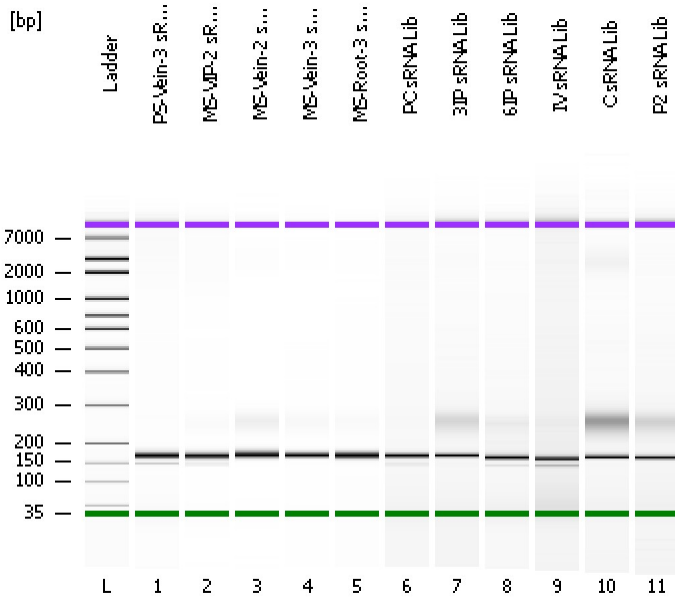


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-02\2013-05-02_002.xad

Created: 5/2/2013 11:18:33 AM
Modified: 5/2/2013 12:01:20 PM

Electrophoresis File Run Summary



Instrument Information:

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

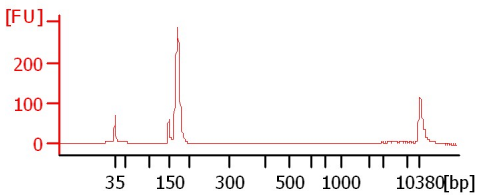
Assay Information:

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

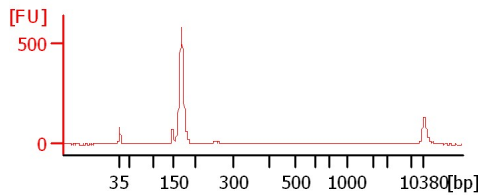
Chip Information:

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

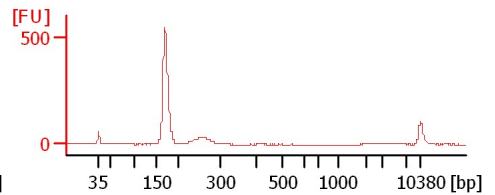
PS-Vein-3 sRNA Lib



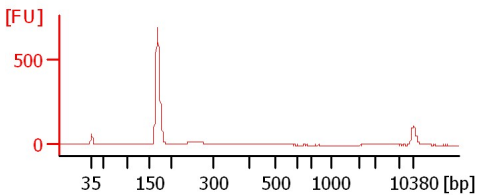
MS-VIP-2 sRNA Lib



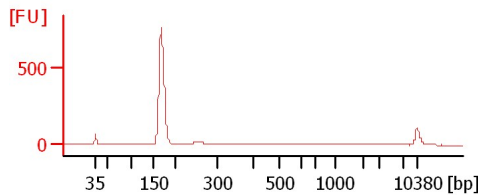
MS-Vein-2 sRNA Lib 1:2



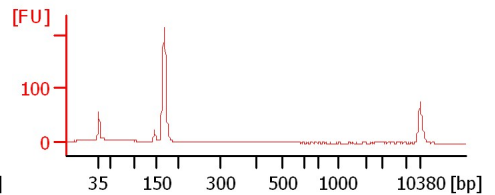
MS-Vein-3 sRNA Lib



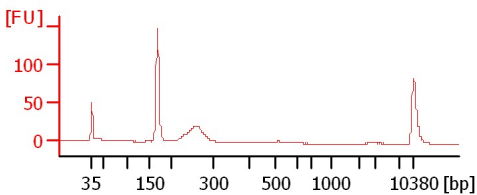
MS-Root-3 sRNA Lib



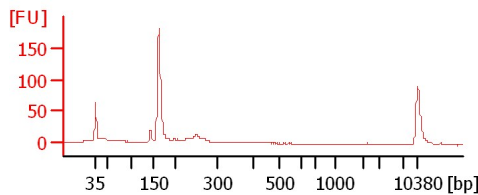
PC sRNA Lib



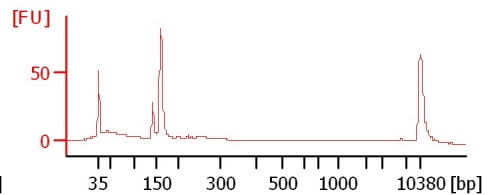
3IP sRNA Lib



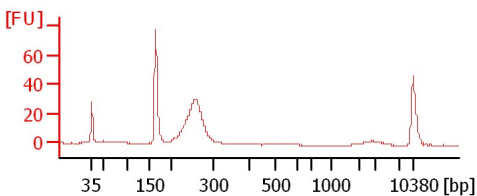
6IP sRNA Lib



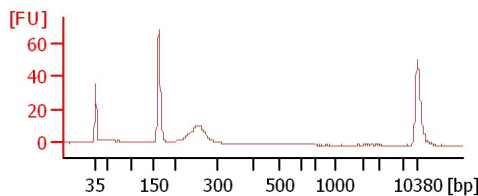
IV sRNA Lib



C sRNA Lib



P2 sRNA Lib



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-02\2013-05-02_002.xad

Created: 5/2/2013 11:18:33 AM
Modified: 5/2/2013 12:01:20 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
PS-Vein-3 sRNA Lib		<input type="checkbox"/>	✓			
MS-VIP-2 sRNA Lib		<input type="checkbox"/>	✓			
MS-Vein-2 sRNA Lib 1:2		<input type="checkbox"/>	✓			
MS-Vein-3 sRNA Lib		<input type="checkbox"/>	✓			
MS-Root-3 sRNA Lib		<input type="checkbox"/>	✓			
PC sRNA Lib		<input type="checkbox"/>	✓			
3IP sRNA Lib		<input type="checkbox"/>	✓			
6IP sRNA Lib		<input type="checkbox"/>	✓			
IV sRNA Lib		<input type="checkbox"/>	✓			
C sRNA Lib		<input type="checkbox"/>	✓			
P2 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\2013-05-02\2013-05-02_002.xad

