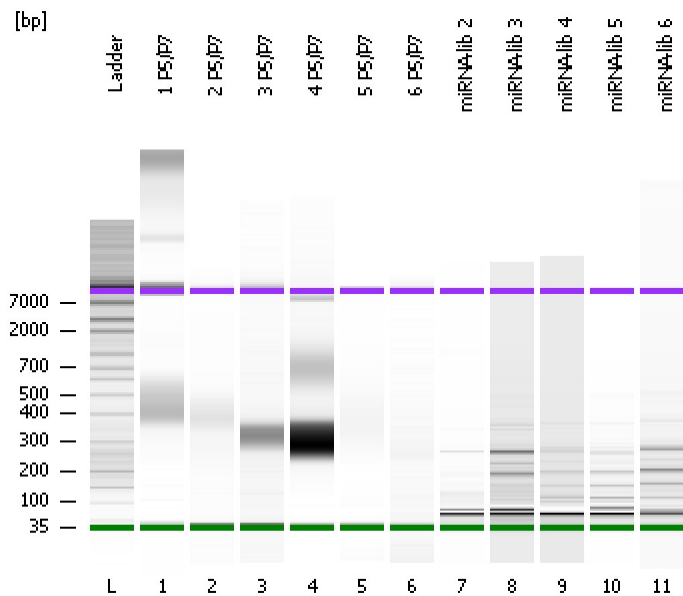


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-15\2012-03-15_001.xad

Created: 3/15/2012 9:24:09 AM
Modified: 3/15/2012 10:09:06 AM

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

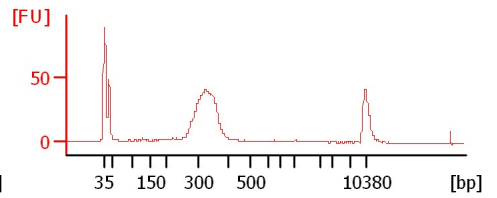
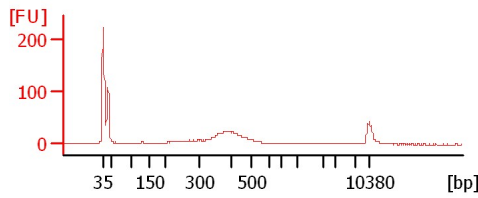
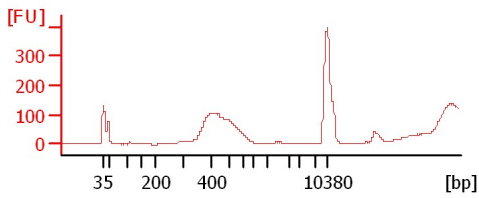
Chip Information:

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

1 P5/P7

2 P5/P7

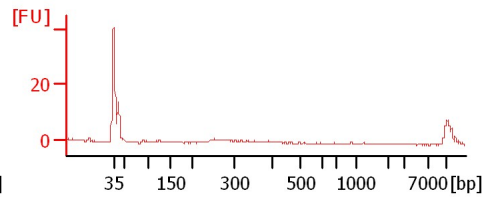
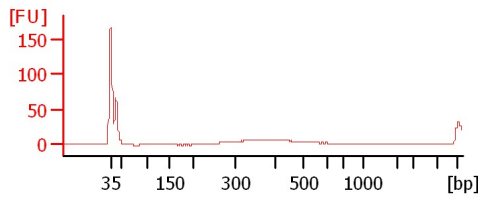
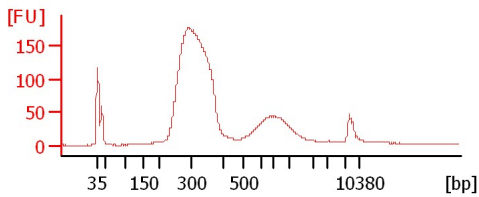
3 P5/P7



4 P5/P7

5 P5/P7

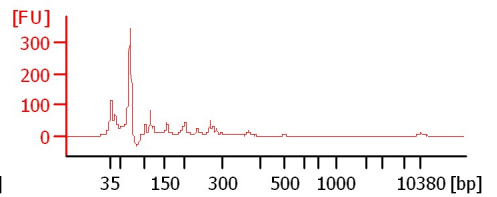
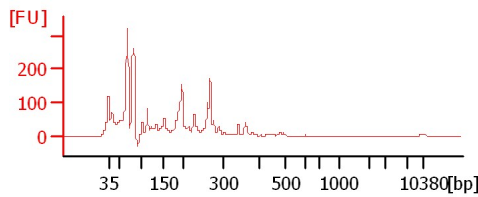
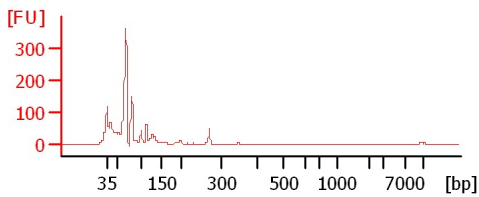
6 P5/P7



miRNA-lib 2

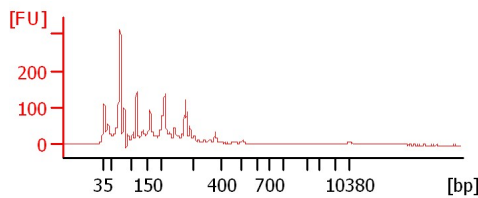
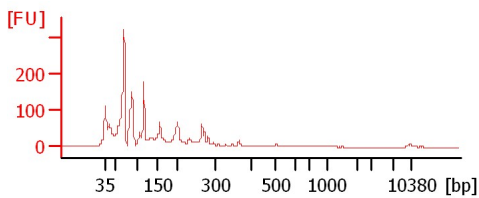
miRNA-lib 3

miRNA-lib 4



miRNA-lib 5

miRNA-lib 6



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-15\2012-03-15_001.xad

Created: 3/15/2012 9:24:09 AM
 Modified: 3/15/2012 10:09:06 AM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
1 P5/P7		<input type="checkbox"/>	✓			
2 P5/P7		<input type="checkbox"/>	✓			
3 P5/P7		<input type="checkbox"/>	✓			
4 P5/P7		<input type="checkbox"/>	✓			
5 P5/P7		<input type="checkbox"/>	✓			
6 P5/P7		<input type="checkbox"/>	✓			
miRNA-lib 2		<input type="checkbox"/>	✓			
miRNA-lib 3		<input type="checkbox"/>	✓			
miRNA-lib 4		<input type="checkbox"/>	✓			
miRNA-lib 5		<input type="checkbox"/>	✓			
miRNA-lib 6		<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\2012-03-15\2012-03-15_001.xad

Created: 3/15/2012 9:24:09 AM
Modified: 3/15/2012 10:09:06 AM

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/ μ l] : 1950
Uses Standard Area for Ladder Fragments
Lower Marker Concentration [pg/ μ l] : 125
Upper Marker Concentration [pg/ μ 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

