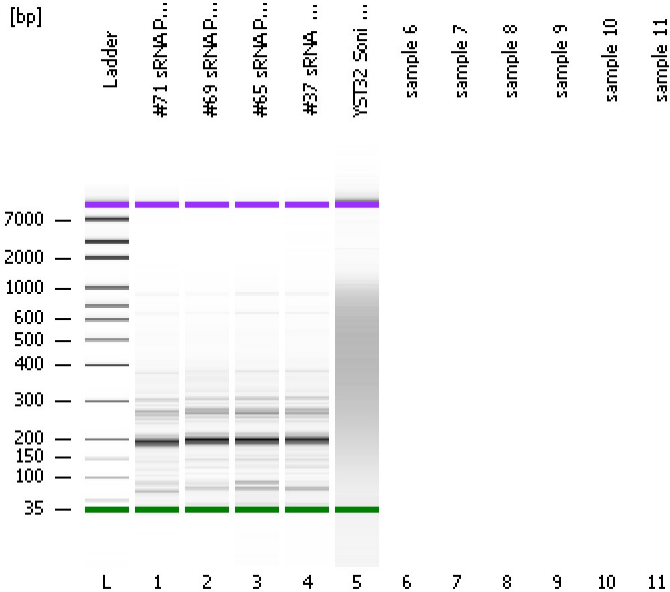


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-27\2012-06-27\_004.xad

Created: 6/27/2012 12:23:16 PM  
Modified: 6/27/2012 12:55:35 PM

**Electrophoresis File Run Summary**



Instrument Information:

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

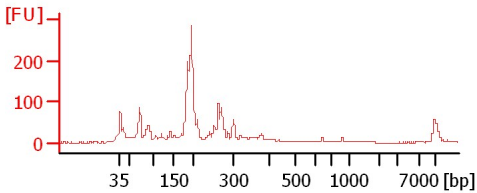
Assay Information:

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

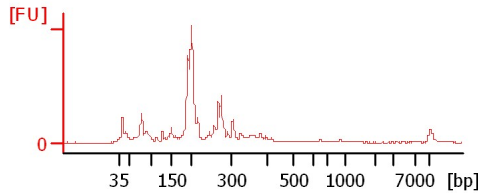
Chip Information:

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

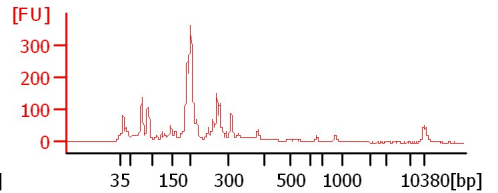
#71 sRNA PCR 1:10 (6/25/12) 15 cyc



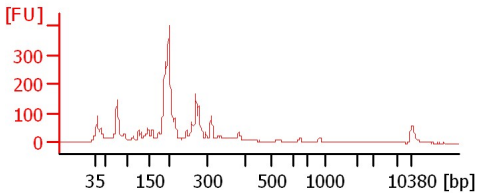
#69 sRNA PCR 1:6 (6/25/12) 15 cyc



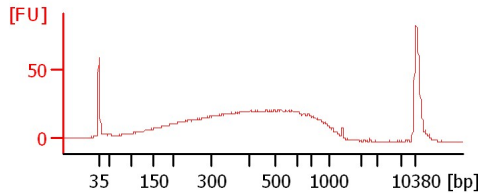
#65 sRNA PCR 1:5(6/25/12) 15 cyc



#37 sRNA PCR 1:6 (6/25/12) 15 cyc



YST32 Soni 9+3 Cycles



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-27\2012-06-27\_004.xad

Created: 6/27/2012 12:23:16 PM  
Modified: 6/27/2012 12:55:35 PM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
#71 sRNA PCR 1:10 (6/25/12) 15 cyc		<input type="checkbox"/>				
#69 sRNA PCR 1:6 (6/25/12) 15 cyc		<input type="checkbox"/>				
#65 sRNA PCR 1:5(6/25/12) 15 cyc		<input type="checkbox"/>				
#37 sRNA PCR 1:6 (6/25/12) 15 cyc		<input type="checkbox"/>				
YST32 Soni 9+3 Cycles		<input type="checkbox"/>				
sample 6		<input type="checkbox"/>				
sample 7		<input type="checkbox"/>				
sample 8		<input type="checkbox"/>				
sample 9		<input type="checkbox"/>				
sample 10		<input type="checkbox"/>				
sample 11		<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\2012-06-27\2012-06-27\_004.xad

