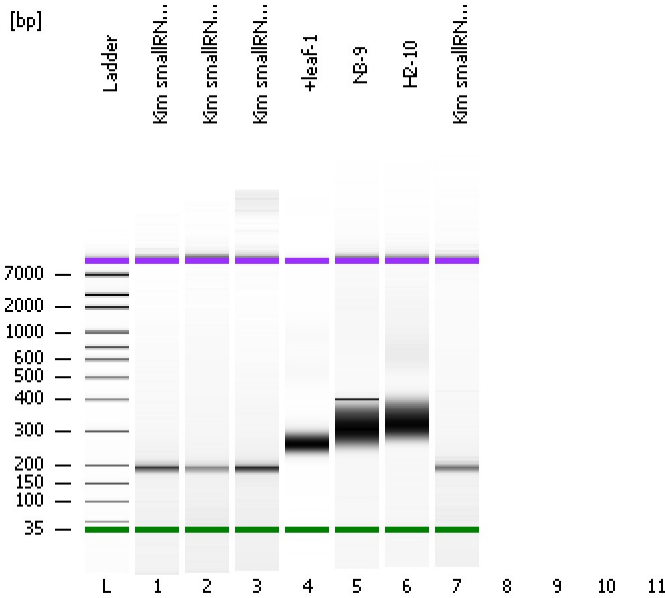


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-21\2012-06-21\_004.xad

Created: 6/21/2012 2:10:54 PM  
Modified: 6/21/2012 3:00:33 PM

**Electrophoresis File Run Summary**



Instrument Information:

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

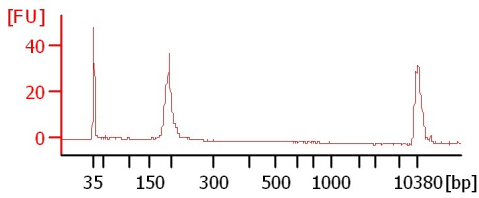
Assay Information:

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:

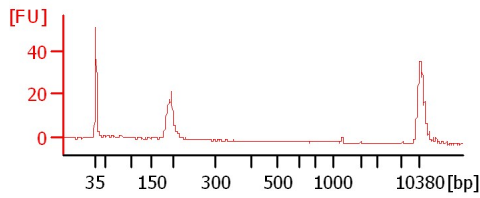
Chip Lot #:  
Reagent Kit Lot #:  
Chip Comments:

**Kim smallRNA size selection (140-160)**



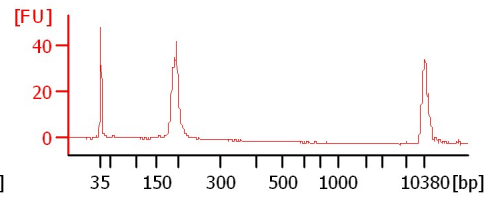
**+leaf-1**

**Kim smallRNA size selection (140-160)**

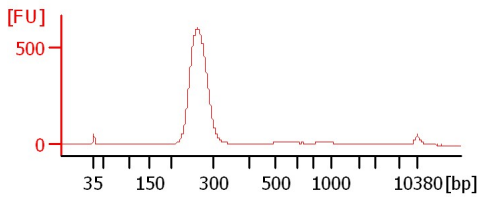


**N3-9**

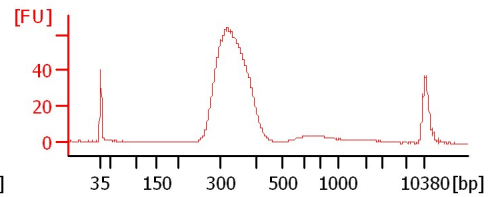
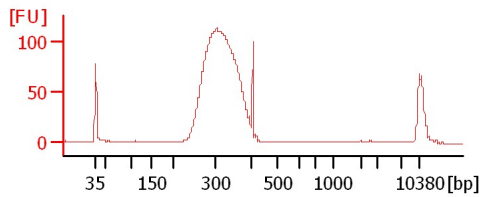
**Kim smallRNA size selection (140-160)**