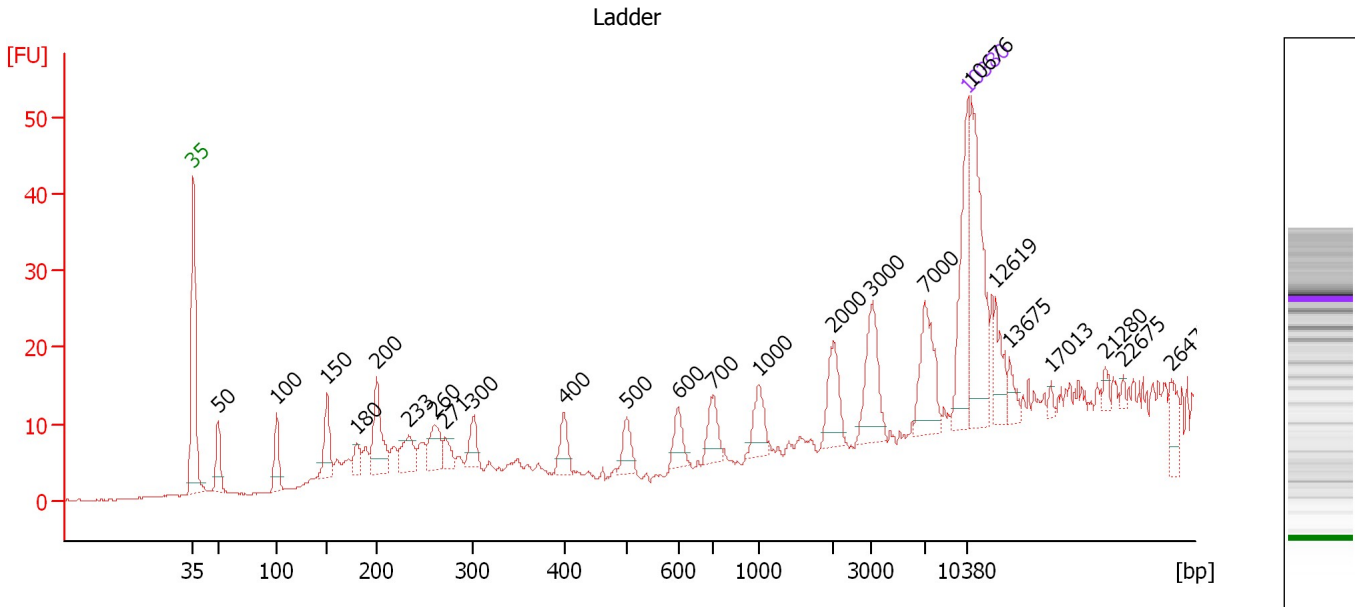
Ladder

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\2012-03-15\2012-03-15_001.xad

Created: 3/15/2012 9:24:09 AM
 Modified: 3/15/2012 10:09:06 AM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

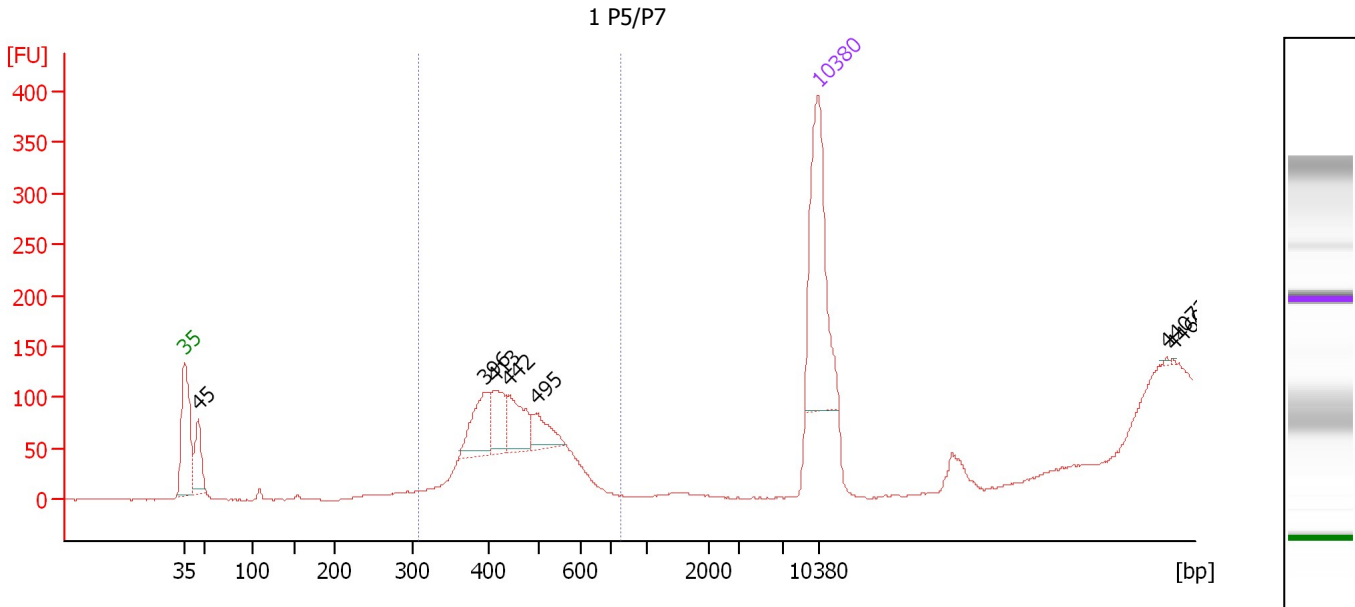
Peak table for Ladder

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	180	0.00	0.0	
6	200	150.00	1,136.4	Ladder Peak
7	233	0.00	0.0	
8	260	0.00	0.0	
9	271	0.00	0.0	
10	300	150.00	757.6	Ladder Peak
11	400	150.00	568.2	Ladder Peak
12	500	150.00	454.5	Ladder Peak
13	600	150.00	378.8	Ladder Peak
14	700	150.00	324.7	Ladder Peak
15	1,000	150.00	227.3	Ladder Peak
16	2,000	150.00	113.6	Ladder Peak
17	3,000	150.00	75.8	Ladder Peak
18	7,000	150.00	32.5	Ladder Peak
19	10,380	75.00	10.9	Upper Marker
20	10,676	0.00	0.0	
21	12,619	0.00	0.0	
22	13,675	0.00	0.0	
23	17,013	0.00	0.0	
24	21,280	0.00	0.0	
25	22,675	0.00	0.0	
26	26,477	0.00	0.0	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-15\2012-03-15_001.xad

Created: 3/15/2012 9:24:09 AM
 Modified: 3/15/2012 10:09:06 AM

Electropherogram Summary Continued ...



