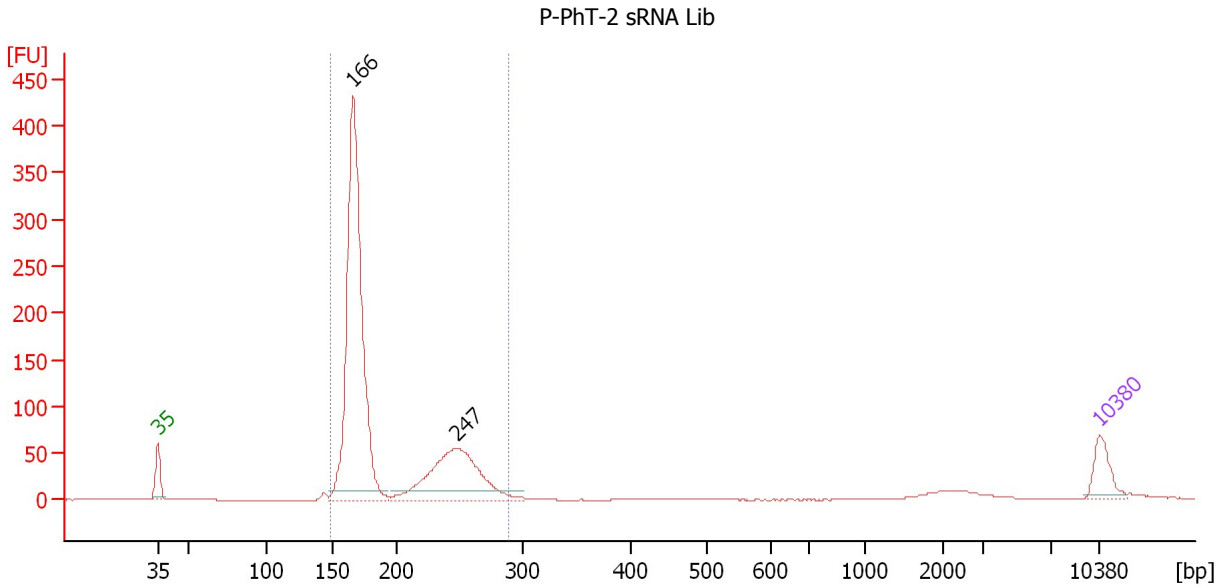
Region table for sample 10 : P-PhT-1 sRNA Lib

Table with 8 columns: From [bp], To [bp], Average Size [bp], Molarity [pmol/l], Conc. [pg/µl], Corr. Area, % of Total, Size distribution in CV [%], Color. Row shows region from 150 to 293 bp.

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-12\2013-08-12_005.xad

Created: 8/12/2013 4:22:15 PM
 Modified: 8/12/2013 5:08:34 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 11 : P-PhT-2 sRNA Lib

Height Threshold [FU] : 10

Overall Results for sample 11 : P-PhT-2 sRNA Lib

Number of peaks found: 2 Corr. Area 1: 1,290.6
 Noise: 0.1

Peak table for sample 11 : P-PhT-2 sRNA Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	166	1,581.24	14,460.8	
3	247	553.25	3,391.6	
4	10,380	75.00	10.9	Upper Marker