**H2-10**



**Kim smallRNA pool (3 collections)**



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-21\2012-06-21\_004.xad

Created: 6/21/2012 2:10:54 PM  
Modified: 6/21/2012 3:00:33 PM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
Kim smallRNA size selection (140-160)		<input type="checkbox"/>	✓			
Kim smallRNA size selection (140-160)		<input type="checkbox"/>	✓			
Kim smallRNA size selection (140-160)		<input type="checkbox"/>	✓			
+leaf-1		<input type="checkbox"/>	✓			
N3-9		<input type="checkbox"/>	✓			
H2-10		<input type="checkbox"/>	✓			
Kim smallRNA pool (3 collections)		<input type="checkbox"/>	✓			
		<input type="checkbox"/>				
		<input type="checkbox"/>				
		<input type="checkbox"/>				
		<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\2012-06-21\2012-06-21\_004.xad

Created: 6/21/2012 2:10:54 PM  
Modified: 6/21/2012 3:00:33 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

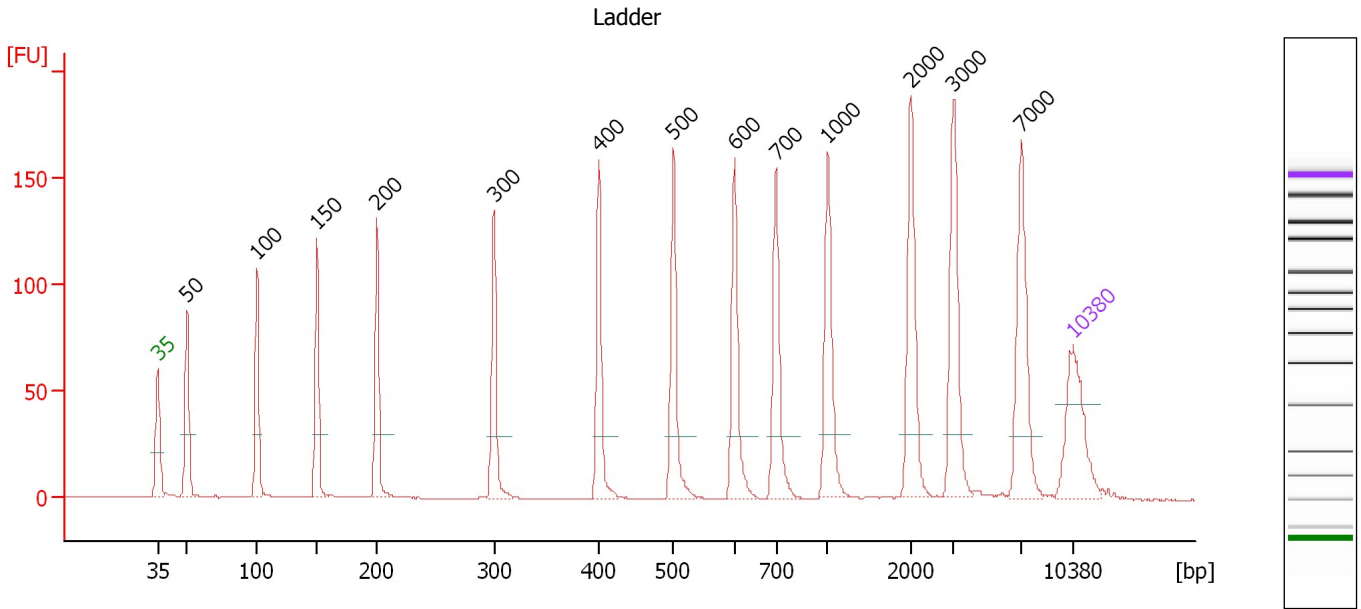
**Ladder**

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\2012-06-21\2012-06-21\_004.xad

Created: 6/21/2012 2:10:54 PM  
 Modified: 6/21/2012 3:00:33 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.1