Overall Results for sample 1 : 1 P5/P7

Number of peaks found: 7 Corr. Area 1: 489.4
 Noise: 0.6

Peak table for sample 1 : 1 P5/P7

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	45	36.04	1,204.1	
3	396	36.67	140.2	
4	413	26.18	96.0	
5	442	29.34	100.7	
6	495	18.24	55.8	
7	10,380	75.00	10.9	Upper Marker
8	44,072	0.00	0.0	
9	44,691	0.00	0.0	

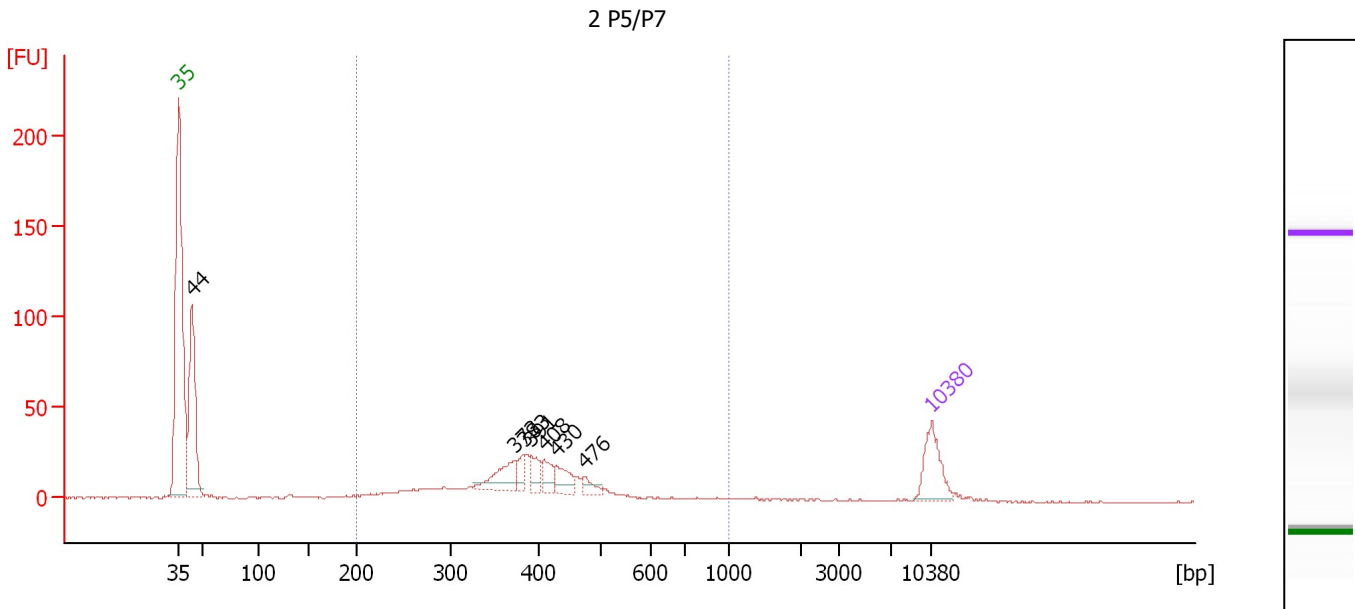
Region table for sample 1 : 1 P5/P7

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
306	358.7	436	102.21	790	489.4	80	10.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-15\2012-03-15_001.xad

Created: 3/15/2012 9:24:09 AM
 Modified: 3/15/2012 10:09:06 AM

Electropherogram Summary Continued ...



Overall Results for sample 2 : 2 P5/P7

Number of peaks found: 7 Corr. Area 1: 344.3
 Noise: 0.4

Peak table for sample 2 : 2 P5/P7

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	44	403.06	13,970.8	
3	373	80.13	325.9	
4	383	32.86	130.0	
5	391	39.89	154.4	
6	408	37.79	140.5	
7	430	50.13	176.8	
8	476	24.40	77.6	
9	10,380	75.00	10.9	Upper Marker

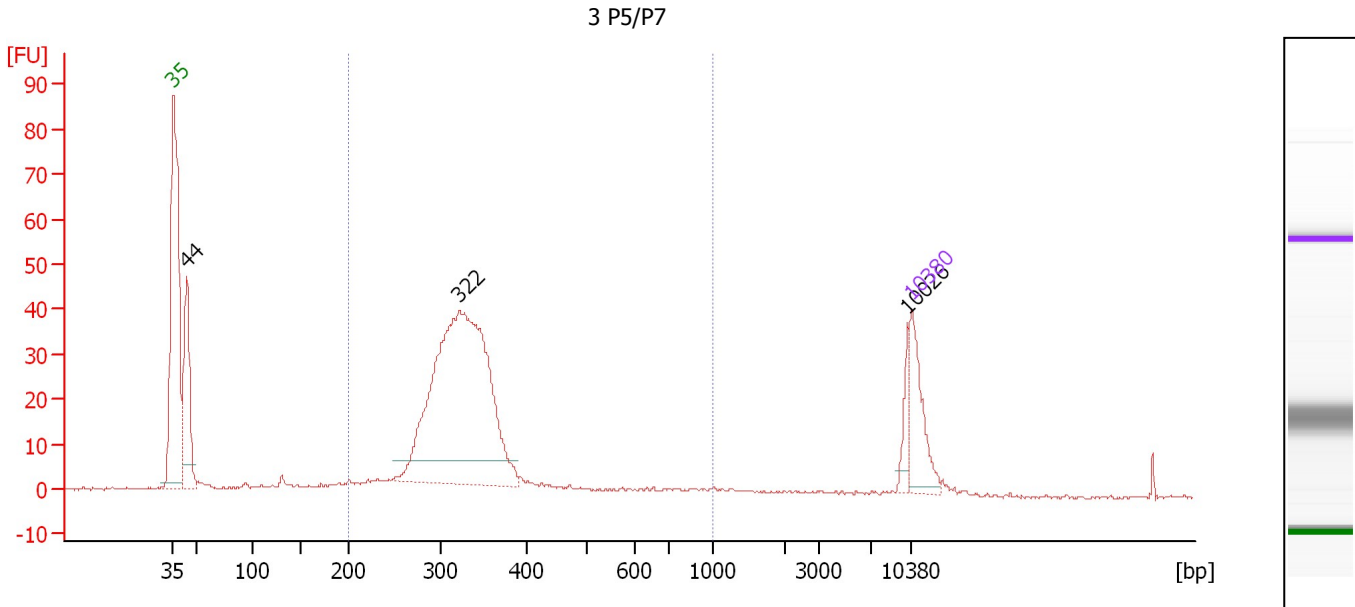
Region table for sample 2 : 2 P5/P7

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	2,411.1	392	579.83	1,000	344.3	63	23.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-15\2012-03-15_001.xad

Created: 3/15/2012 9:24:09 AM
 Modified: 3/15/2012 10:09:06 AM

Electropherogram Summary Continued ...