Created: 6/27/2012 12:23:16 PM  
Modified: 6/27/2012 12:55:35 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

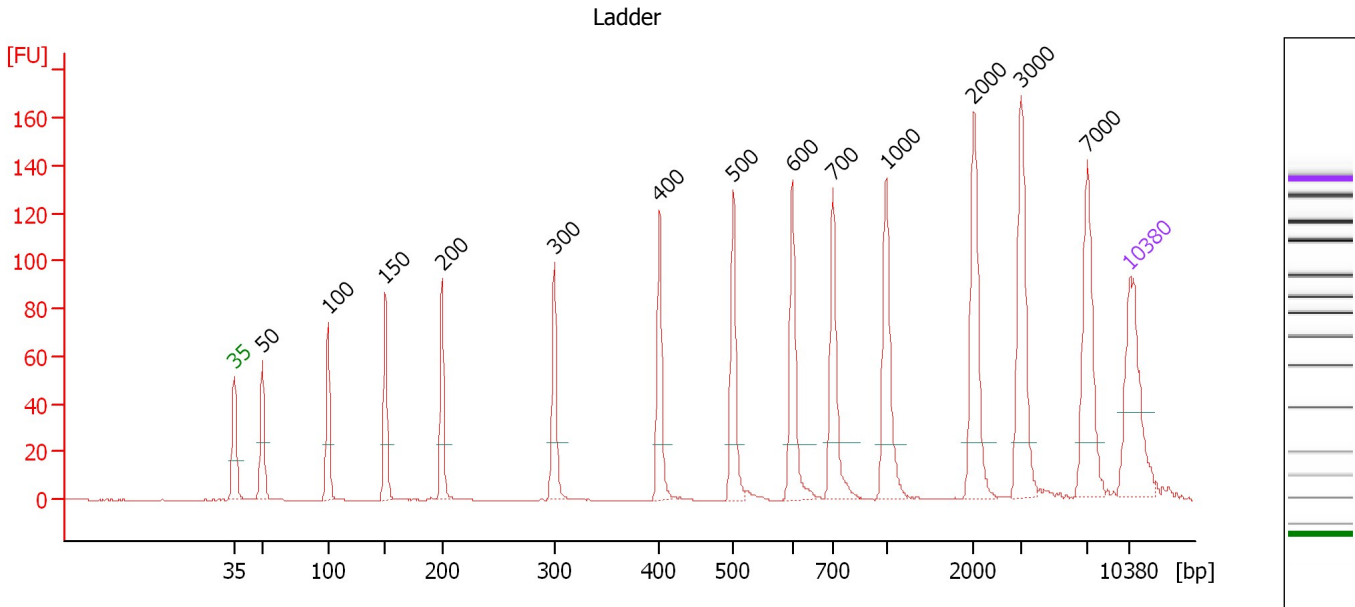
**Ladder**

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\2012-06-27\2012-06-27\_004.xad

Created: 6/27/2012 12:23:16 PM  
 Modified: 6/27/2012 12:55:35 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.1