Created: 5/2/2013 11:18:33 AM
Modified: 5/2/2013 12:01:20 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

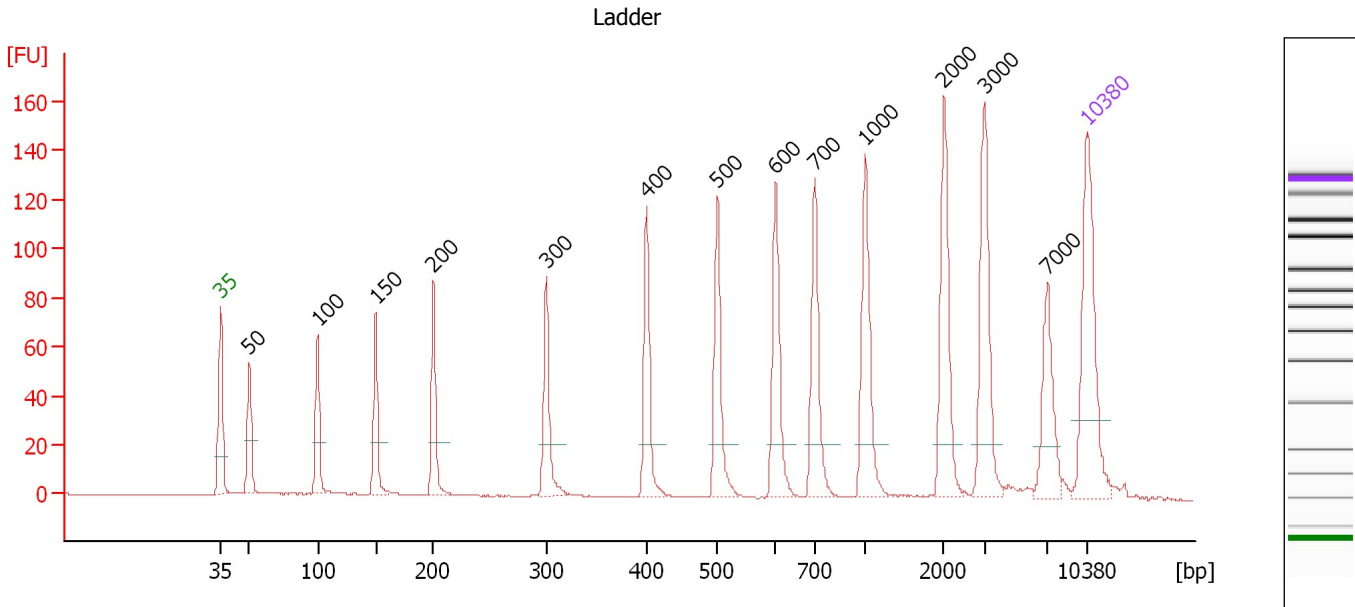
Ladder

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\2013-05-02\2013-05-02_002.xad

Created: 5/2/2013 11:18:33 AM
 Modified: 5/2/2013 12:01:20 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

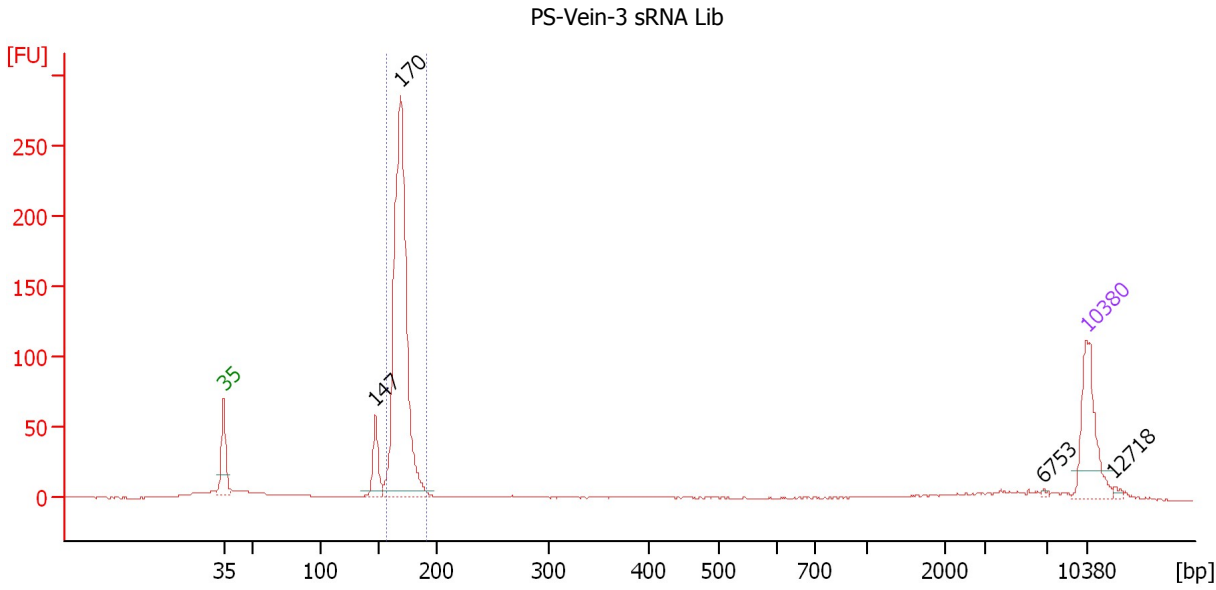
Peak table for Ladder

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\2013-05-02\2013-05-02_002.xad

Created: 5/2/2013 11:18:33 AM
 Modified: 5/2/2013 12:01:20 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : PS-Vein-3 sRNA Lib

Number of peaks found: 4 Corr. Area 1: 605.0
 Noise: 0.2

Peak table for sample 1 : PS-Vein-3 sRNA Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	147	60.96	627.2	
3	170	636.77	5,690.3	
4	6,753	1.51	0.3	
5	10,380	75.00	10.9	Upper Marker
6	12,718	0.00	0.0	