Overall Results for sample 3 : 3 P5/P7

Number of peaks found: 3 Corr. Area 1: 430.1
 Noise: 0.2

Peak table for sample 3 : 3 P5/P7

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	44	227.59	7,918.6	
3	322	822.37	3,865.5	
4	10,026	31.44	4.8	
5	10,380	75.00	10.9	Upper Marker

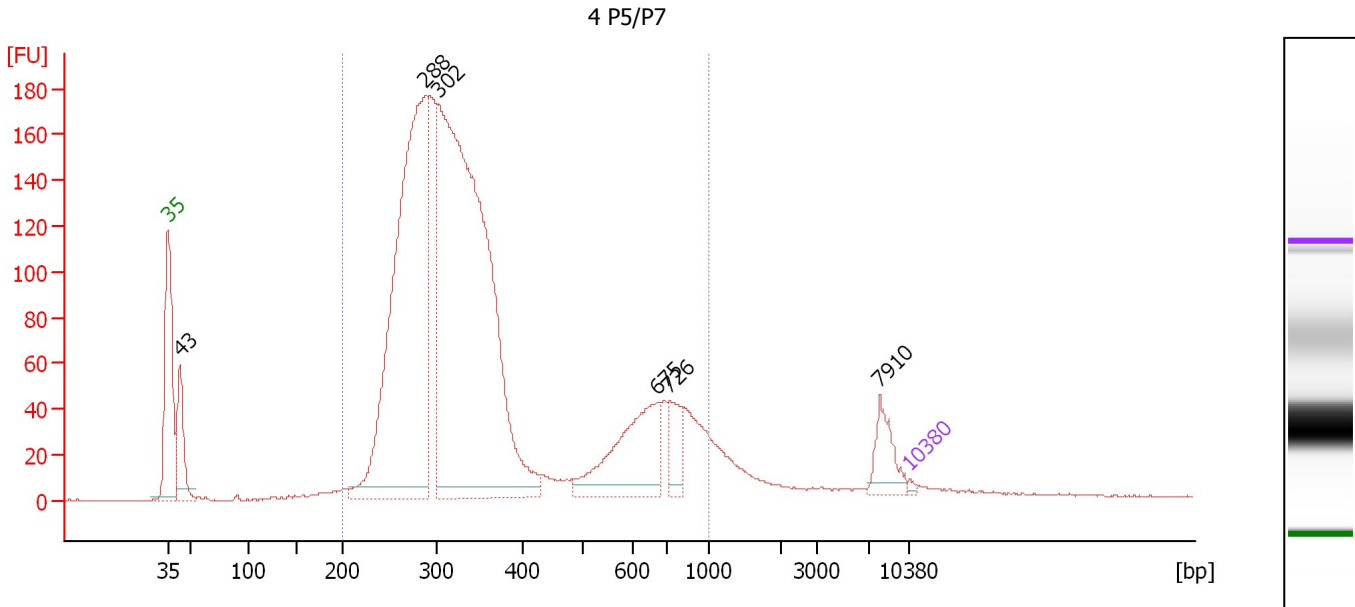
Region table for sample 3 : 3 P5/P7

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	4,763.2	339	1,013.97	1,000	430.1	73	25.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-15\2012-03-15_001.xad

Created: 3/15/2012 9:24:09 AM
 Modified: 3/15/2012 10:09:06 AM

Electropherogram Summary Continued ...



Overall Results for sample 4 : 4 P5/P7

Number of peaks found: 6 Corr. Area 1: 2,950.0
 Noise: 0.3

Peak table for sample 4 : 4 P5/P7

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	43	3,994.46	141,311.1	
3	288	29,113.29	152,898.9	
4	302	41,058.05	206,074.9	
5	675	5,711.38	12,827.1	
6	726	1,561.11	3,259.6	
7	7,910	1,432.54	274.4	
8	10,380	75.00	10.9	Upper Marker

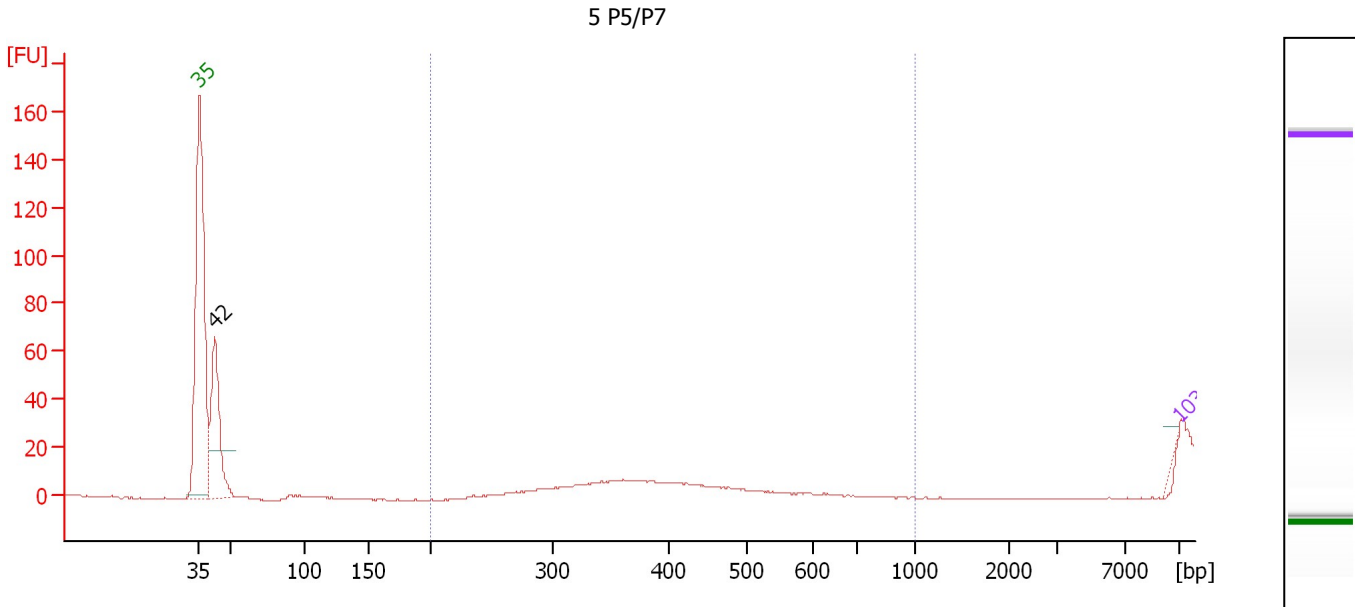
Region table for sample 4 : 4 P5/P7

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	405,238.3	381	87,008.04	1,000	2,950.0	89	43.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-15\2012-03-15_001.xad

Created: 3/15/2012 9:24:09 AM
 Modified: 3/15/2012 10:09:06 AM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 5 : 5 P5/P7

Height Threshold [FU] : 20 Width Threshold [s] : 0.2

Overall Results for sample 5 : 5 P5/P7

Number of peaks found: 1 Corr. Area 1: 0.0
 Noise: 0.2

Peak table for sample 5 : 5 P5/P7

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	42	0.00	0.0	
3	10,380	75.00	10.9	Upper Marker

