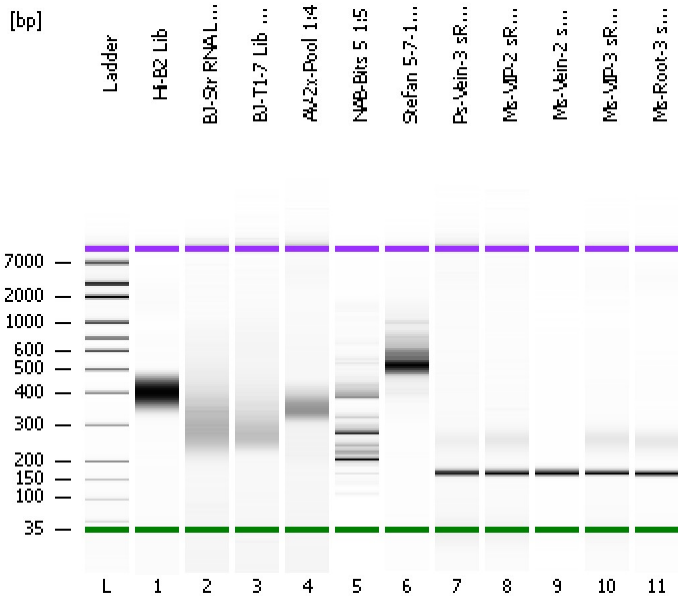


Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-15\2013-05-15\_002.xad

Created: 5/15/2013 4:28:27 PM  
 Modified: 5/15/2013 5:11:30 PM

**Electrophoresis File Run Summary**



Instrument Information:

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

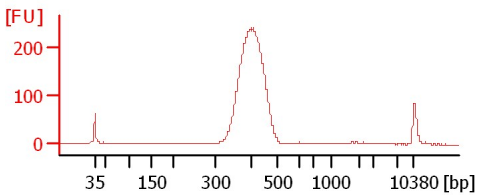
Assay Information:

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

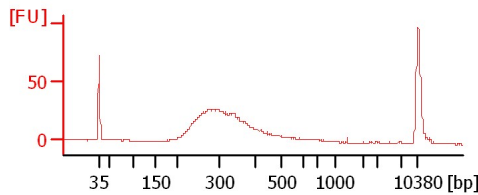
Chip Information:

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

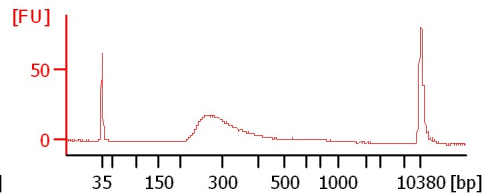
**Hi-B2 Lib**



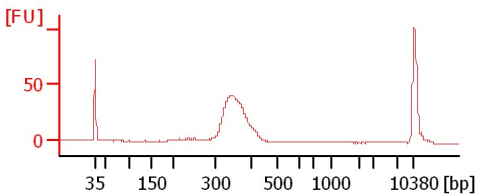
**BJ-Str RNA Lib Pool 1:3**



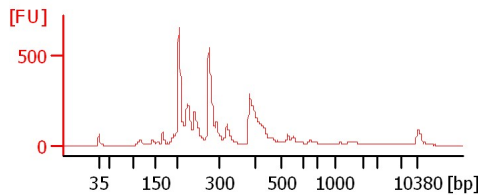
**BJ-T1-7 Lib Pool 1:5**



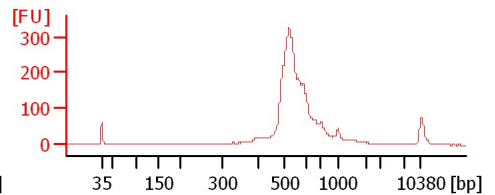
**AV-2x-Pool 1:4**



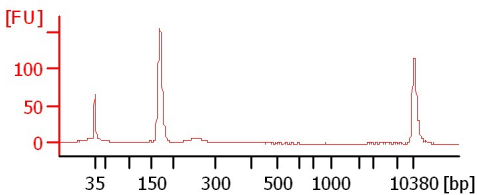
**NAB-Bits 5 1:5**



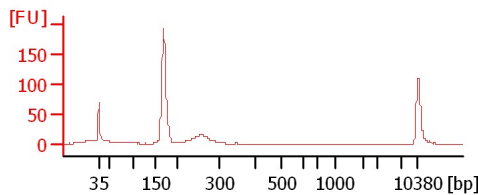
**Stefan 5-7-13 1:2**



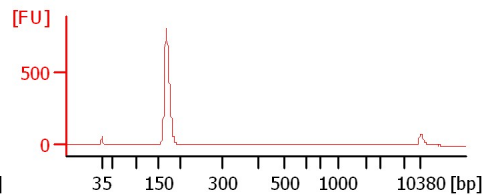
**Ps-Vein-3 sRNA Lib**



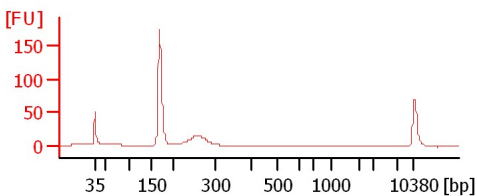
**Ms-VIP-2 sRNA Lib**



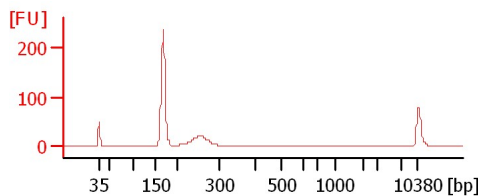
**Ms-Vein-2 sRNA Lib**



**Ms-VIP-3 sRNA Lib**



**Ms-Root-3 sRNA Lib 1:2**



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-15\2013-05-15\_002.xad

Created: 5/15/2013 4:28:27 PM  
Modified: 5/15/2013 5:11:30 PM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
Hi-B2 Lib		<input type="checkbox"/>	✓			
BJ-Str RNA Lib Pool 1:3		<input type="checkbox"/>	✓			
BJ-T1-7 Lib Pool 1:5		<input type="checkbox"/>	✓			
AV-2x-Pool 1:4		<input type="checkbox"/>	✓			
NAB-Bits 5 1:5		<input type="checkbox"/>	✓			
Stefan 5-7-13 1:2		<input type="checkbox"/>	✓			
Ps-Vein-3 sRNA Lib		<input type="checkbox"/>	✓			
Ms-VIP-2 sRNA Lib		<input type="checkbox"/>	✓			
Ms-Vein-2 sRNA Lib		<input type="checkbox"/>	✓			
Ms-VIP-3 sRNA Lib		<input type="checkbox"/>	✓			
Ms-Root-3 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\2013-05-15\2013-05-15\_002.xad