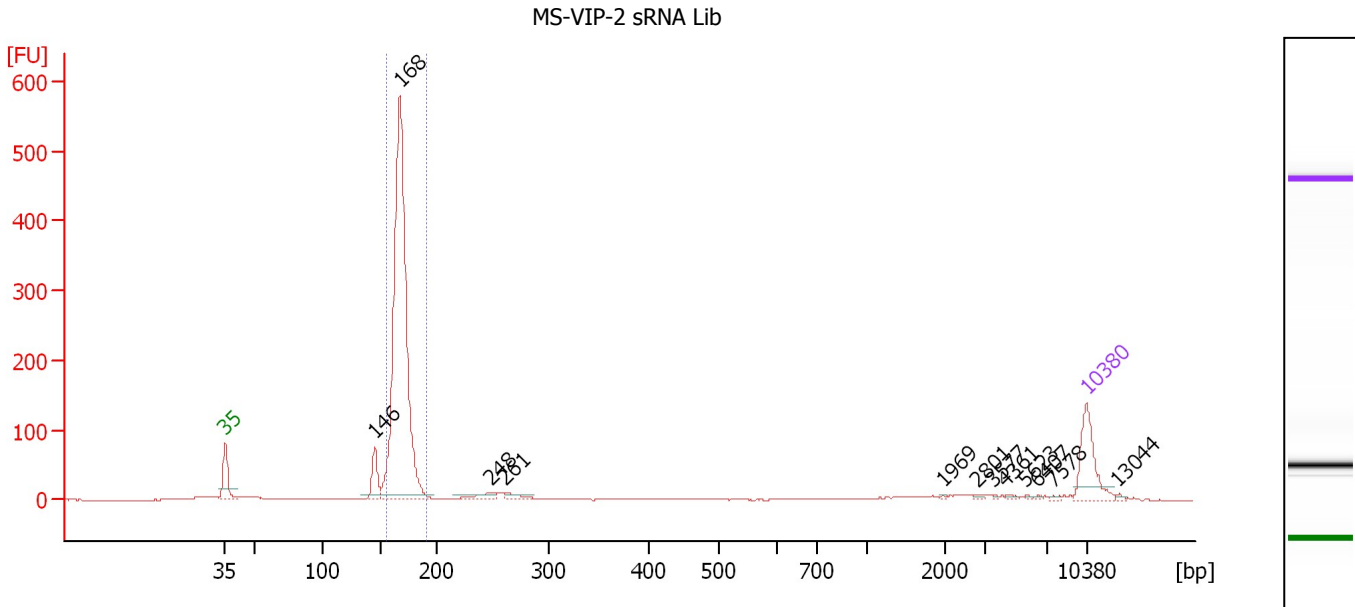
Region table for sample 1 : PS-Vein-3 sRNA Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
157	192	170	5,686.9	636.85	605.0	67	3.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-02\2013-05-02_002.xad

Created: 5/2/2013 11:18:33 AM
 Modified: 5/2/2013 12:01:20 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : MS-VIP-2 sRNA Lib

Number of peaks found: 12 Corr. Area 1: 1,198.3
 Noise: 0.2

Peak table for sample 2 : MS-VIP-2 sRNA Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	146	68.74	715.0	
3	168	1,079.45	9,763.7	
4	248	19.90	121.6	
5	261	15.53	90.2	
6	1,969	1.38	1.1	
7	2,801	2.90	1.6	
8	3,577	1.75	0.7	
9	4,361	3.11	1.1	
10	5,623	1.69	0.5	
11	6,407	2.02	0.5	
12	7,578	2.48	0.5	
13	10,380	75.00	10.9	Upper Marker
14	13,044	0.00	0.0	

Region table for sample 2 : MS-VIP-2 sRNA Lib

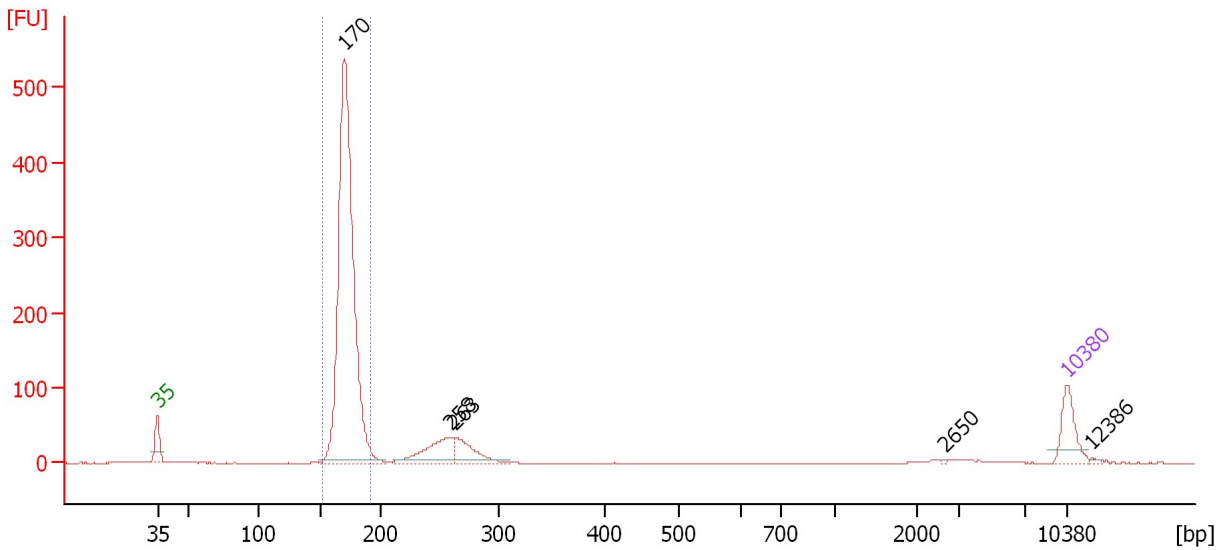
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
156	191	168	9,638.4	1,070.90	1,198.3	75	3.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-02\2013-05-02_002.xad

Created: 5/2/2013 11:18:33 AM
 Modified: 5/2/2013 12:01:20 PM

Electropherogram Summary Continued ...