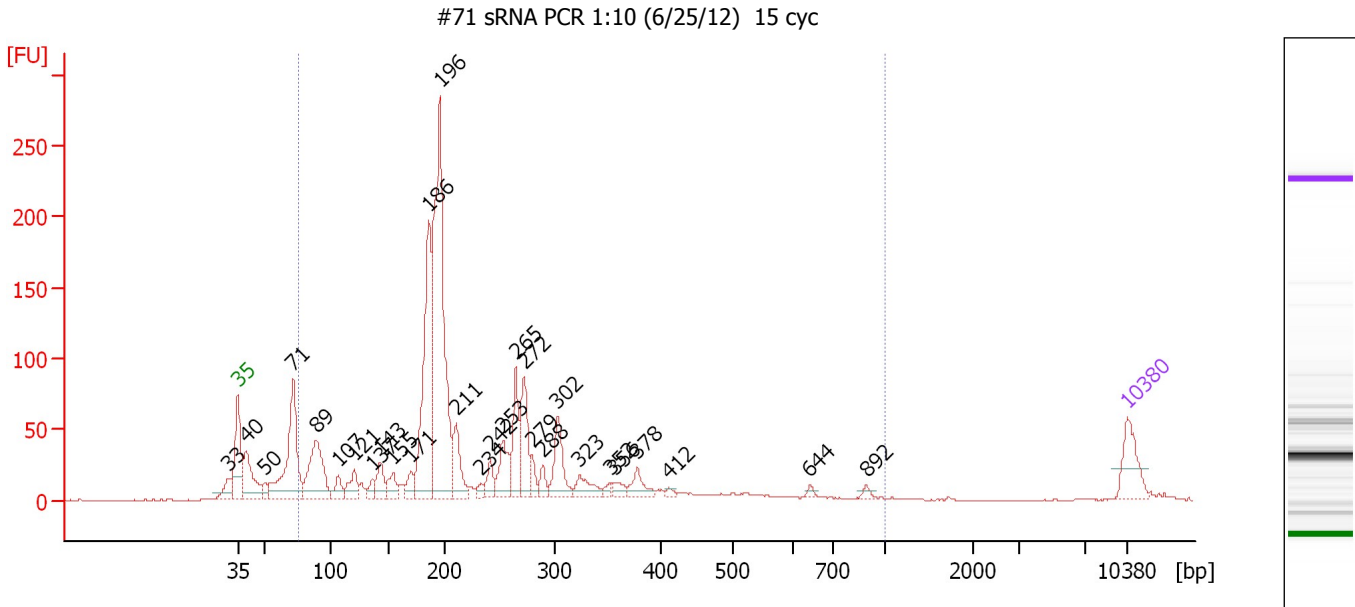
**Peak table for Ladder**

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\2012-06-27\2012-06-27\_004.xad

Created: 6/27/2012 12:23:16 PM  
 Modified: 6/27/2012 12:55:35 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : #71 sRNA PCR 1:10 (6/25/12) 15 cyc**

Number of peaks found: 29                      Corr. Area 1: 1,650.6  
 Noise: 0.3

**Peak table for sample 1 : #71 sRNA PCR 1:10 (6/25/12) 15 cyc**


Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	33	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	40	174.51	6,669.7	
4	50	32.78	997.4	
5	71	397.59	8,458.5	
6	89	262.59	4,467.0	
7	107	47.39	673.6	
8	121	69.33	870.3	
9	137	33.16	367.5	
10	143	68.29	722.2	
11	155	53.51	522.8	
12	171	46.10	409.1	
13	186	514.22	4,180.1	
14	196	924.96	7,137.4	
15	211	121.36	871.0	
16	234	17.89	116.1	
17	242	48.10	301.6	
18	253	109.04	652.8	
19	265	135.32	775.1	
20	272	156.74	872.7	
21	279	33.02	179.4	
22	288	34.41	180.8	
23	302	124.15	623.2	
24	323	59.24	278.1	
25	352	13.50	58.0	
26	356	25.59	108.8	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-27\2012-06-27\_004.xad

Created: 6/27/2012 12:23:16 PM  
 Modified: 6/27/2012 12:55:35 PM

### Electropherogram Summary Continued ...

#### ... Peak table for sample 1 : #71 sRNA PCR 1:10 (6/25/12) 15 cyc

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	378	49.33	197.8	
28	412	9.14	33.6	
29	644	7.87	18.5	
30	892	9.65	16.4	
31	 10,380	75.00	10.9	Upper Marker