Created: 5/15/2013 4:28:27 PM  
Modified: 5/15/2013 5:11:30 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

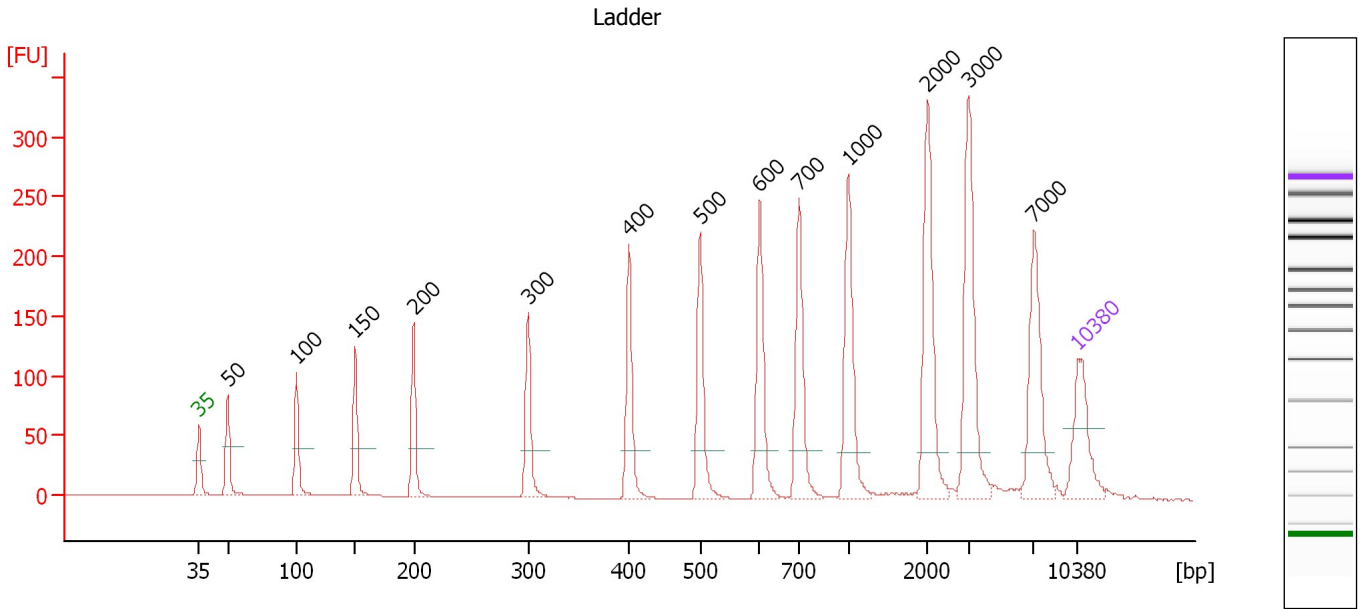
### Ladder

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\2013-05-15\2013-05-15\_002.xad

Created: 5/15/2013 4:28:27 PM  
 Modified: 5/15/2013 5:11:30 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.1

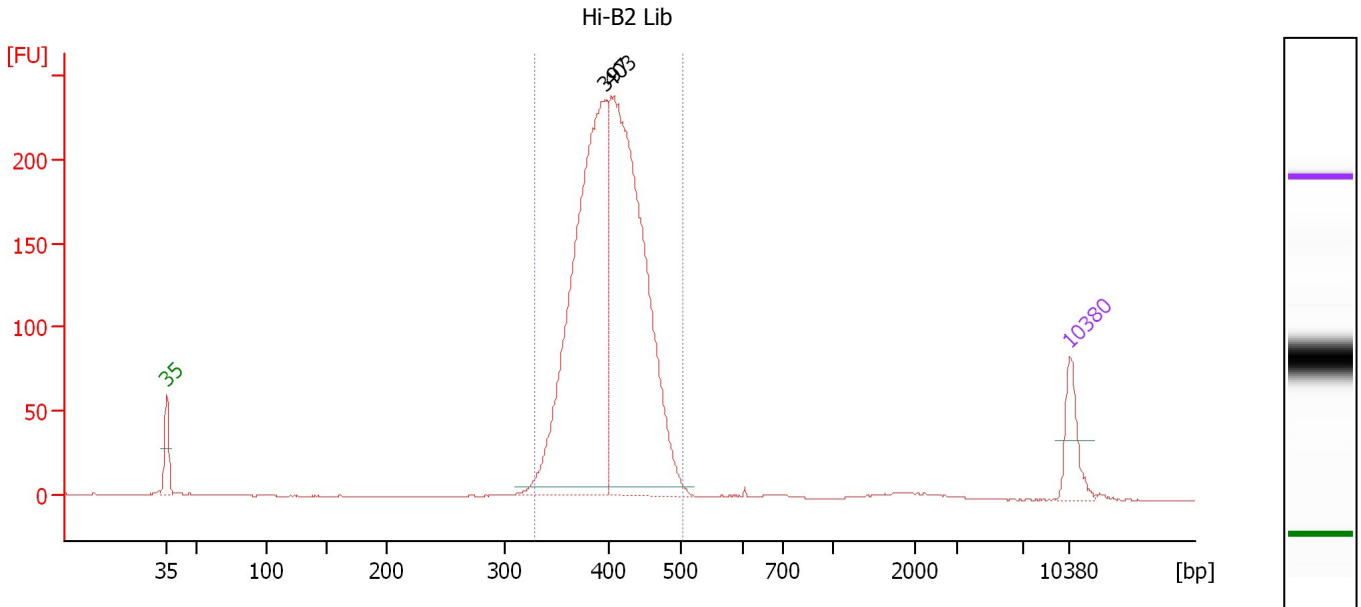
**Peak table for Ladder**

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\2013-05-15\2013-05-15\_002.xad

Created: 5/15/2013 4:28:27 PM  
 Modified: 5/15/2013 5:11:30 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : Hi-B2 Lib**

Number of peaks found: 2                      Corr. Area 1: 2,082.8  
 Noise: 0.2

**Peak table for sample 1 : Hi-B2 Lib**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	397	1,251.50	4,778.1	
3	403	1,298.16	4,878.4	
4	10,380	75.00	10.9	Upper Marker