MS-Vein-2 sRNA Lib 1:2



Overall Results for sample 3 : MS-Vein-2 sRNA Lib 1:2

Number of peaks found: 5 Corr. Area 1: 1,271.2
 Noise: 0.2

Peak table for sample 3 : MS-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	170	1,604.71	14,310.3	
3	258	148.76	873.7	
4	263	99.88	575.8	
5	2,650	1.85	1.1	
6	10,380	75.00	10.9	Upper Marker
7	12,386	0.00	0.0	

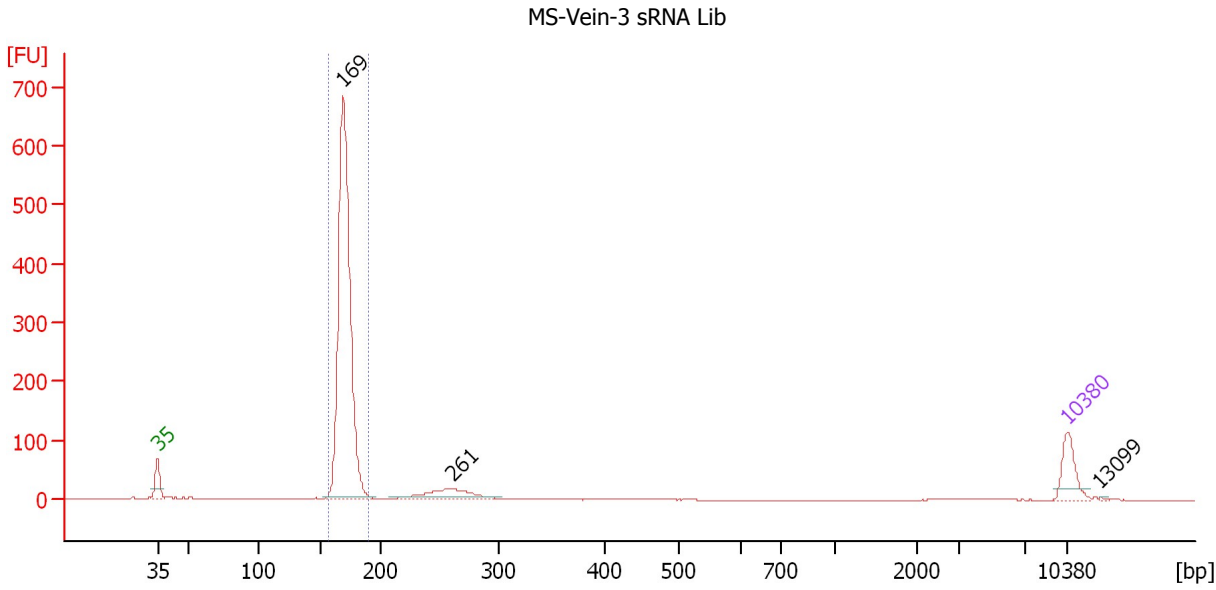
Region table for sample 3 : MS-Vein-2 sRNA Lib 1:2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
152	191	172	13,889.1	1,573.71	1,271.2	80	3.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-02\2013-05-02_002.xad

Created: 5/2/2013 11:18:33 AM
 Modified: 5/2/2013 12:01:20 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : MS-Vein-3 sRNA Lib

Number of peaks found: 3 Corr. Area 1: 1,275.3
 Noise: 0.1

Peak table for sample 4 : MS-Vein-3 sRNA Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	169	1,489.33	13,388.1	
3	261	122.05	709.7	
4	10,380	75.00	10.9	Upper Marker
5	13,099	0.00	0.0	

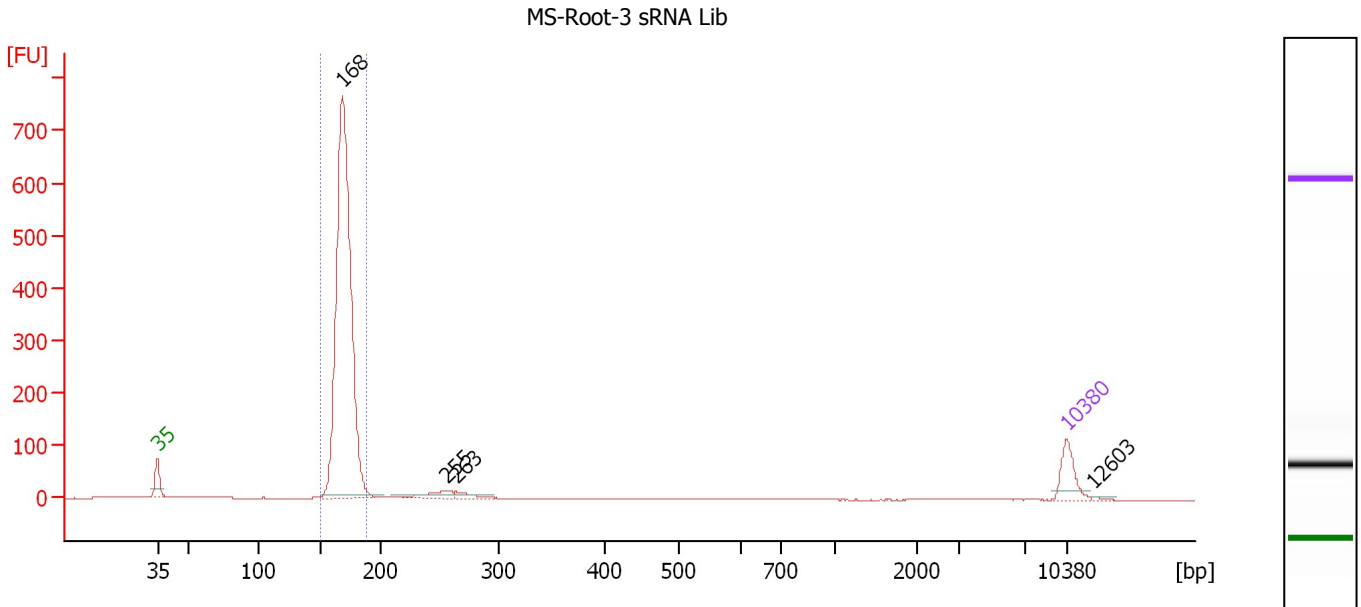
Region table for sample 4 : MS-Vein-3 sRNA Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
157	189	170	13,151.9	1,478.22	1,275.3	83	2.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-02\2013-05-02_002.xad