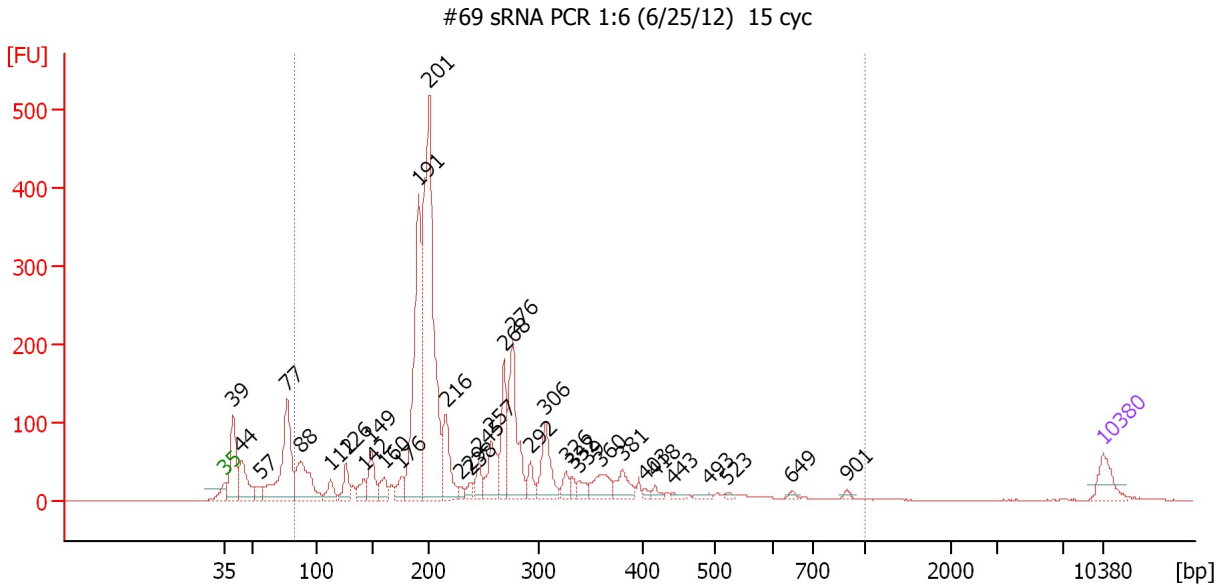
#### Region table for sample 1 : #71 sRNA PCR 1:10 (6/25/12) 15 cyc

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
75	1,000	237	27,357.7	3,311.30	1,650.6	85	48.8	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-27\2012-06-27\_004.xad

Created: 6/27/2012 12:23:16 PM  
 Modified: 6/27/2012 12:55:35 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : #69 sRNA PCR 1:6 (6/25/12) 15 cyc**

Number of peaks found: 34                      Corr. Area 1: 3,057.4  
 Noise: 0.4

**Peak table for sample 2 : #69 sRNA PCR 1:6 (6/25/12) 15 cyc**


Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	39	341.04	13,112.1	
3	44	221.87	7,621.0	
4	57	49.66	1,330.4	
5	77	589.63	11,587.7	
6	88	319.51	5,515.1	
7	112	72.92	982.2	
8	126	102.04	1,224.1	
9	142	68.13	726.9	
10	149	148.63	1,514.7	
11	160	77.68	734.7	
12	176	67.03	578.4	
13	191	907.55	7,182.9	
14	201	1,629.57	12,310.1	
15	216	243.72	1,709.4	
16	229	26.98	178.5	
17	238	37.07	235.8	
18	245	78.90	487.0	
19	257	187.61	1,105.8	
20	268	236.87	1,338.3	
21	276	432.01	2,368.4	
22	292	68.77	356.4	
23	306	217.40	1,075.6	
24	326	52.45	243.5	
25	332	34.77	158.6	
26	339	45.14	201.5	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-27\2012-06-27\_004.xad

Created: 6/27/2012 12:23:16 PM  
 Modified: 6/27/2012 12:55:35 PM

**Electropherogram Summary Continued ...**

**... Peak table for sample 2 : #69 sRNA PCR 1:6 (6/25/12) 15 cyc**

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
27	360	119.30	502.1	
28	381	93.57	371.9	
29	403	14.95	56.2	
30	418	21.69	78.6	
31	443	13.83	47.4	
32	493	15.22	46.8	
33	523	7.97	23.1	
34	649	9.71	22.7	
35	901	10.36	17.4	
36	 10,380	75.00	10.9	Upper Marker