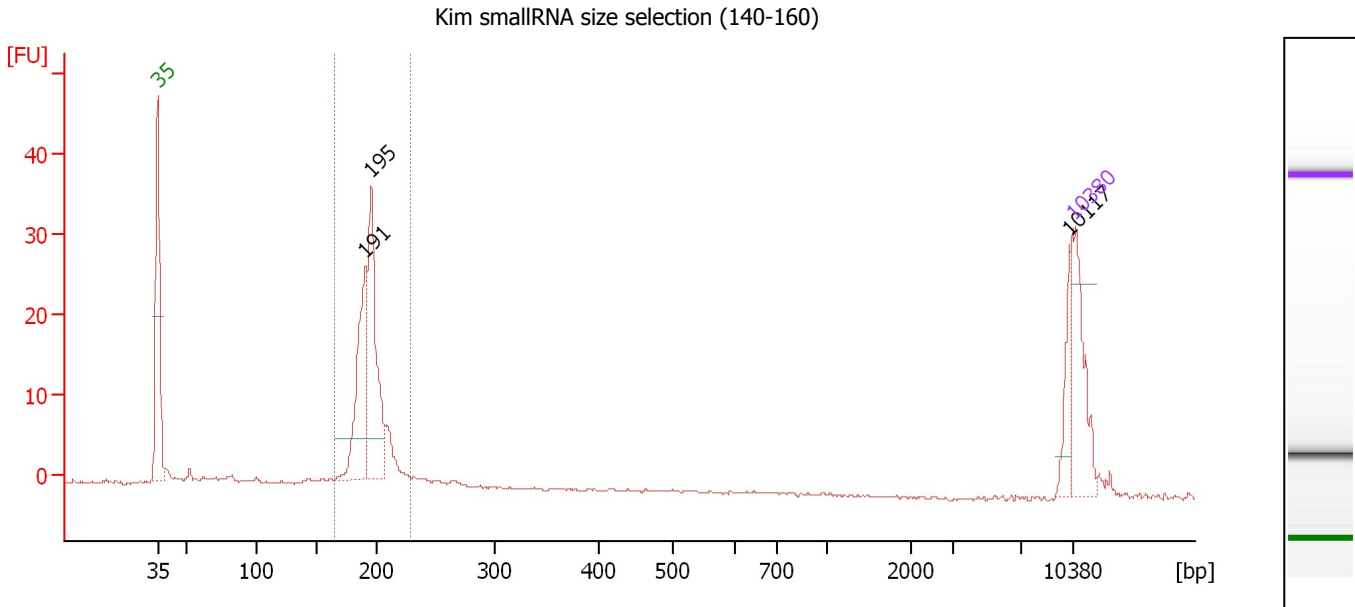
**Peak table for Ladder**

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\2012-06-21\2012-06-21\_004.xad

Created: 6/21/2012 2:10:54 PM  
 Modified: 6/21/2012 3:00:33 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : Kim smallRNA size selection (140-160)**

Number of peaks found: 3                      Corr. Area 1: 101.8  
 Noise: 0.1

**Peak table for sample 1 : Kim smallRNA size selection (140-160)**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	191	168.96	1,342.8	
3	195	193.87	1,502.9	
4	10,117	37.08	5.6	
5	10,380	75.00	10.9	Upper Marker

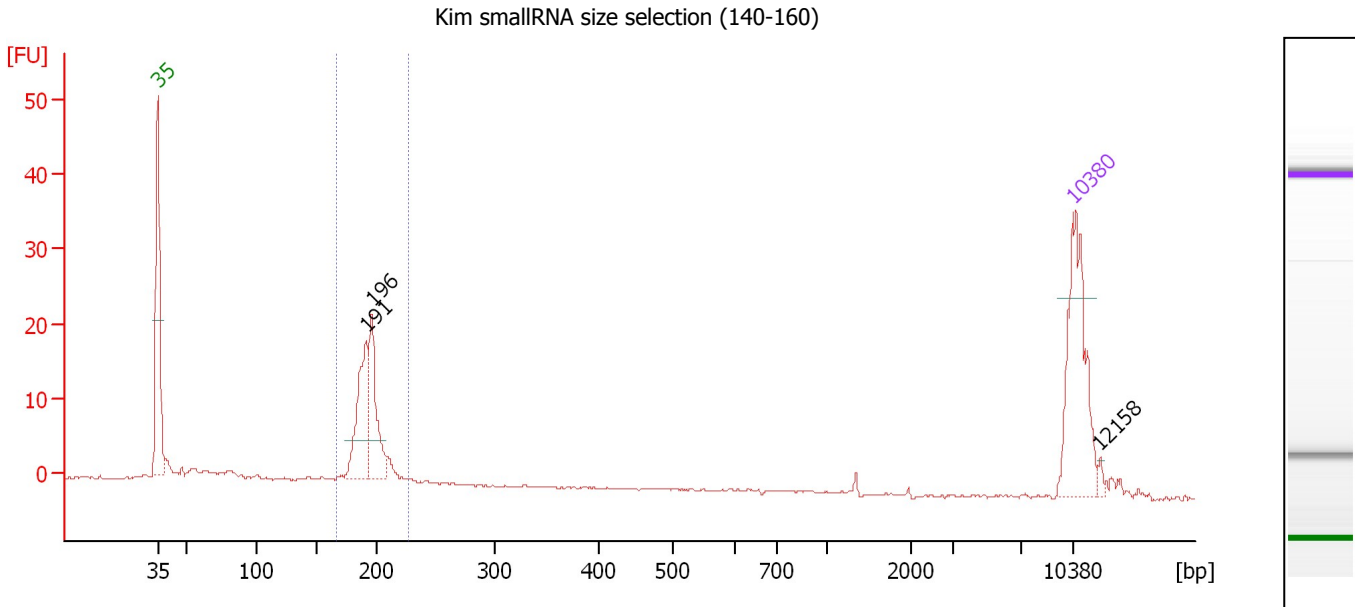
**Region table for sample 1 : Kim smallRNA size selection (140-160)**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
165	229	194	3,273.8	419.23	101.8	79	5.0	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-21\2012-06-21\_004.xad