Created: 5/2/2013 11:18:33 AM
 Modified: 5/2/2013 12:01:20 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : MS-Root-3 sRNA Lib

Number of peaks found: 4 Corr. Area 1: 1,775.8
 Noise: 0.2

Peak table for sample 5 : MS-Root-3 sRNA Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	168	2,055.99	18,531.8	
3	255	47.93	285.0	
4	263	28.84	165.9	
5	10,380	75.00	10.9	Upper Marker
6	12,603	0.00	0.0	

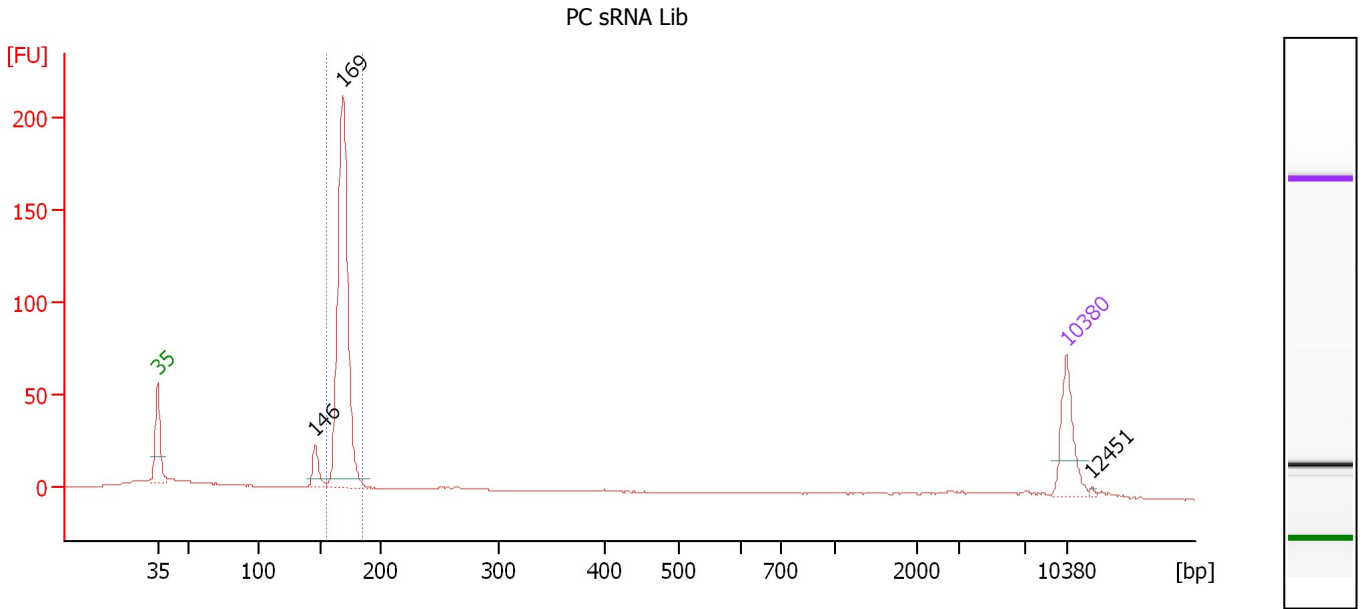
Region table for sample 5 : MS-Root-3 sRNA Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
150	188	170	18,291.1	2,046.93	1,775.8	88	3.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-02\2013-05-02_002.xad

Created: 5/2/2013 11:18:33 AM
 Modified: 5/2/2013 12:01:20 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : PC sRNA Lib

Number of peaks found: 3 Corr. Area 1: 346.5
 Noise: 0.2

Peak table for sample 6 : PC sRNA Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	146	46.47	482.9	
3	169	655.37	5,884.4	
4	10,380	75.00	10.9	Upper Marker
5	12,451	0.00	0.0	

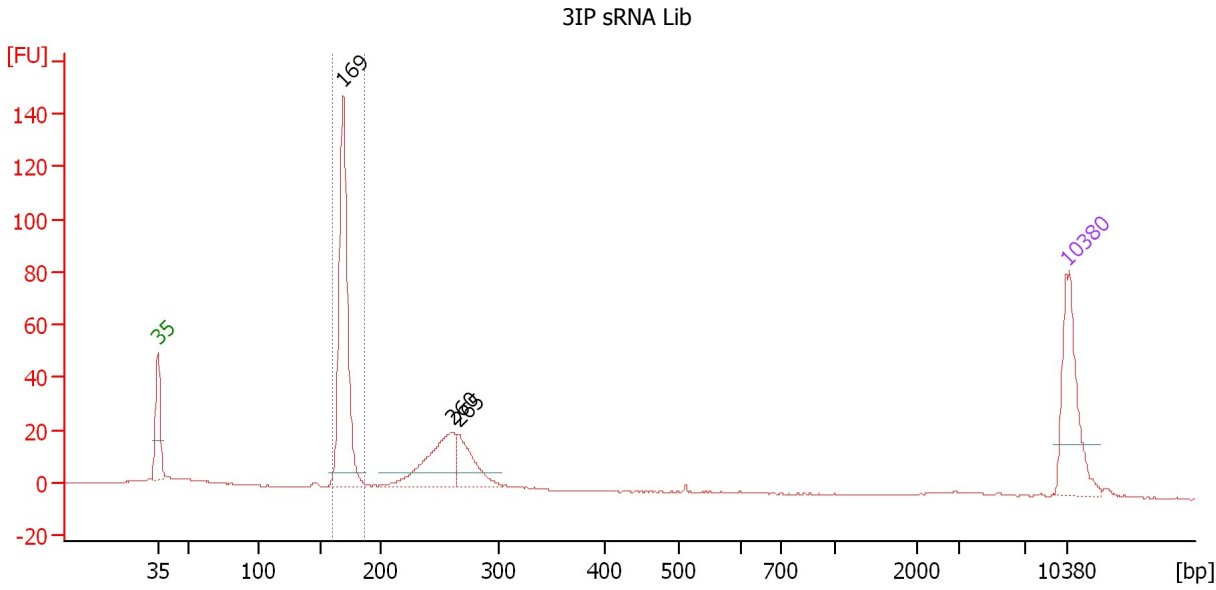
Region table for sample 6 : PC sRNA Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
155	184	169	5,980.0	665.78	346.5	62	2.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-02\2013-05-02_002.xad