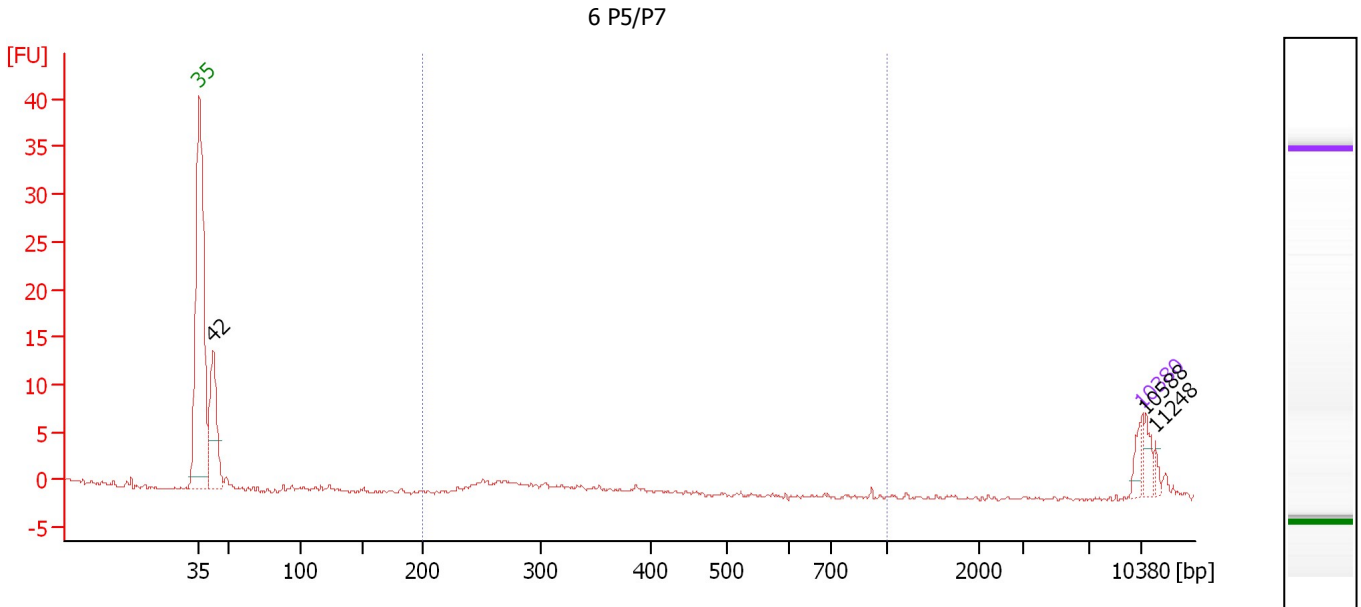
Region table for sample 5 : 5 P5/P7

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	0.0	0	0.00	1,000	0.0	0	0.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-15\2012-03-15_001.xad

Created: 3/15/2012 9:24:09 AM
 Modified: 3/15/2012 10:09:06 AM

Electropherogram Summary Continued ...



Overall Results for sample 6 : 6 P5/P7

Number of peaks found: 3 Corr. Area 1: 2.0
 Noise: 0.2

Peak table for sample 6 : 6 P5/P7

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	42	848.89	30,647.7	
3	10,380	75.00	10.9	Upper Marker
4	10,588	0.00	0.0	
5	11,248	0.00	0.0	

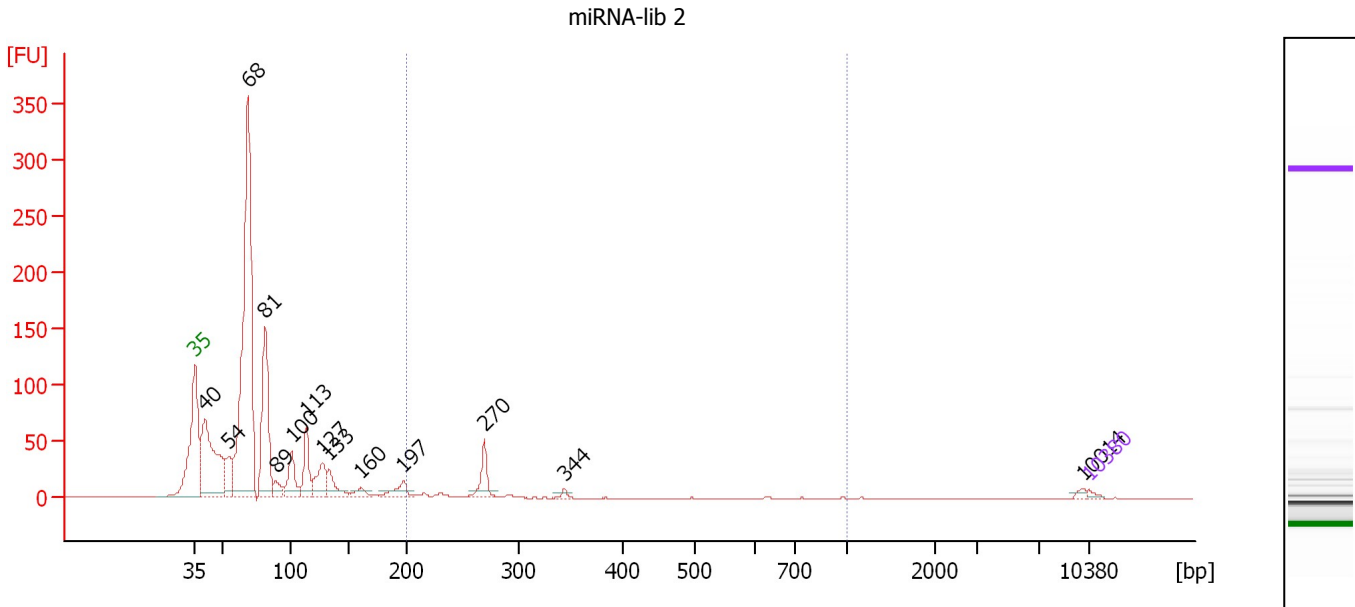
Region table for sample 6 : 6 P5/P7

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	293.2	286	52.83	1,000	2.0	6	32.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-15\2012-03-15_001.xad

Created: 3/15/2012 9:24:09 AM
 Modified: 3/15/2012 10:09:06 AM

Electropherogram Summary Continued ...



Overall Results for sample 7 : miRNA-lib 2

Number of peaks found: 14 Corr. Area 1: 73.4
 Noise: 0.2

Peak table for sample 7 : miRNA-lib 2

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	40	7,075.14	267,428.5	
3	54	1,422.02	39,973.5	
4	68	18,103.13	400,595.9	
5	81	5,780.33	108,028.5	
6	89	568.09	9,719.9	
7	100	1,577.37	23,798.2	
8	113	1,636.12	21,900.3	
9	127	1,572.04	18,773.8	
10	133	984.32	11,230.4	
11	160	433.31	4,093.6	
12	197	682.26	5,242.7	
13	270	989.27	5,554.6	
14	344	126.79	557.9	
15	10,014	101.16	15.3	
16	10,380	75.00	10.9	Upper Marker