Created: 6/21/2012 2:10:54 PM  
 Modified: 6/21/2012 3:00:33 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : Kim smallRNA size selection (140-160)**

Number of peaks found: 3                      Corr. Area 1: 62.1  
 Noise: 0.1

**Peak table for sample 2 : Kim smallRNA size selection (140-160)**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	191	75.78	601.2	
3	196	64.17	496.2	
4	10,380	75.00	10.9	Upper Marker
5	12,158	0.00	0.0	

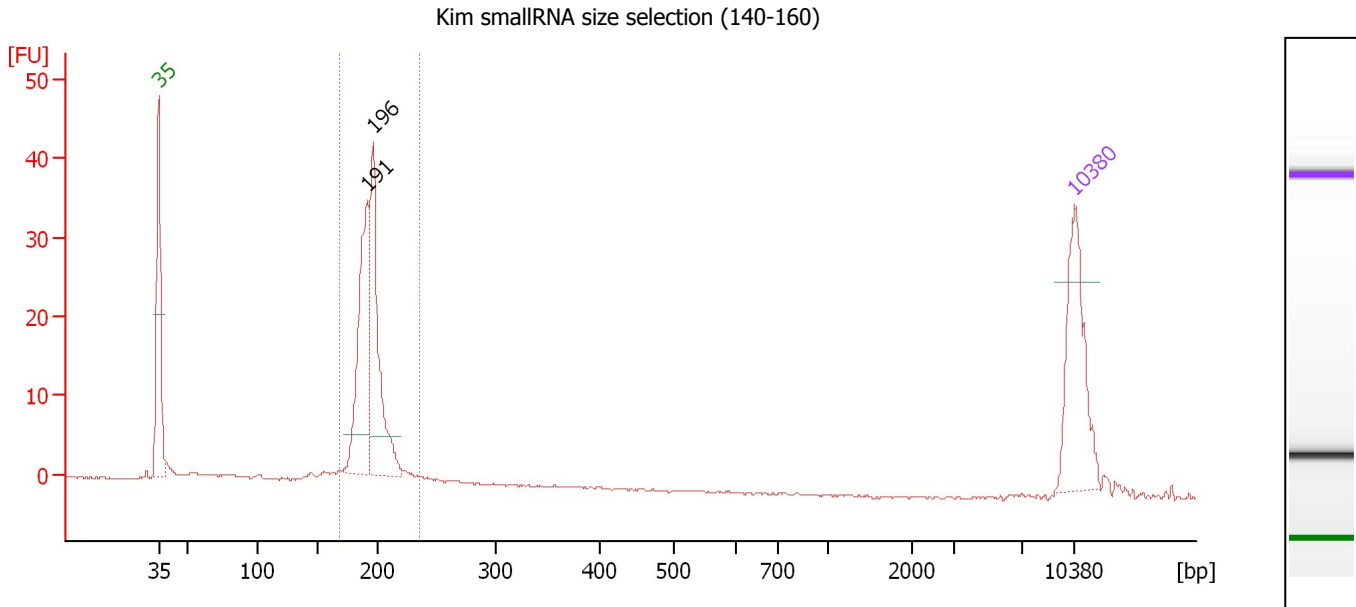
**Region table for sample 2 : Kim smallRNA size selection (140-160)**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
167	226	193	1,216.4	154.83	62.1	76	4.5	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-21\2012-06-21\_004.xad

Created: 6/21/2012 2:10:54 PM  
 Modified: 6/21/2012 3:00:33 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : Kim smallRNA size selection (140-160)**