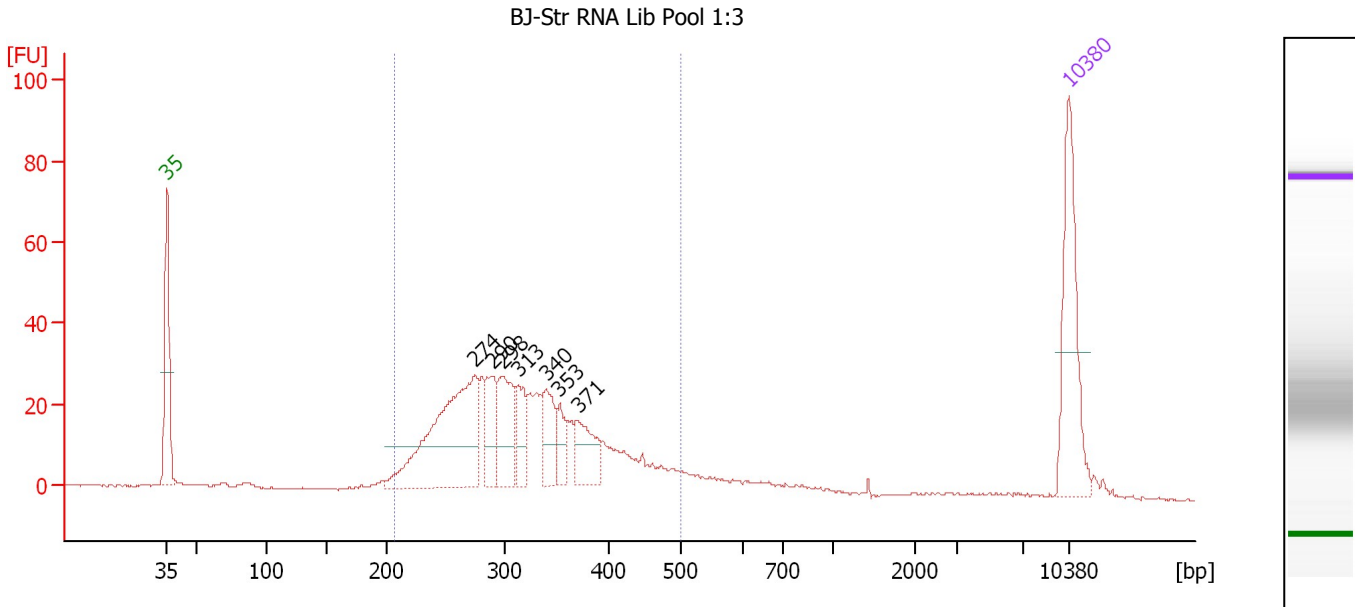
**Region table for sample 1 : Hi-B2 Lib**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
330	502	406	9,792.4	2,602.38	2,082.8	96	8.5	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-15\2013-05-15\_002.xad

Created: 5/15/2013 4:28:27 PM  
 Modified: 5/15/2013 5:11:30 PM

**Electropherogram Summary Continued ...**



**Setpoint Deviations for sample 2 : BJ-Str RNA Lib Pool 1:3**

Height Threshold [FU] : 10

**Overall Results for sample 2 : BJ-Str RNA Lib Pool 1:3**

Number of peaks found: 7                      Corr. Area 1: 560.2  
 Noise: 0.2

**Peak table for sample 2 : BJ-Str RNA Lib Pool 1:3**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	274	194.62	1,074.9	
3	290	44.09	230.4	
4	298	60.01	305.0	
5	313	33.66	163.1	
6	340	39.64	176.8	
7	353	21.34	91.6	
8	371	40.30	164.7	
9	10,380	75.00	10.9	Upper Marker

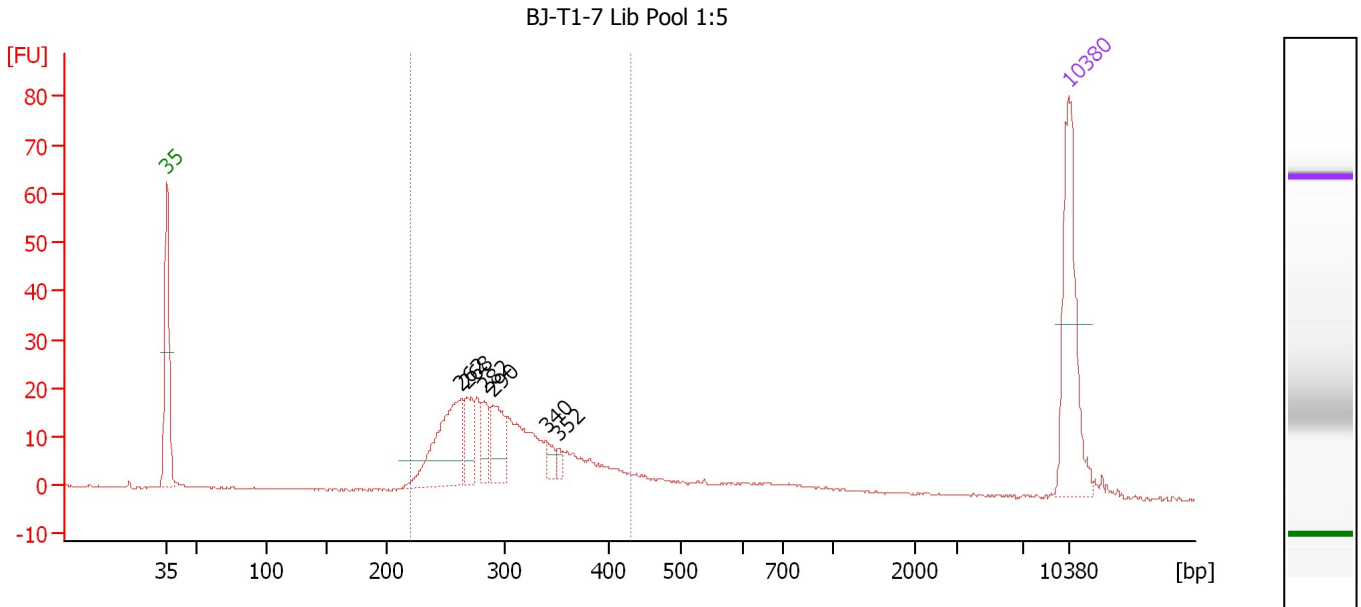
**Region table for sample 2 : BJ-Str RNA Lib Pool 1:3**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
206	500	320	3,100.8	622.47	560.2	88	20.0	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-15\2013-05-15\_002.xad

Created: 5/15/2013 4:28:27 PM  
 Modified: 5/15/2013 5:11:30 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : BJ-T1-7 Lib Pool 1:5**