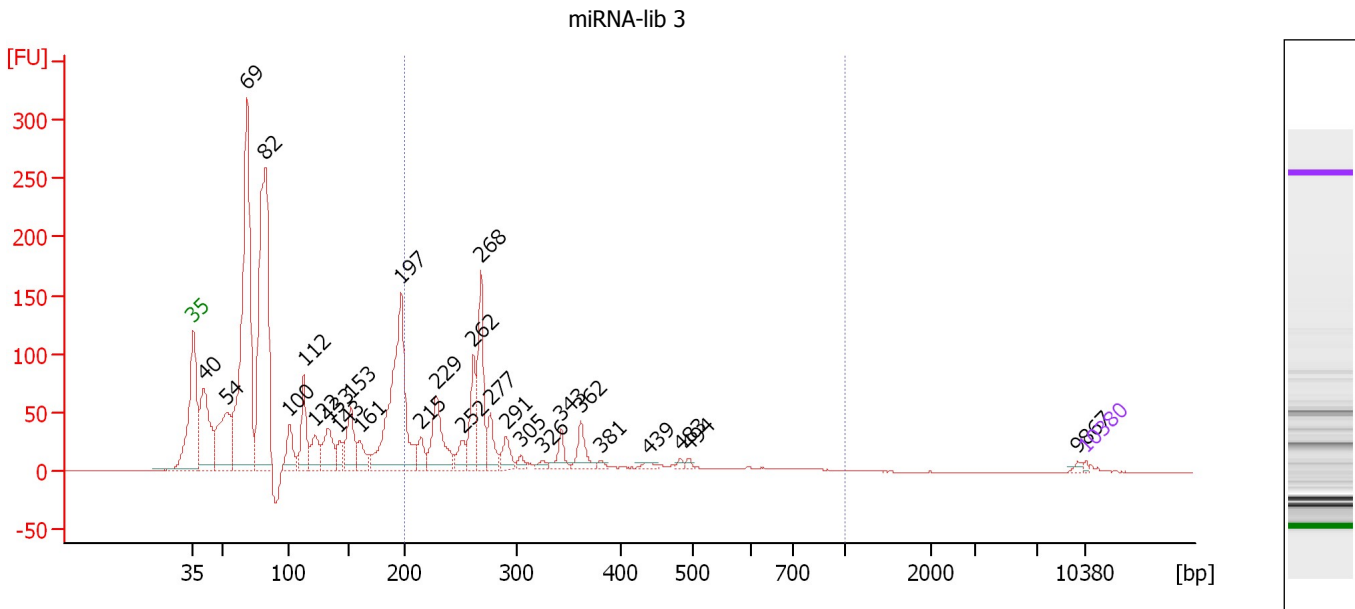
Region table for sample 7 : miRNA-lib 2

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/µl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	9,345.5	277	1,636.99	1,000	73.4	5	28.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-15\2012-03-15_001.xad

Created: 3/15/2012 9:24:09 AM
 Modified: 3/15/2012 10:09:06 AM

Electropherogram Summary Continued ...



Overall Results for sample 8 : miRNA-lib 3

Number of peaks found: 28 Corr. Area 1: 793.2
 Noise: 0.2

Peak table for sample 8 : miRNA-lib 3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	40	6,542.16	245,493.6	
3	54	5,734.43	161,064.1	
4	69	22,394.50	492,214.1	
5	82	19,578.79	360,234.6	
6	100	1,998.30	30,241.8	
7	112	2,990.54	40,294.4	
8	122	1,740.41	21,607.0	
9	133	2,429.69	27,678.0	
10	143	1,012.29	10,721.5	
11	153	2,636.08	26,155.4	
12	161	1,155.22	10,896.1	
13	197	12,019.35	92,426.7	
14	215	906.92	6,400.4	
15	229	3,577.46	23,711.4	
16	252	950.14	5,710.6	
17	262	2,644.86	15,313.7	
18	268	4,229.45	23,876.0	
19	277	1,478.29	8,085.2	
20	291	1,021.42	5,310.7	
21	305	345.58	1,718.8	
22	326	257.28	1,197.3	
23	343	911.76	4,022.4	
24	362	1,221.90	5,109.6	
25	381	210.78	837.8	
26	439	246.39	849.5	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-15\2012-03-15_001.xad


Created: 3/15/2012 9:24:09 AM
 Modified: 3/15/2012 10:09:06 AM

Electropherogram Summary Continued ...

... Peak table for sample 8 : miRNA-lib 3

Peak	Size [bp]	Conc. [pg/ μ l]	Molarity [pmol/l]	Observations
27	483	163.86	513.7	
28	494	158.50	485.8	
29	9,867	107.23	16.5	
30	10,380	75.00	10.9	Upper Marker

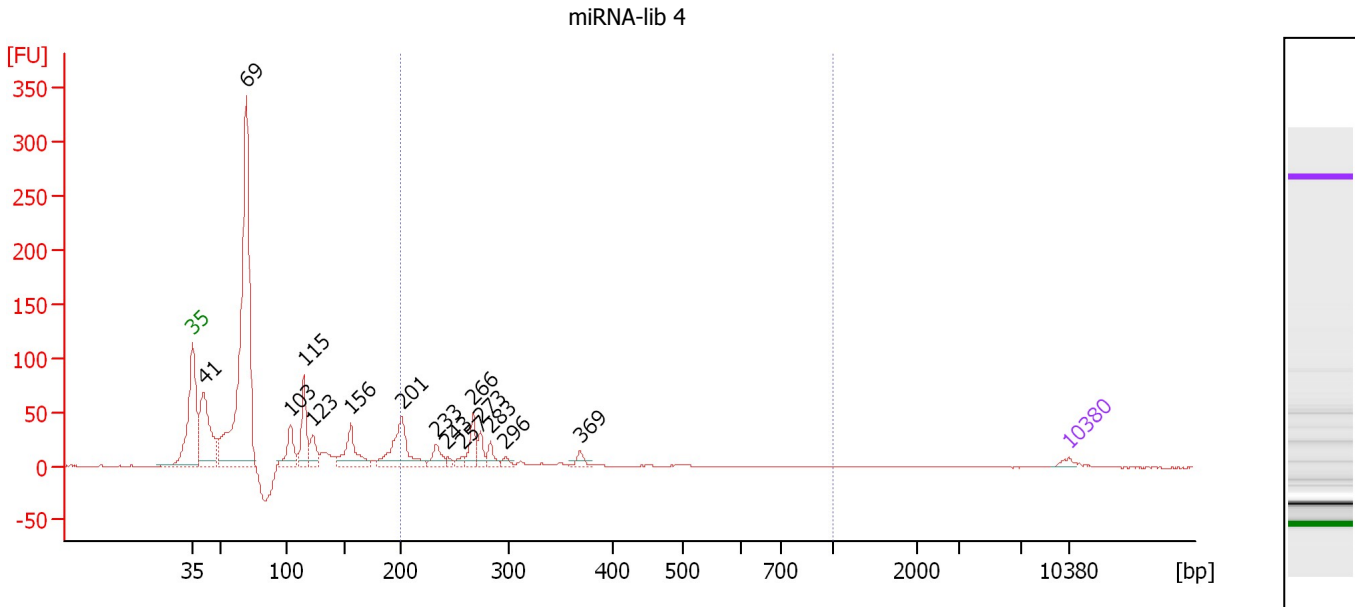
Region table for sample 8 : miRNA-lib 3

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/ μ l]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	128,249.2	311	23,461.48	1,000	793.2	27	37.8	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-15\2012-03-15_001.xad

Created: 3/15/2012 9:24:09 AM
 Modified: 3/15/2012 10:09:06 AM

Electropherogram Summary Continued ...