Number of peaks found: 2                      Corr. Area 1: 115.2  
 Noise: 0.1

**Peak table for sample 3 : Kim smallRNA size selection (140-160)**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	191	149.51	1,184.1	
3	196	154.28	1,190.3	
4	10,380	75.00	10.9	Upper Marker

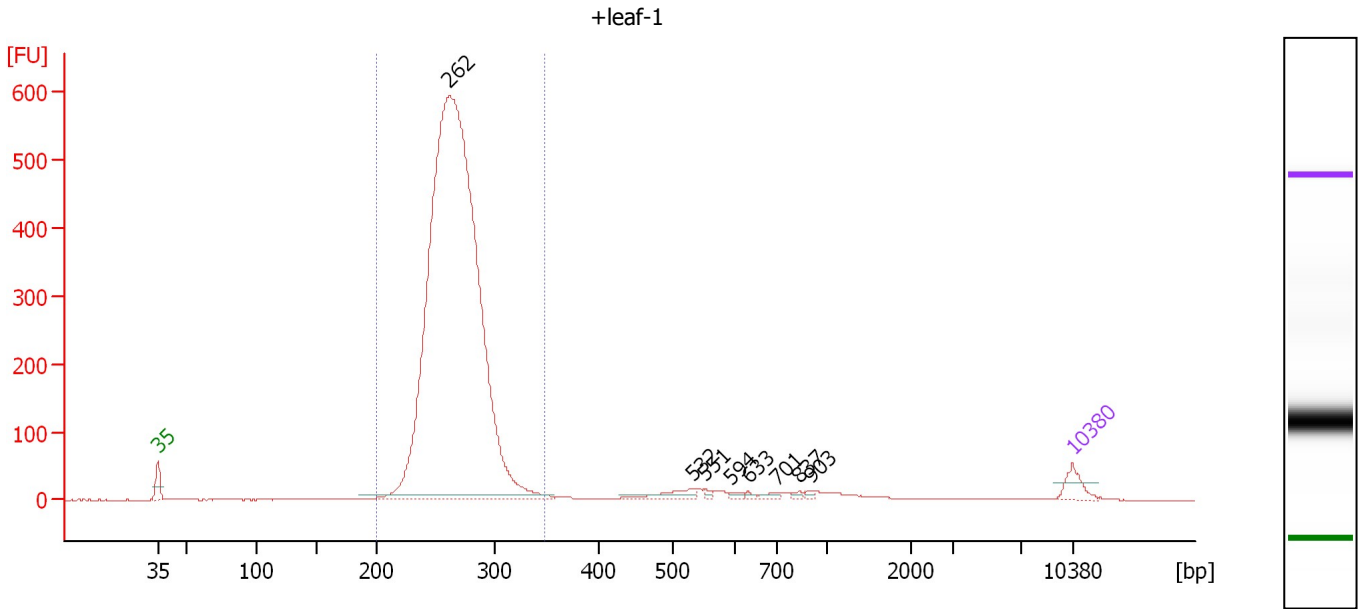
**Region table for sample 3 : Kim smallRNA size selection (140-160)**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
168	236	193	2,406.9	306.67	115.2	95	4.3	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-21\2012-06-21\_004.xad

Created: 6/21/2012 2:10:54 PM  
 Modified: 6/21/2012 3:00:33 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : +leaf-1**

Number of peaks found: 8                      Corr. Area 1: 4,148.6  
 Noise: 0.2

**Peak table for sample 4 : +leaf-1**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	262	7,725.18	44,725.3	
3	532	74.03	210.7	
4	551	14.44	39.7	
5	594	16.20	41.4	
6	633	11.50	27.5	
7	701	19.14	41.4	
8	837	13.56	24.6	
9	903	12.52	21.0	
10	10,380	75.00	10.9	Upper Marker