Number of peaks found: 6                      Corr. Area 1: 284.1  
 Noise: 0.1

**Peak table for sample 3 : BJ-T1-7 Lib Pool 1:5**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	262	92.91	536.4	
3	268	29.82	168.7	
4	282	21.95	117.8	
5	290	37.83	197.6	
6	340	9.69	43.2	
7	352	6.15	26.5	
8	10,380	75.00	10.9	Upper Marker

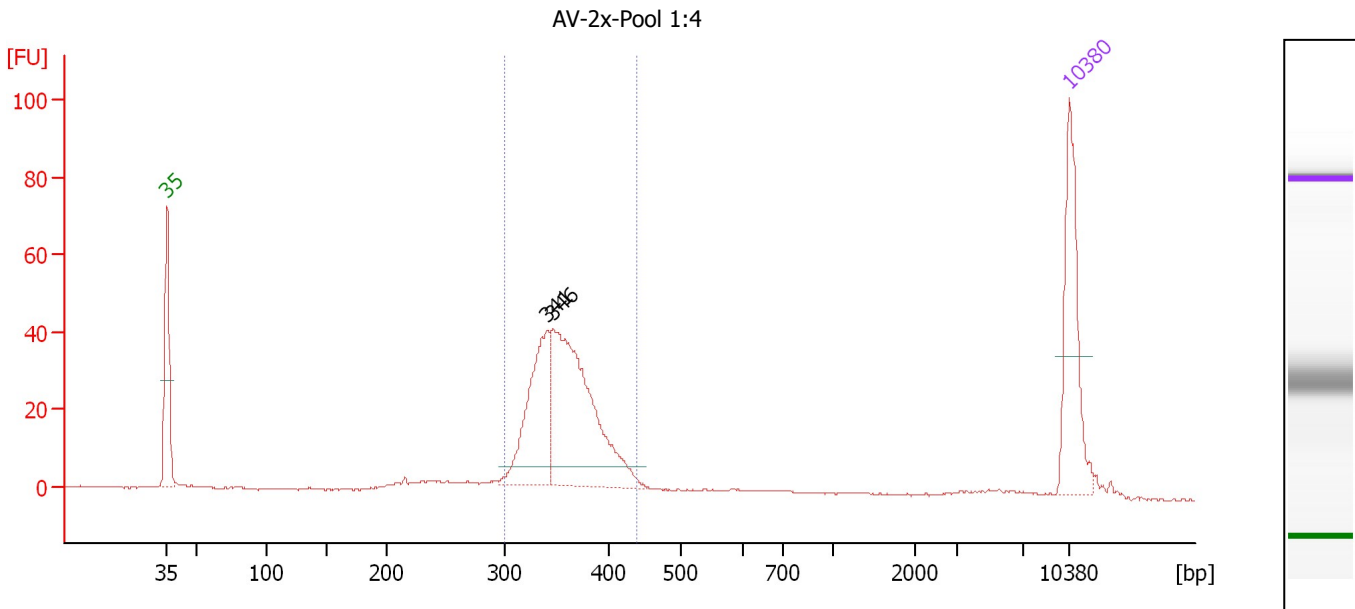
**Region table for sample 3 : BJ-T1-7 Lib Pool 1:5**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
219	431	303	1,947.8	378.01	284.1	82	15.9	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-15\2013-05-15\_002.xad

Created: 5/15/2013 4:28:27 PM  
 Modified: 5/15/2013 5:11:30 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : AV-2x-Pool 1:4**

Number of peaks found: 2                      Corr. Area 1: 341.4  
 Noise: 0.2

**Peak table for sample 4 : AV-2x-Pool 1:4**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	341	116.92	520.1	
3	346	229.21	1,002.7	
4	10,380	75.00	10.9	Upper Marker

**Region table for sample 4 : AV-2x-Pool 1:4**

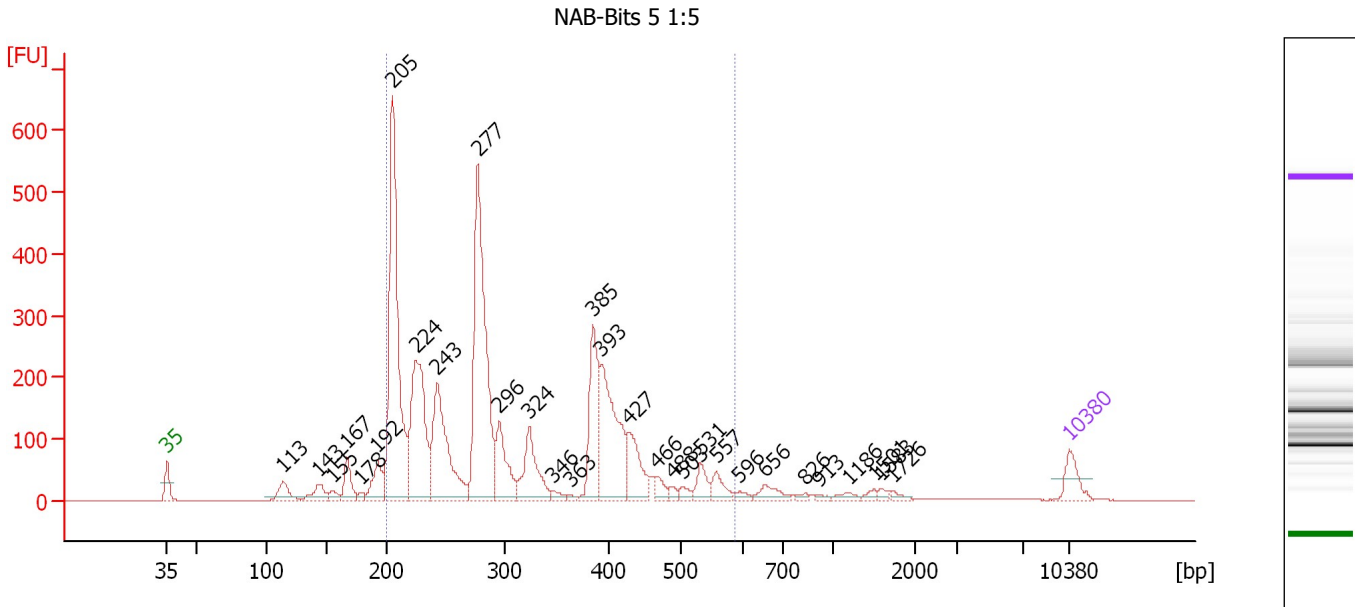
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
299	438	358	1,530.6	360.13	341.4	77	7.8	Blue