Created: 5/2/2013 11:18:33 AM
 Modified: 5/2/2013 12:01:20 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : 3IP sRNA Lib

Number of peaks found: 3 Corr. Area 1: 198.0
 Noise: 0.2

Peak table for sample 7 : 3IP sRNA Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	169	277.25	2,490.1	
3	260	97.21	567.1	
4	265	54.48	311.0	
5	10,380	75.00	10.9	Upper Marker

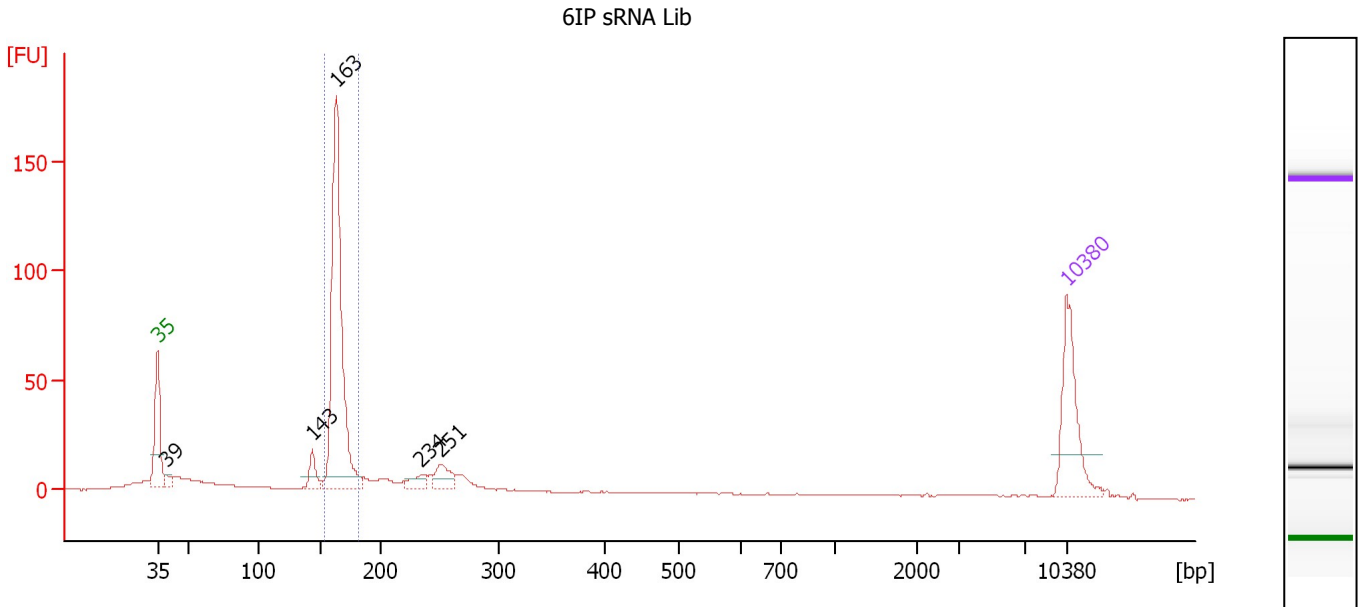
Region table for sample 7 : 3IP sRNA Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
160	186	170	2,490.5	278.62	198.0	48	2.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-02\2013-05-02_002.xad

Created: 5/2/2013 11:18:33 AM
 Modified: 5/2/2013 12:01:20 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : 6IP sRNA Lib

Number of peaks found: 5 Corr. Area 1: 280.3
 Noise: 0.1

Peak table for sample 8 : 6IP sRNA Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	39	10.74	417.3	
3	143	25.95	274.6	
4	163	384.13	3,566.6	
5	234	18.35	118.7	
6	251	30.11	181.8	
7	10,380	75.00	10.9	Upper Marker

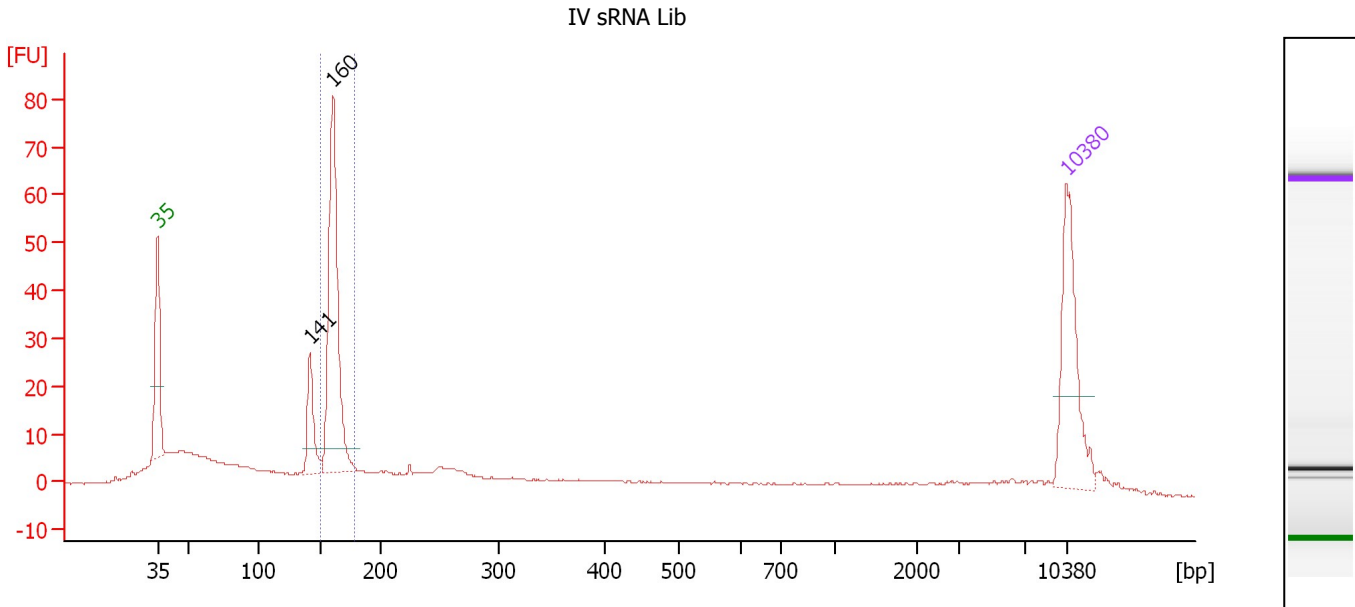
Region table for sample 8 : 6IP sRNA Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
153	181	164	3,579.5	388.21	280.3	50	2.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-02\2013-05-02_002.xad