**Region table for sample 4 : +leaf-1**

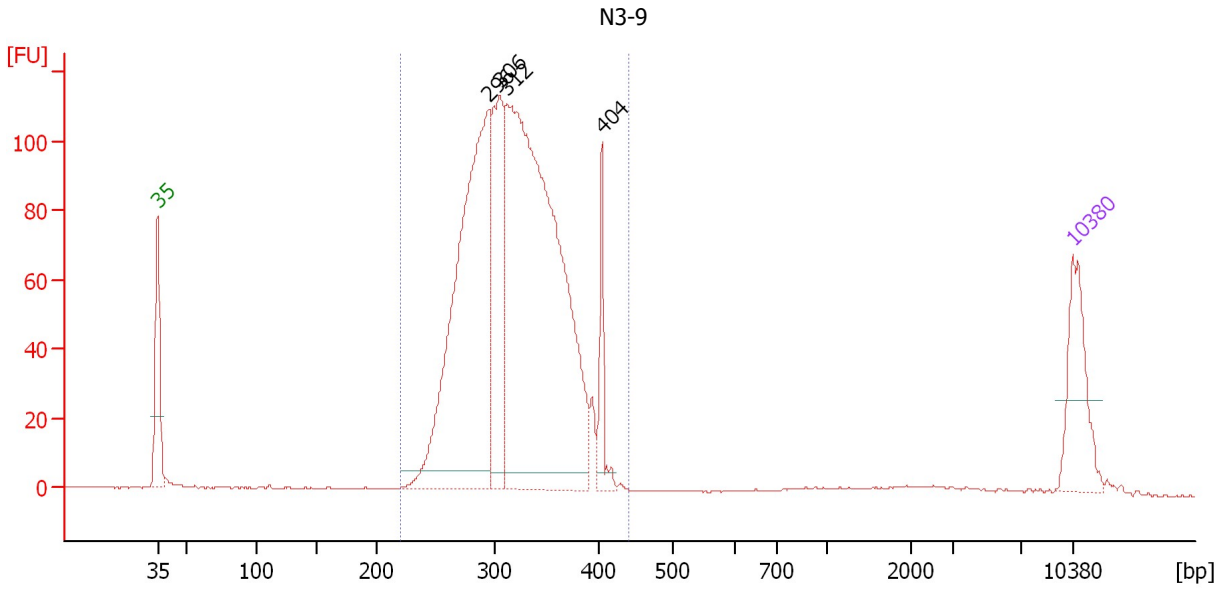
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	348	267	43,782.6	7,688.56	4,148.6	93	7.5	Blue



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-21\2012-06-21\_004.xad

Created: 6/21/2012 2:10:54 PM  
 Modified: 6/21/2012 3:00:33 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : N3-9**

Number of peaks found: 4                      Corr. Area 1: 1,476.5  
 Noise: 0.2

**Peak table for sample 5 : N3-9**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	296	590.48	3,027.3	
3	306	206.86	1,025.8	
4	312	892.07	4,327.1	
5	404	49.48	185.5	
6	10,380	75.00	10.9	Upper Marker

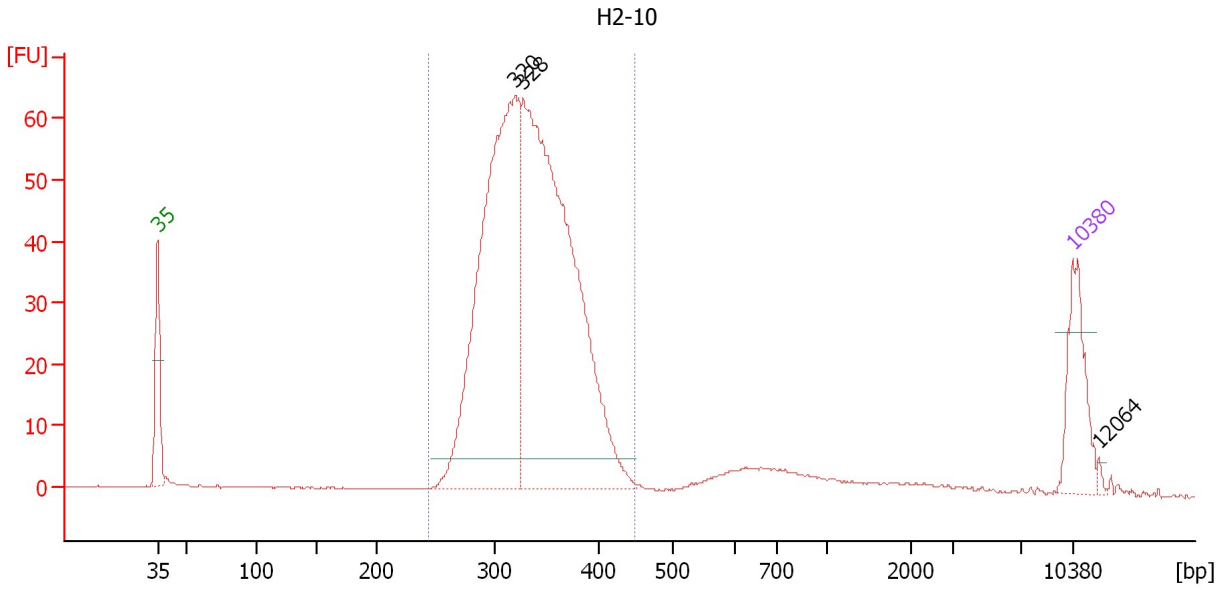
**Region table for sample 5 : N3-9**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
221	440	320	8,466.4	1,754.63	1,476.5	95	12.3	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-21\2012-06-21\_004.xad