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-15\2013-05-15\_002.xad

Created: 5/15/2013 4:28:27 PM  
 Modified: 5/15/2013 5:11:30 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : NAB-Bits 5 1:5**

Number of peaks found: 30                      Corr. Area 1: 4,222.4  
 Noise: 0.1

**Peak table for sample 5 : NAB-Bits 5 1:5**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	113	105.48	1,408.2	
3	143	96.57	1,021.6	
4	155	36.74	359.6	
5	167	121.90	1,106.7	
6	178	21.06	179.3	
7	192	155.07	1,223.2	
8	205	1,344.01	9,944.2	
9	224	711.08	4,801.9	
10	243	598.08	3,730.3	
11	277	1,170.53	6,403.8	
12	296	255.53	1,310.2	
13	324	268.22	1,255.8	
14	346	26.69	116.9	
15	363	11.22	46.8	
16	385	375.13	1,475.6	
17	393	532.06	2,052.3	
18	427	215.03	762.5	
19	466	47.04	153.1	
20	488	24.13	74.9	
21	503	32.52	98.0	
22	531	74.51	212.4	
23	557	70.49	191.7	
24	596	19.88	50.6	
25	656	60.42	139.5	
26	826	13.56	24.9	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-15\2013-05-15\_002.xad

Created: 5/15/2013 4:28:27 PM  
 Modified: 5/15/2013 5:11:30 PM

### Electropherogram Summary Continued ...

#### ... Peak table for sample 5 : NAB-Bits 5 1:5

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	913	12.13	20.1	
28	1,186	24.77	31.6	
29	1,501	17.05	17.2	
30	1,583	15.84	15.2	
31	1,726	15.03	13.2	
32	10,380	75.00	10.9	Upper Marker

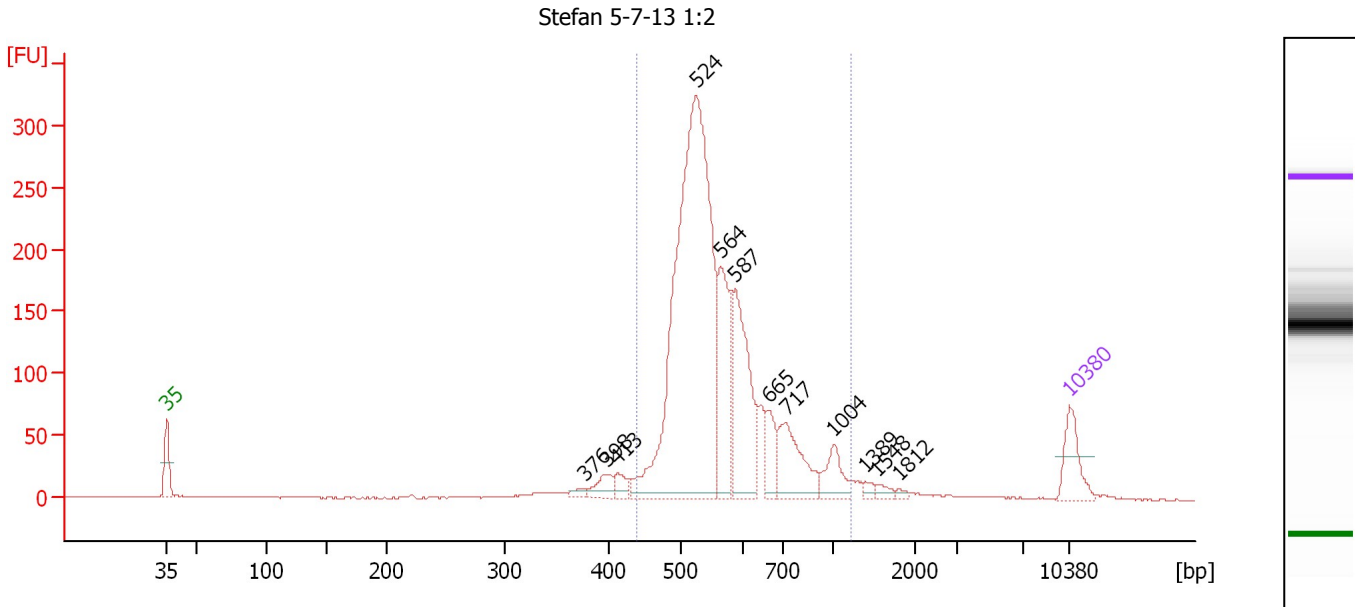
#### Region table for sample 5 : NAB-Bits 5 1:5

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	588	310	31,107.2	5,713.55	4,222.4	88	30.2	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-15\2013-05-15\_002.xad

Created: 5/15/2013 4:28:27 PM  
 Modified: 5/15/2013 5:11:30 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : Stefan 5-7-13 1:2**

Number of peaks found: 12                      Corr. Area 1: 2,159.8  
 Noise: 0.3

**Peak table for sample 6 : Stefan 5-7-13 1:2**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	376	15.71	63.3	
3	398	46.77	177.9	
4	413	33.14	121.7	
5	524	1,483.32	4,288.2	
6	564	248.44	667.4	
7	587	326.52	842.8	
8	665	75.36	171.7	
9	717	167.84	354.5	
10	1,004	71.82	108.4	
11	1,389	13.10	14.3	
12	1,548	14.26	14.0	
13	1,812	7.08	5.9	
14	10,380	75.00	10.9	Upper Marker

**Region table for sample 6 : Stefan 5-7-13 1:2**

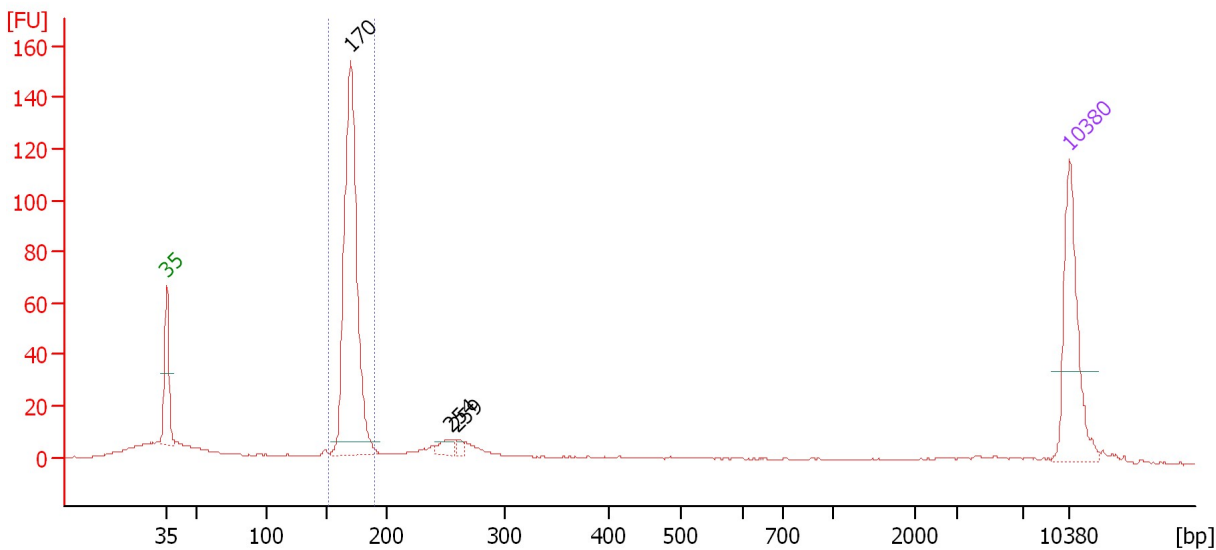
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
440	1,215	581	6,620.0	2,448.60	2,159.8	91	20.1	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-15\2013-05-15\_002.xad