Overall Results for sample 9 : miRNA-lib 4

Number of peaks found: 15 Corr. Area 1: 251.1
 Noise: 0.2

Peak table for sample 9 : miRNA-lib 4

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	41	2,985.25	110,950.0	
3	69	11,193.39	244,778.3	
4	103	880.77	12,948.1	
5	115	1,298.47	17,152.2	
6	123	598.84	7,399.9	
7	156	1,178.90	11,466.3	
8	201	1,612.82	12,129.8	
9	233	407.57	2,653.5	
10	243	98.84	616.3	
11	257	124.46	733.3	
12	266	599.87	3,411.3	
13	273	323.87	1,795.7	
14	283	282.37	1,514.2	
15	296	118.85	607.9	
16	369	175.29	720.1	
17	10,380	75.00	10.9	Upper Marker

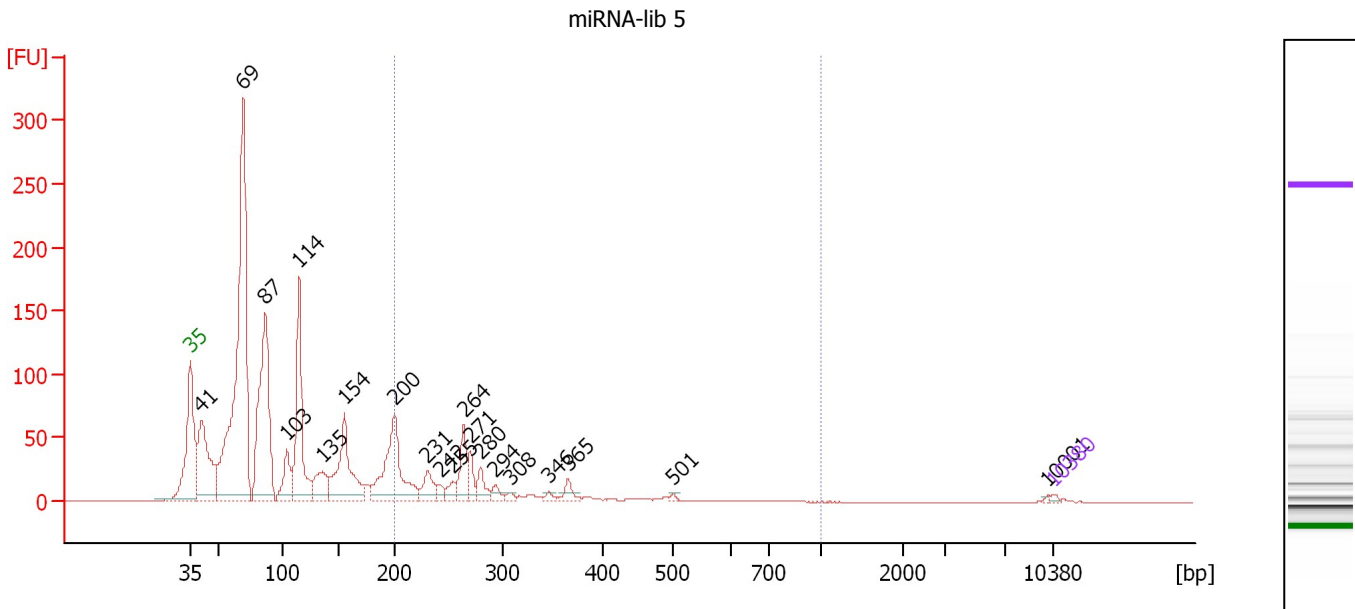
Region table for sample 9 : miRNA-lib 4

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/µl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	19,106.0	277	3,299.25	1,000	251.1	17	27.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-15\2012-03-15_001.xad

Created: 3/15/2012 9:24:09 AM
 Modified: 3/15/2012 10:09:06 AM

Electropherogram Summary Continued ...



Overall Results for sample 10 : miRNA-lib 5

Number of peaks found: 20 Corr. Area 1: 390.7
 Noise: 0.2

Peak table for sample 10 : miRNA-lib 5

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	41	6,745.85	248,412.1	
3	69	25,064.59	546,629.6	
4	87	11,390.75	199,277.4	
5	103	2,166.48	31,751.0	
6	114	7,046.23	93,447.0	
7	135	2,075.74	23,291.7	
8	154	5,202.90	51,027.3	
9	200	5,688.04	43,125.3	
10	231	1,145.73	7,528.7	
11	242	413.91	2,591.7	
12	255	506.63	3,011.8	
13	264	1,697.05	9,728.9	
14	271	854.13	4,780.0	
15	280	826.13	4,467.9	
16	294	398.75	2,058.2	
17	308	188.97	929.9	
18	346	170.34	745.0	
19	365	453.31	1,879.4	
20	501	82.85	250.5	
21	10,001	39.05	5.9	
22	10,380	75.00	10.9	Upper Marker

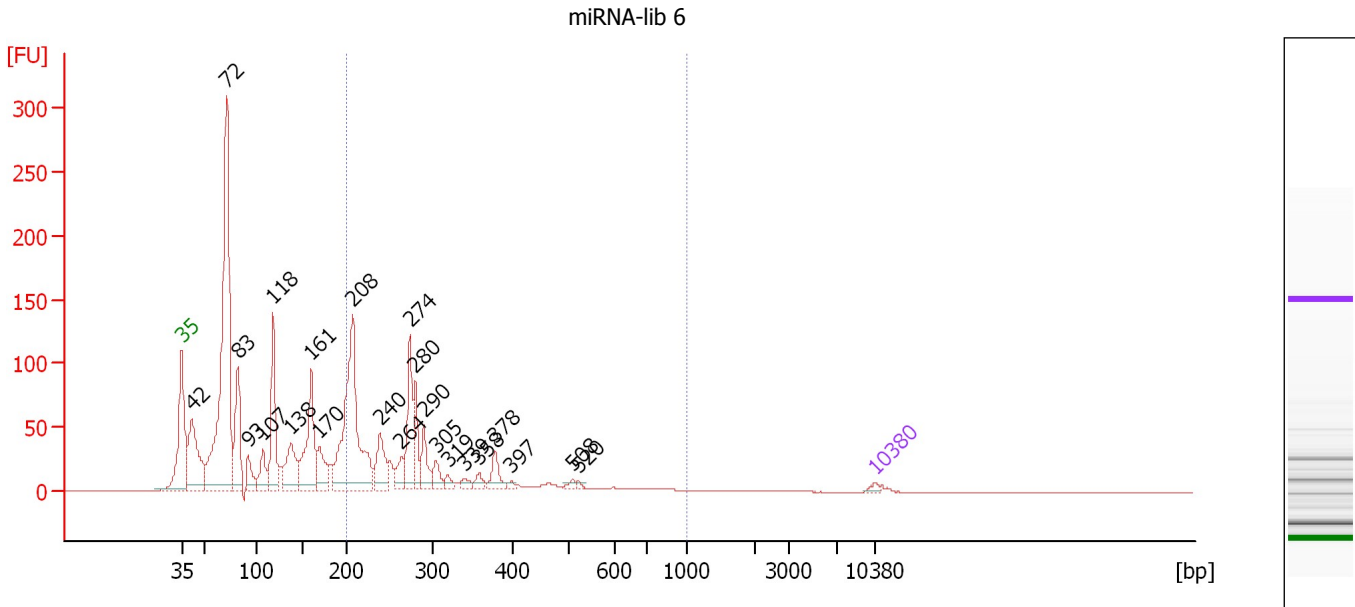
Region table for sample 10 : miRNA-lib 5