Created: 6/21/2012 2:10:54 PM  
 Modified: 6/21/2012 3:00:33 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : H2-10**

Number of peaks found: 3                      Corr. Area 1: 733.5  
 Noise: 0.1

**Peak table for sample 6 : H2-10**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	320	686.23	3,252.7	
3	328	873.23	4,035.5	
4	10,380	75.00	10.9	Upper Marker
5	12,064	0.00	0.0	

**Region table for sample 6 : H2-10**

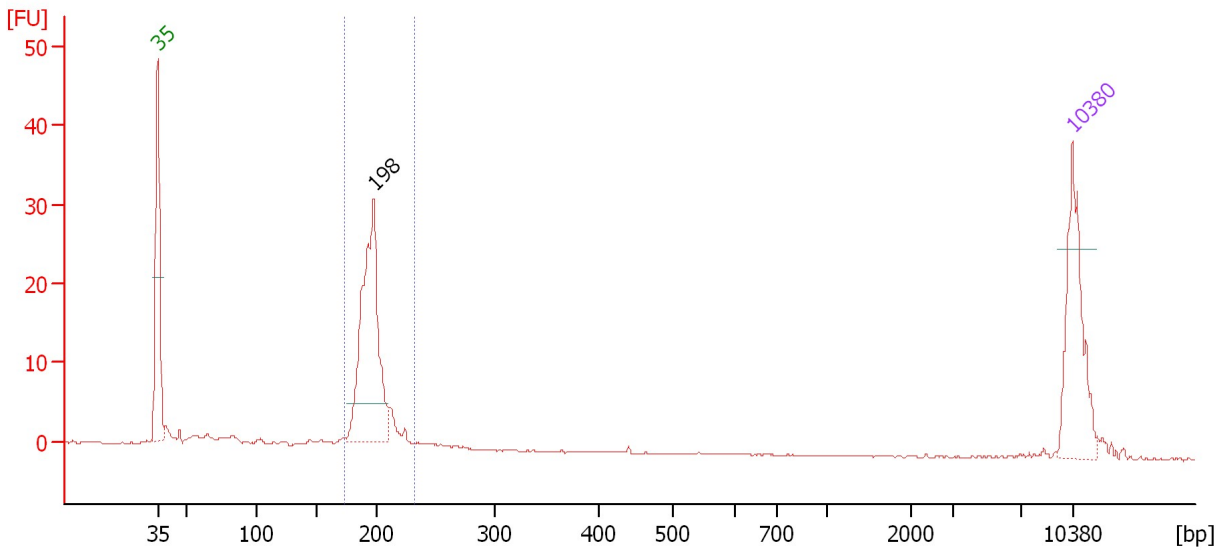
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
243	448	334	7,205.6	1,571.47	733.5	89	10.8	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-21\2012-06-21\_004.xad

Created: 6/21/2012 2:10:54 PM  
 Modified: 6/21/2012 3:00:33 PM

**Electropherogram Summary Continued ...**

Kim smallRNA pool (3 collections)



**Overall Results for sample 7 : Kim smallRNA pool (3 collections)**

Number of peaks found: 1                      Corr. Area 1: 85.8  
 Noise: 0.1

**Peak table for sample 7 : Kim smallRNA pool (3 collections)**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	198	214.55	1,642.7	
3	10,380	75.00	10.9	Upper Marker