Created: 5/15/2013 4:28:27 PM  
 Modified: 5/15/2013 5:11:30 PM

**Electropherogram Summary Continued ...**

Ps-Vein-3 sRNA Lib



**Overall Results for sample 7 : Ps-Vein-3 sRNA Lib**

Number of peaks found: 3                      Corr. Area 1: 324.9  
 Noise: 0.2

**Peak table for sample 7 : 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	170	337.35	3,010.9	
3	254	11.38	67.9	
4	259	5.57	32.5	
5	10,380	75.00	10.9	Upper Marker

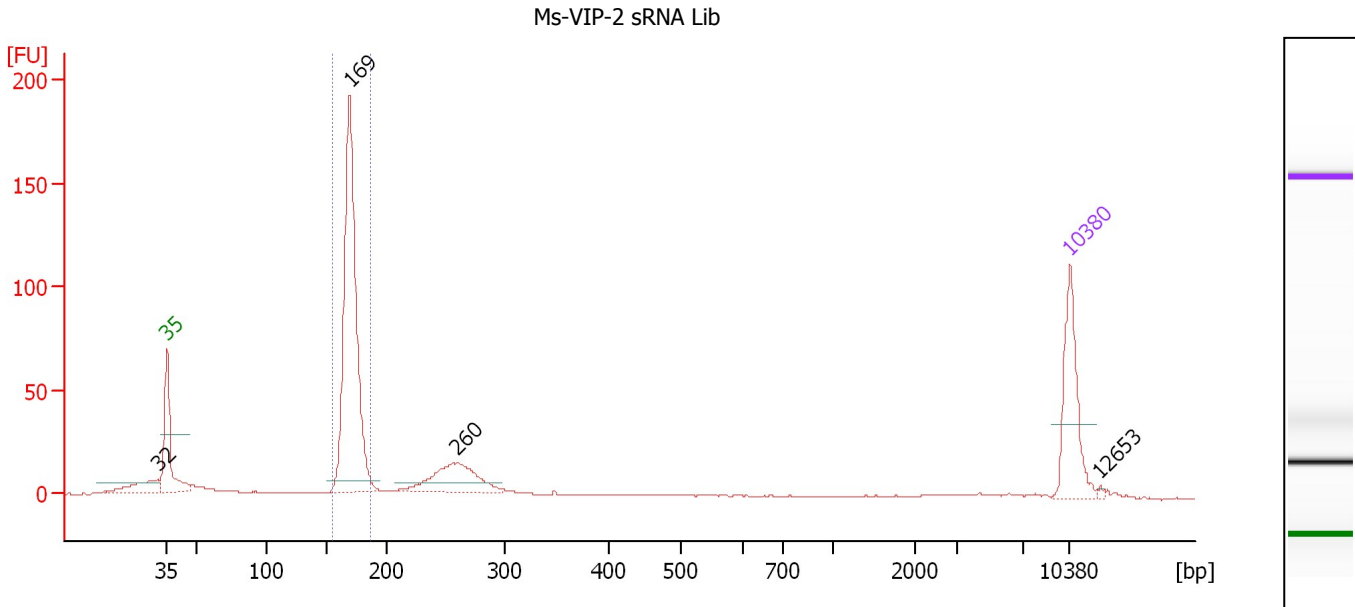
**Region table for sample 7 : Ps-Vein-3 sRNA Lib**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
151	189	170	3,104.0	348.64	324.9	55	3.3	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-15\2013-05-15\_002.xad

Created: 5/15/2013 4:28:27 PM  
 Modified: 5/15/2013 5:11:30 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : Ms-VIP-2 sRNA Lib**

Number of peaks found: 4                      Corr. Area 1: 380.3  
 Noise: 0.2

**Peak table for sample 8 : Ms-VIP-2 sRNA Lib**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	32	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	169	450.13	4,036.6	
4	260	95.89	559.1	
5	10,380	75.00	10.9	Upper Marker
6	12,653	0.00	0.0	

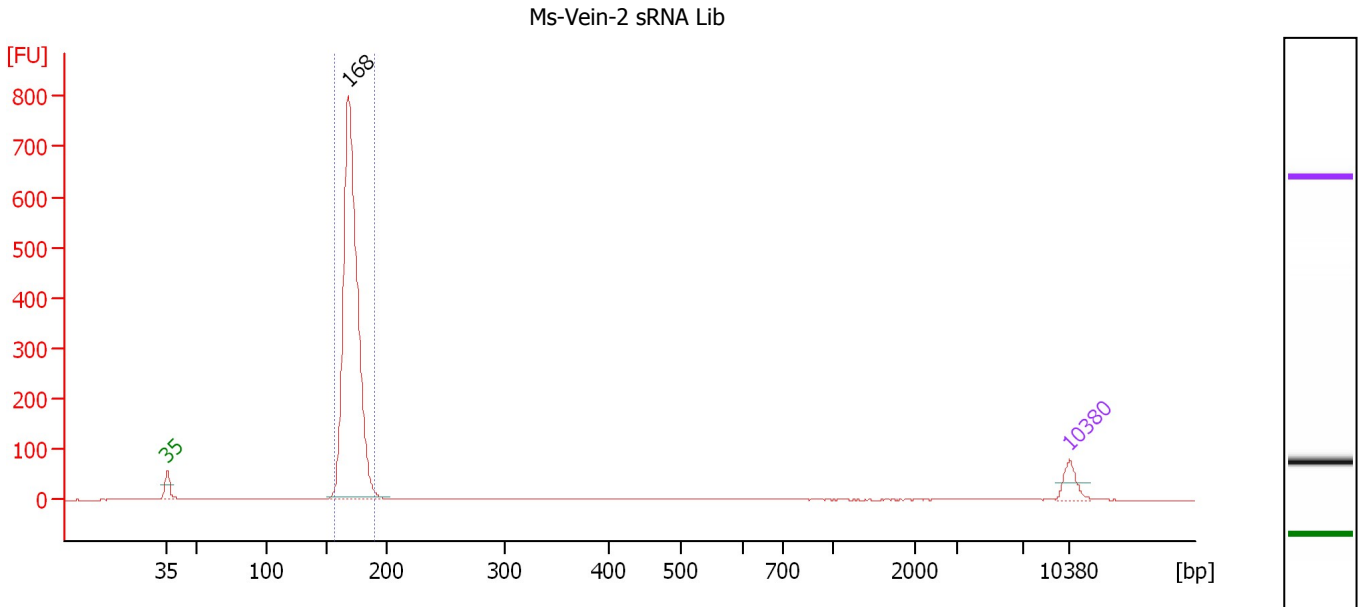
**Region table for sample 8 : Ms-VIP-2 sRNA Lib**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
155	187	170	4,064.7	455.91	380.3	58	3.2	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-15\2013-05-15\_002.xad