Created: 5/2/2013 11:18:33 AM
 Modified: 5/2/2013 12:01:20 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : IV sRNA Lib

Number of peaks found: 2 Corr. Area 1: 126.1
 Noise: 0.2

Peak table for sample 9 : IV sRNA Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	141	47.96	514.1	
3	160	215.45	2,035.4	
4	10,380	75.00	10.9	Upper Marker

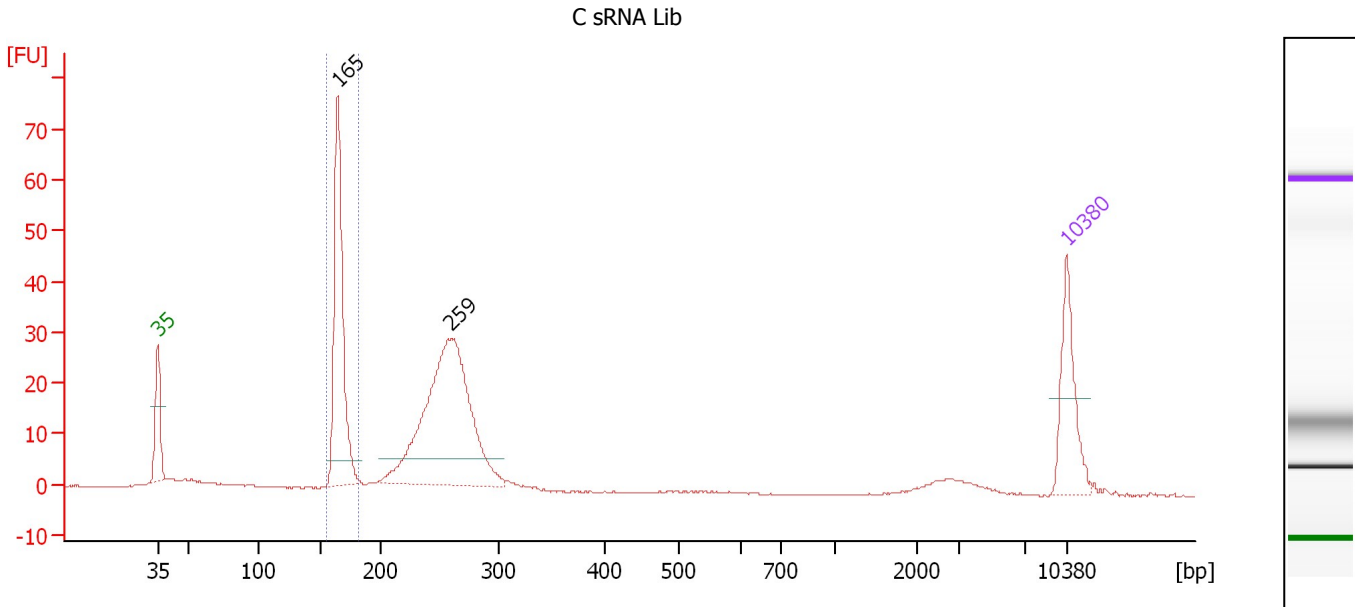
Region table for sample 9 : IV sRNA Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
149	178	161	2,276.5	242.56	126.1	29	3.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-02\2013-05-02_002.xad

Created: 5/2/2013 11:18:33 AM
 Modified: 5/2/2013 12:01:20 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : C sRNA Lib

Number of peaks found: 2 Corr. Area 1: 102.4
 Noise: 0.1

Peak table for sample 10 : C sRNA Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	165	294.90	2,715.9	
3	259	448.70	2,622.2	
4	10,380	75.00	10.9	Upper Marker

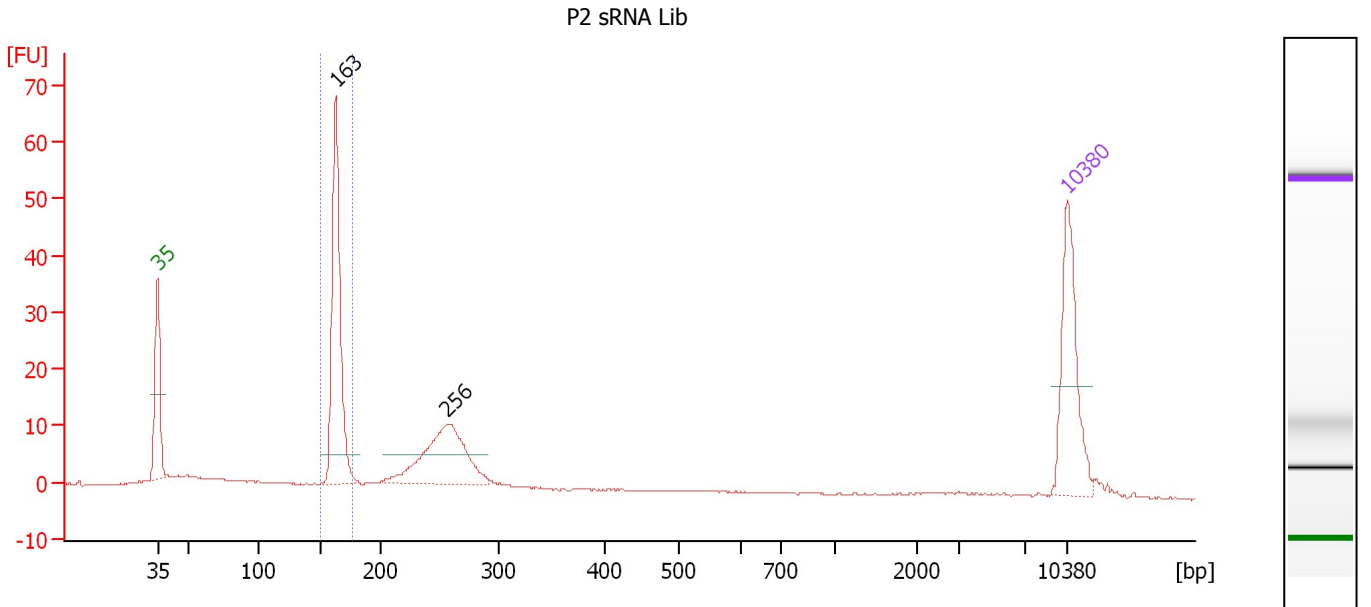
Region table for sample 10 : C sRNA Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
155	181	166	2,743.6	300.11	102.4	31	2.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-02\2013-05-02_002.xad