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	64,582.5	296	11,407.62	1,000	390.7	18	36.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-15\2012-03-15_001.xad

Created: 3/15/2012 9:24:09 AM
 Modified: 3/15/2012 10:09:06 AM

Electropherogram Summary Continued ...



Overall Results for sample 11 : miRNA-lib 6

Number of peaks found: 23 Corr. Area 1: 798.1
 Noise: 0.1

Peak table for sample 11 : miRNA-lib 6

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	42	3,411.84	123,316.7	
3	72	12,641.48	266,999.2	
4	83	2,670.87	48,811.4	
5	93	746.88	12,226.9	
6	107	967.38	13,666.7	
7	118	2,613.90	33,444.7	
8	138	1,599.93	17,514.8	
9	161	2,977.84	28,028.5	
10	170	1,103.45	9,835.7	
11	208	6,545.15	47,670.7	
12	240	1,246.59	7,886.3	
13	264	546.22	3,132.7	
14	274	1,864.14	10,306.1	
15	280	1,032.60	5,583.1	
16	290	831.79	4,344.3	
17	305	462.44	2,300.5	
18	319	214.19	1,017.2	
19	339	200.34	894.4	
20	358	237.06	1,003.9	
21	378	539.43	2,165.1	
22	397	92.26	352.5	
23	508	121.73	363.0	
24	520	60.12	175.3	
25	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-15\2012-03-15_001.xad

Created: 3/15/2012 9:24:09 AM
Modified: 3/15/2012 10:09:06 AM

Electropherogram Summary Continued ...

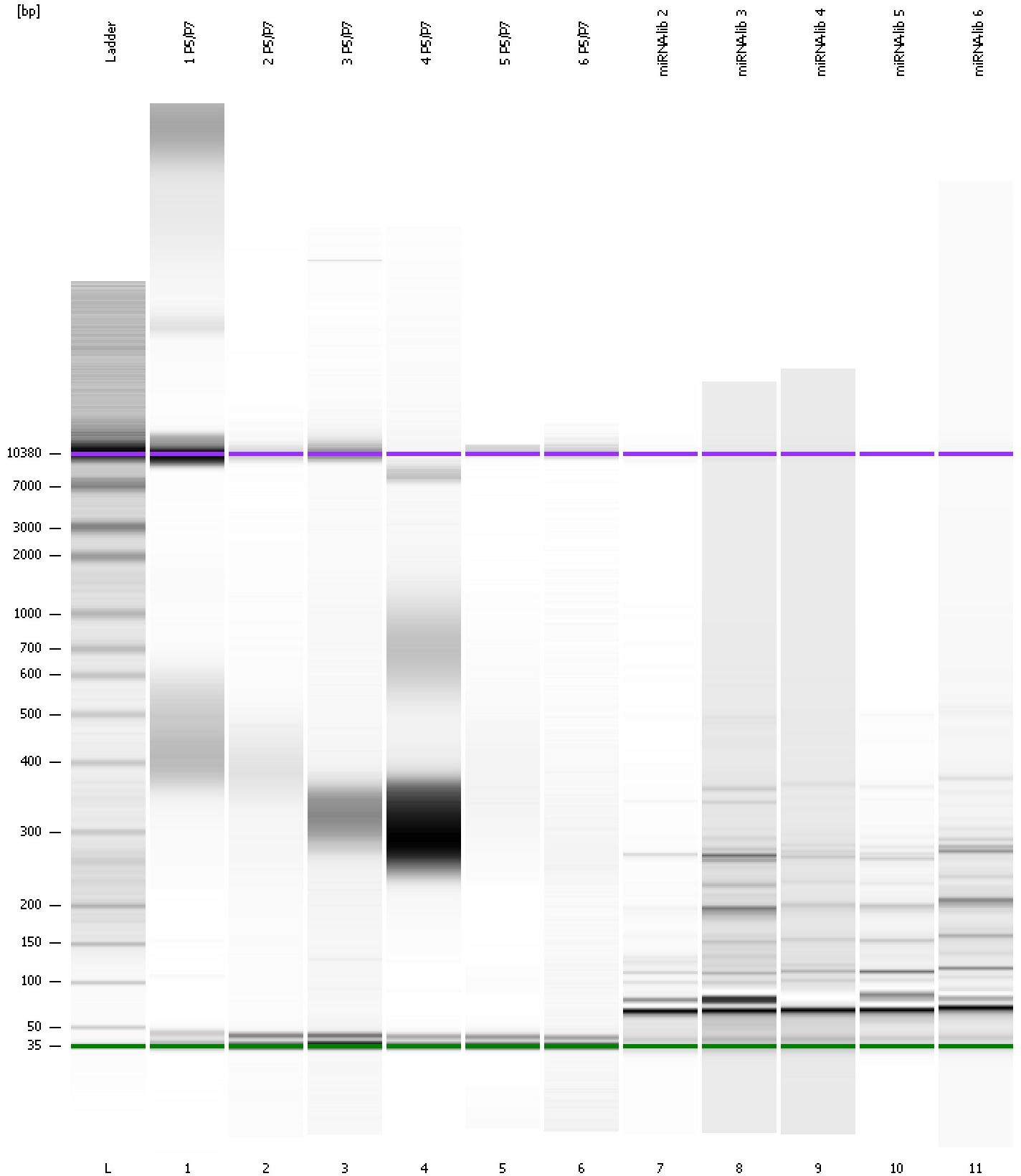
... Region table for sample 11 : miRNA-lib 6

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	83,585.0	298	14,715.21	1,000	798.1	36	38.6	■

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-15\2012-03-15_001.xad

Created: 3/15/2012 9:24:09 AM
Modified: 3/15/2012 10:09:06 AM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-15\2012-03-15_001.xad

Created: 3/15/2012 9:24:09 AM
 Modified: 3/15/2012 10:09:06 AM

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		3/15/2012 10:05:27 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2012-03-15\2012-03-15_001.xad)		Instrument	Run		3/15/2012 9:24:15 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		3/15/2012 9:24:15 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		3/15/2012 9:24:15 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		3/15/2012 9:24:15 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		3/15/2012 9:24:15 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		3/15/2012 9:24:15 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		3/15/2012 9:24:15 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1