Created: 5/15/2013 4:28:27 PM  
 Modified: 5/15/2013 5:11:30 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : Ms-Vein-2 sRNA Lib**

Number of peaks found: 1                      Corr. Area 1: 1,799.3  
 Noise: 0.2

**Peak table for sample 9 : Ms-Vein-2 sRNA Lib**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	168	3,077.30	27,714.5	
3	10,380	75.00	10.9	Upper Marker

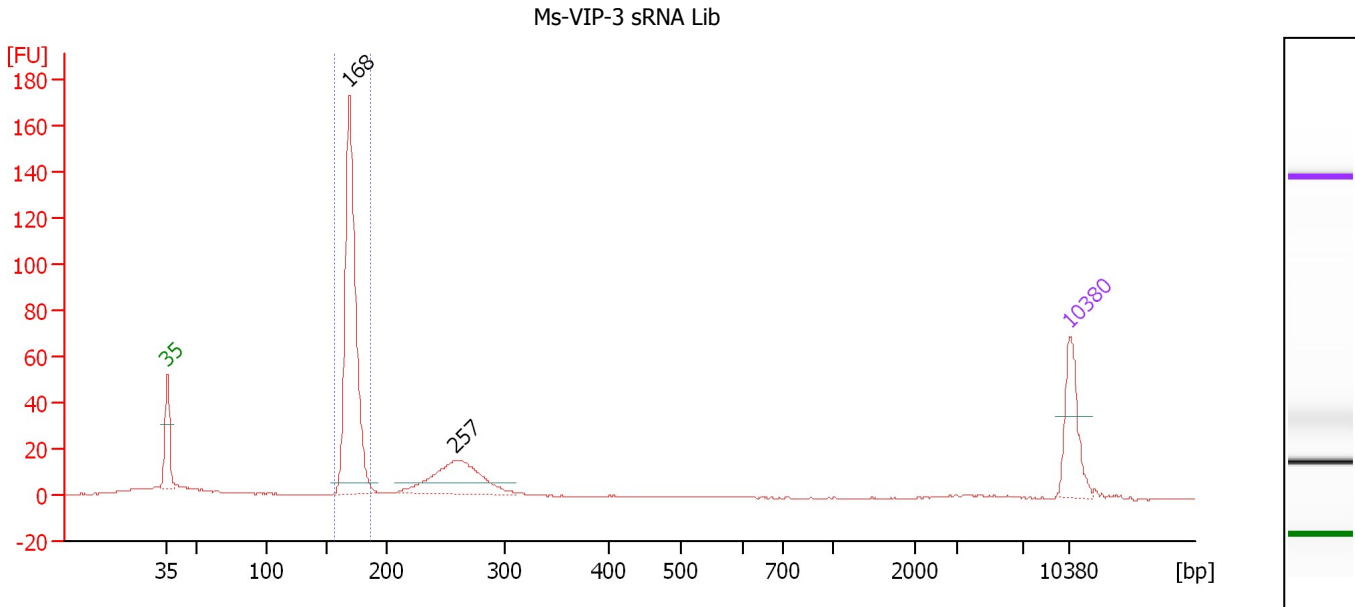
**Region table for sample 9 : Ms-Vein-2 sRNA Lib**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
157	189	170	26,987.5	3,034.72	1,799.3	89	3.4	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-15\2013-05-15\_002.xad

Created: 5/15/2013 4:28:27 PM  
 Modified: 5/15/2013 5:11:30 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : Ms-VIP-3 sRNA Lib**

Number of peaks found: 2                      Corr. Area 1: 296.6  
 Noise: 0.2

**Peak table for sample 10 : Ms-VIP-3 sRNA Lib**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	168	576.15	5,185.1	
3	257	175.08	1,030.8	
4	10,380	75.00	10.9	Upper Marker

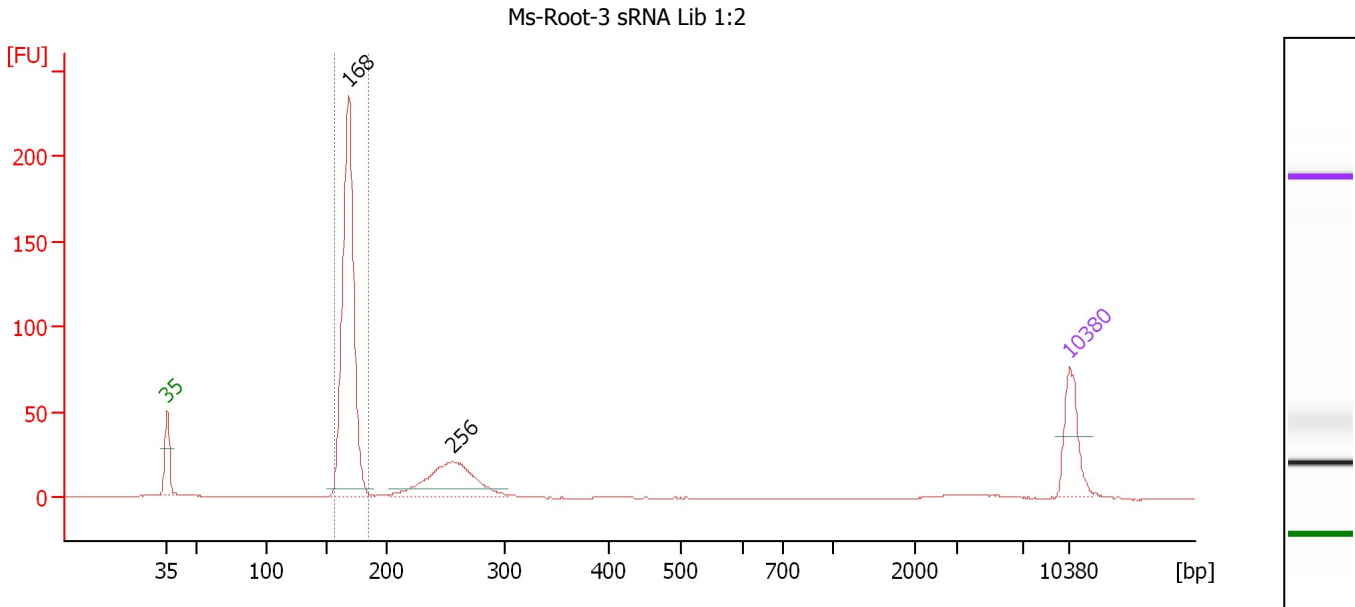
**Region table for sample 10 : Ms-VIP-3 sRNA Lib**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
157	186	170	5,140.5	577.71	296.6	58	2.7	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-15\2013-05-15\_002.xad