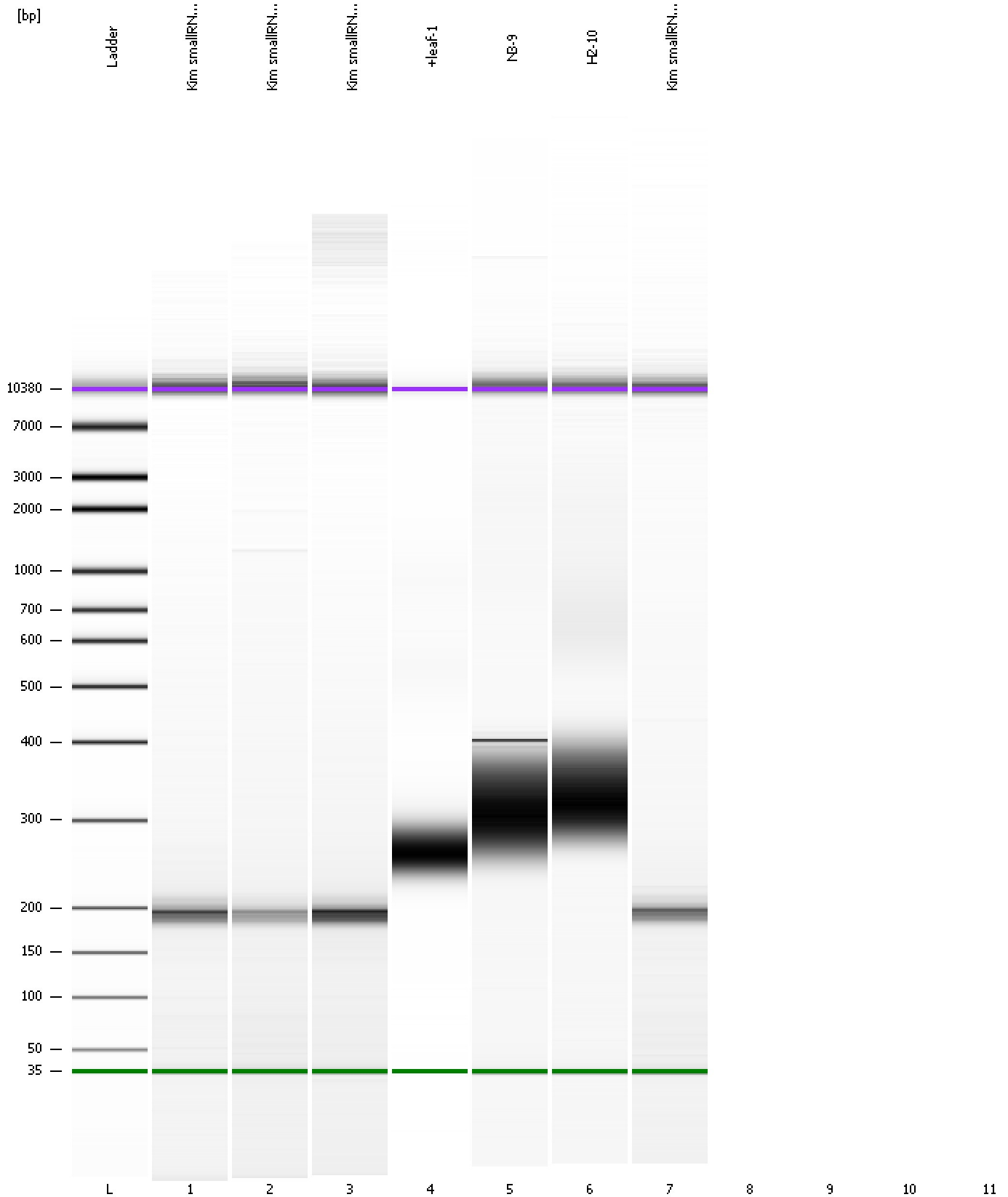
**Region table for sample 7 : Kim smallRNA pool (3 collections)**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
173	232	196	1,918.0	247.60	85.8	78	4.9	Blue

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-21\2012-06-21\_004.xad

Created: 6/21/2012 2:10:54 PM  
Modified: 6/21/2012 3:00:33 PM

**Gel Image**



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-21\2012-06-21\_004.xad

Created: 6/21/2012 2:10:54 PM  
Modified: 6/21/2012 3:00:33 PM

**Invalid Samples**

Sample 8 has not been run, no results available.

Sample 9 has not been run, no results available.

Sample 10 has not been run, no results available.

Sample 11 has not been run, no results available.

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-21\2012-06-21\_004.xad

Created: 6/21/2012 2:10:54 PM  
 Modified: 6/21/2012 3:00:33 PM

**Run Logbook**

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 8)		Instrument	Run		6/21/2012 2:40:46 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2012-06-21\2012-06-21_004.xad)		Instrument	Run		6/21/2012 2:10:59 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		6/21/2012 2:10:59 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		6/21/2012 2:10:59 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		6/21/2012 2:10:59 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		6/21/2012 2:10:59 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		6/21/2012 2:10:59 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		6/21/2012 2:10:59 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1