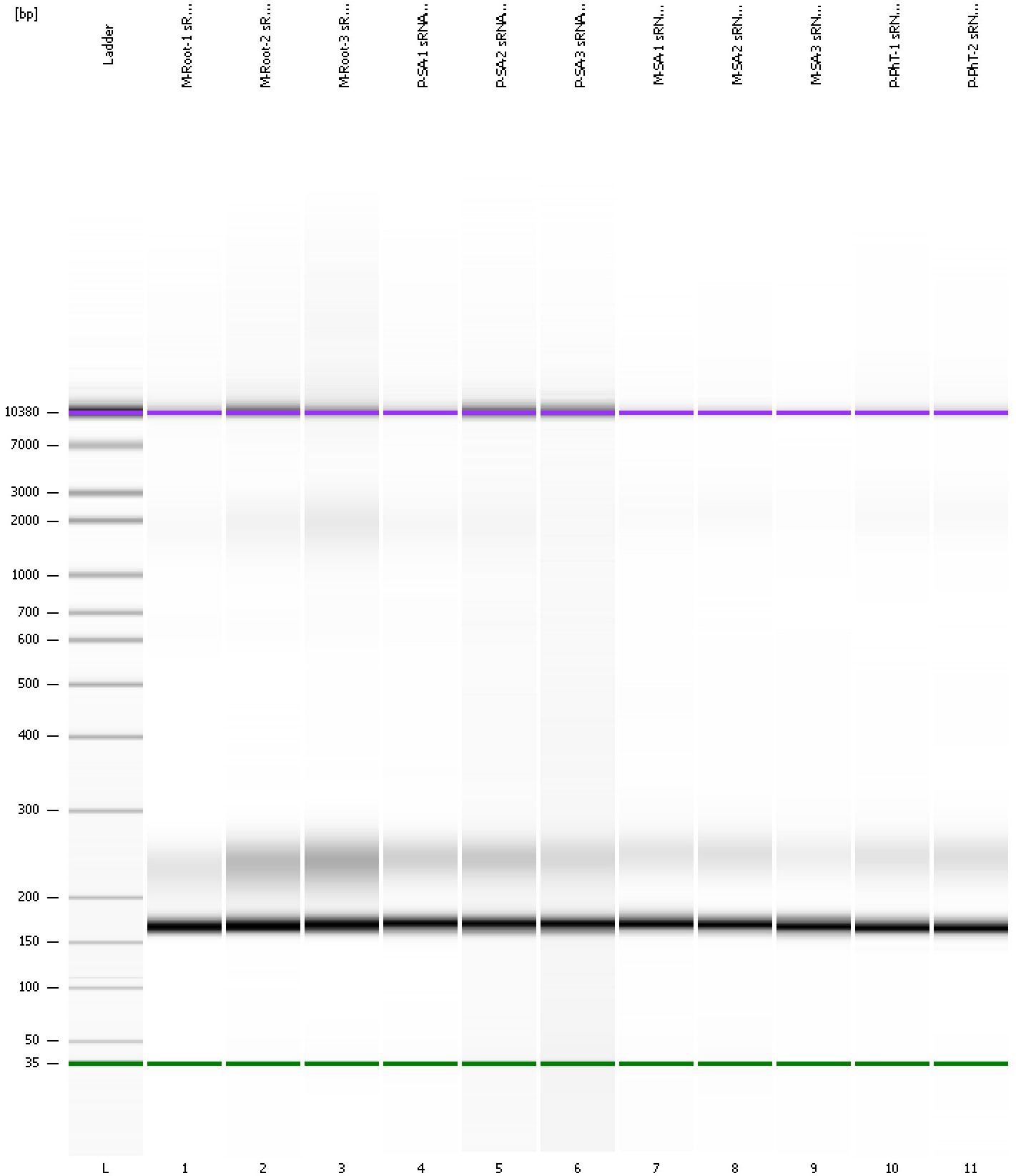
Region table for sample 11 : P-PhT-2 sRNA Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
148	289	191	17,686.3	2,126.69	1,290.6	89	19.6	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-12\2013-08-12_005.xad

Created: 8/12/2013 4:22:15 PM
Modified: 8/12/2013 5:08:34 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-12\2013-08-12_005.xad

Created: 8/12/2013 4:22:15 PM
 Modified: 8/12/2013 5:08:34 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		8/12/2013 5:02:38 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-08-12\2013-08-12_005.xad)		Instrument	Run		8/12/2013 4:22:15 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		8/12/2013 4:22:15 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		8/12/2013 4:22:15 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		8/12/2013 4:22:15 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		8/12/2013 4:22:15 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		8/12/2013 4:22:15 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		8/12/2013 4:22:15 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1