Created: 5/2/2013 11:18:33 AM
 Modified: 5/2/2013 12:01:20 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : P2 sRNA Lib

Number of peaks found: 2 Corr. Area 1: 86.8
 Noise: 0.1

Peak table for sample 11 : P2 sRNA Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	163	204.14	1,902.7	
3	256	121.67	720.7	
4	10,380	75.00	10.9	Upper Marker

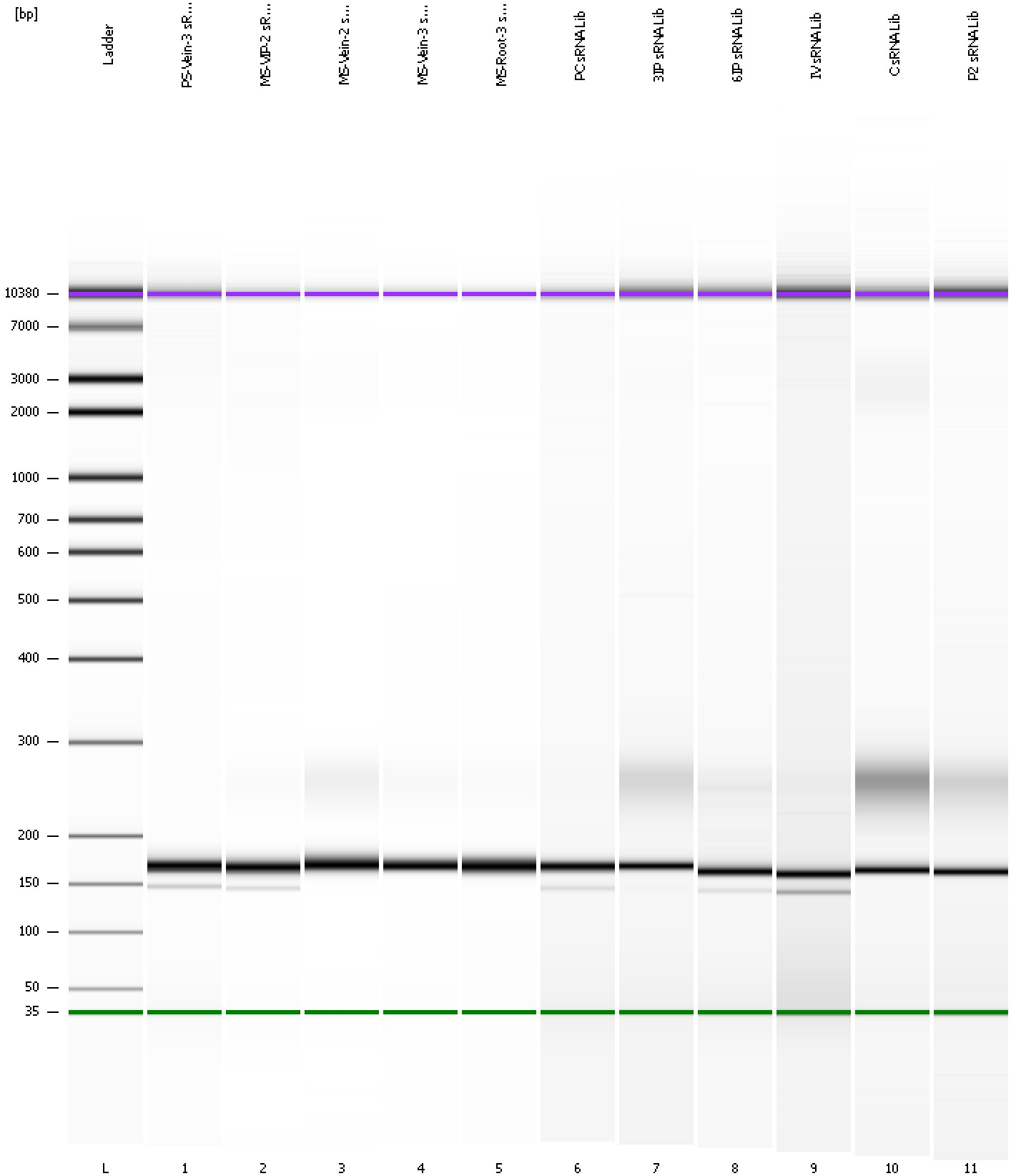
Region table for sample 11 : P2 sRNA Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
151	177	164	1,923.9	207.65	86.8	43	2.3	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-02\2013-05-02_002.xad

Created: 5/2/2013 11:18:33 AM
Modified: 5/2/2013 12:01:20 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-02\2013-05-02_002.xad

Created: 5/2/2013 11:18:33 AM
 Modified: 5/2/2013 12:01:20 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		5/2/2013 11:59:51 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-05-02\2013-05-02_002.xad)		Instrument	Run		5/2/2013 11:18:38 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		5/2/2013 11:18:38 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		5/2/2013 11:18:38 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		5/2/2013 11:18:38 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		5/2/2013 11:18:38 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		5/2/2013 11:18:38 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		5/2/2013 11:18:38 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1