Created: 5/15/2013 4:28:27 PM  
 Modified: 5/15/2013 5:11:30 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : Ms-Root-3 sRNA Lib 1:2**

Number of peaks found: 2                      Corr. Area 1: 430.7  
 Noise: 0.1

**Peak table for sample 11 : Ms-Root-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	168	733.16	6,618.7	
3	256	215.32	1,275.2	
4	10,380	75.00	10.9	Upper Marker

**Region table for sample 11 : Ms-Root-3 sRNA Lib 1:2**

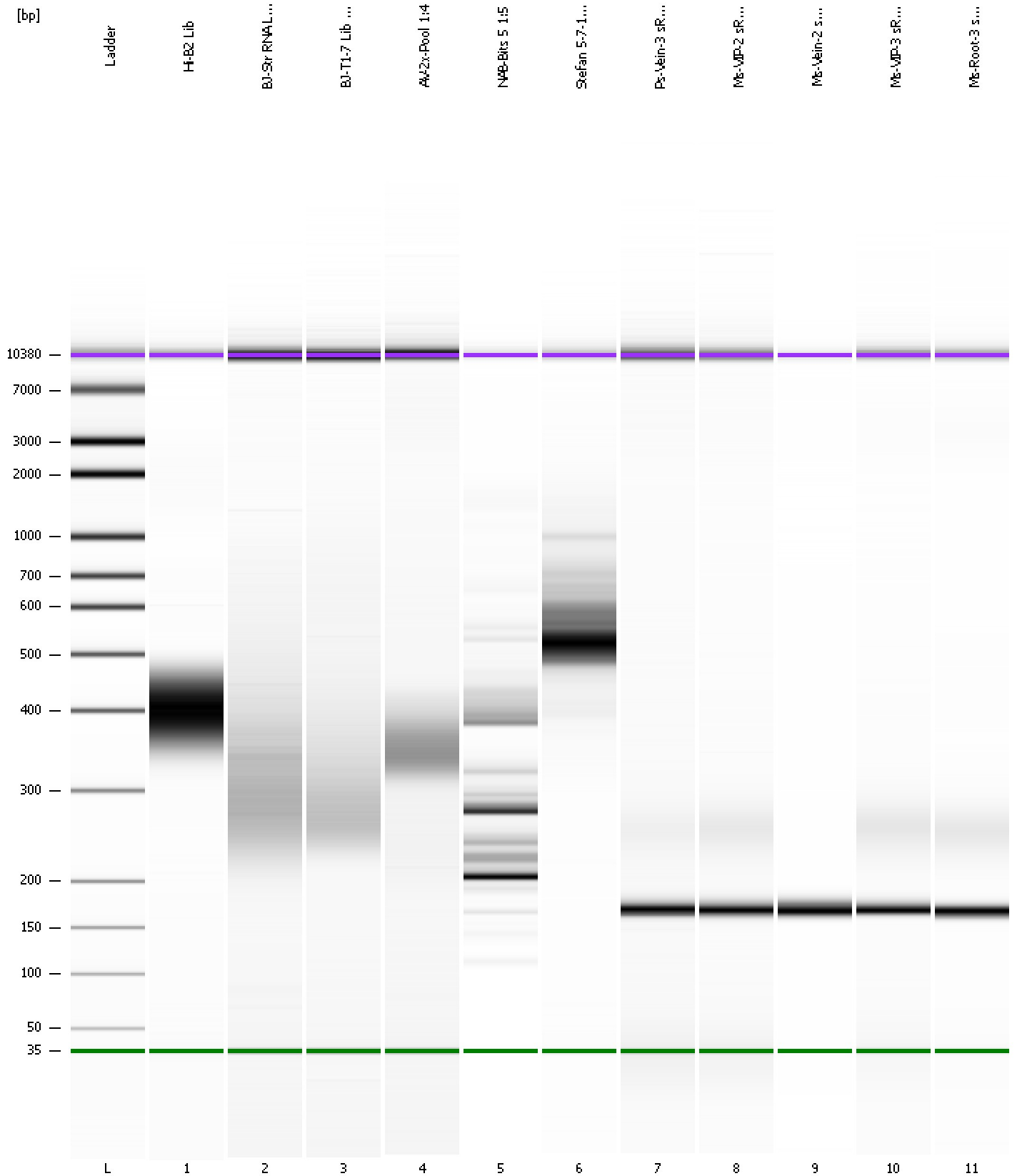
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
156	185	168	6,592.8	730.76	430.7	67	2.8	Blue



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-15\2013-05-15\_002.xad

Created: 5/15/2013 4:28:27 PM  
Modified: 5/15/2013 5:11:30 PM

**Gel Image**



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-15\2013-05-15\_002.xad

Created: 5/15/2013 4:28:27 PM  
 Modified: 5/15/2013 5:11:30 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		5/15/2013 5:09:45 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-05-15\2013-05-15_002.xad)		Instrument	Run		5/15/2013 4:28:33 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		5/15/2013 4:28:33 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		5/15/2013 4:28:33 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		5/15/2013 4:28:33 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		5/15/2013 4:28:33 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		5/15/2013 4:28:33 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		5/15/2013 4:28:33 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1