**Region table for sample 2 : #69 sRNA PCR 1:6 (6/25/12) 15 cyc**

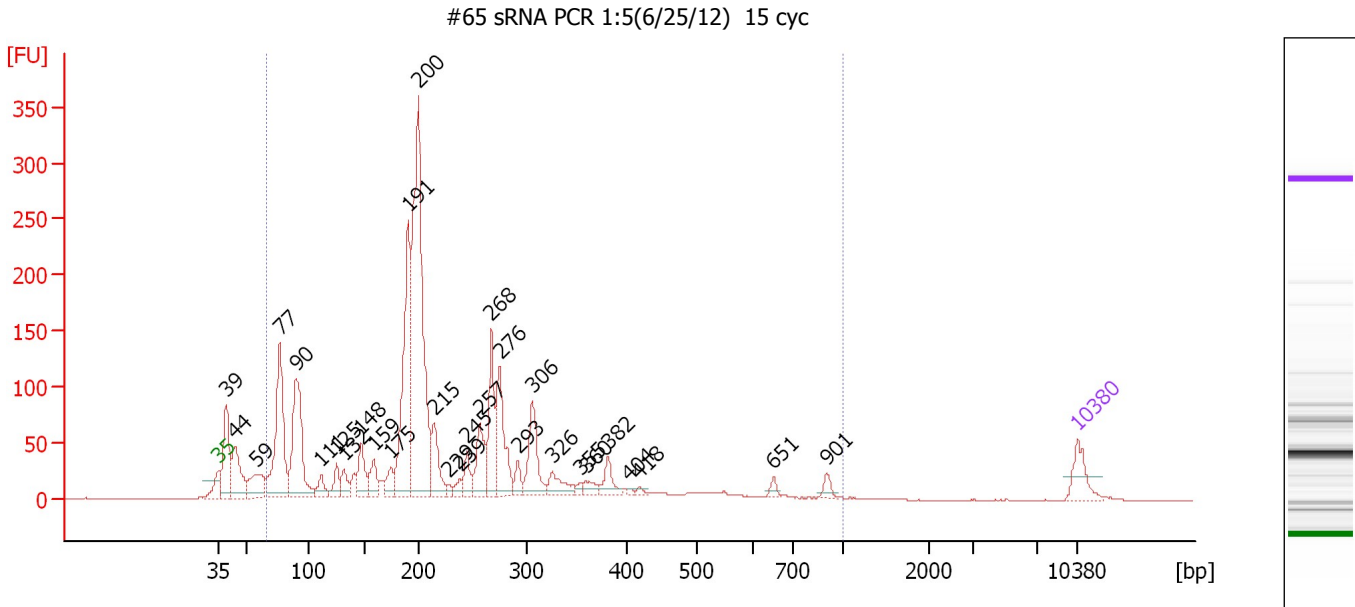
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
83	1,000	249	42,987.1	5,717.87	3,057.4	84	44.4	



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-27\2012-06-27\_004.xad

Created: 6/27/2012 12:23:16 PM  
 Modified: 6/27/2012 12:55:35 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : #65 sRNA PCR 1:5(6/25/12) 15 cyc**

Number of peaks found: 30                      Corr. Area 1: 2,525.7  
 Noise: 0.4

**Peak table for sample 3 : #65 sRNA PCR 1:5(6/25/12) 15 cyc**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	39	312.55	12,077.1	
3	44	249.40	8,583.2	
4	59	170.27	4,380.8	
5	77	601.56	11,841.6	
6	90	550.55	9,267.9	
7	111	70.21	955.6	
8	125	78.41	947.0	
9	132	70.84	814.4	
10	148	144.10	1,476.5	
11	159	98.75	940.0	
12	175	76.15	659.6	
13	191	693.40	5,496.5	
14	200	1,305.43	9,865.6	
15	215	168.70	1,187.1	
16	229	20.85	137.9	
17	239	30.90	195.9	
18	245	75.42	465.6	
19	257	178.14	1,048.9	
20	268	242.78	1,371.6	
21	276	288.65	1,584.0	
22	293	51.55	266.6	
23	306	211.25	1,045.4	
24	326	87.14	404.6	
25	355	15.89	67.7	
26	360	36.60	154.2	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-27\2012-06-27\_004.xad


Created: 6/27/2012 12:23:16 PM  
 Modified: 6/27/2012 12:55:35 PM

### Electropherogram Summary Continued ...

#### ... Peak table for sample 3 : #65 sRNA PCR 1:5(6/25/12) 15 cyc

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	382	69.07	274.0	
28	404	9.01	33.8	
29	418	11.50	41.7	
30	651	19.35	45.0	
31	901	26.10	43.9	
32	10,380	75.00	10.9	Upper Marker

#### Region table for sample 3 : #65 sRNA PCR 1:5(6/25/12) 15 cyc

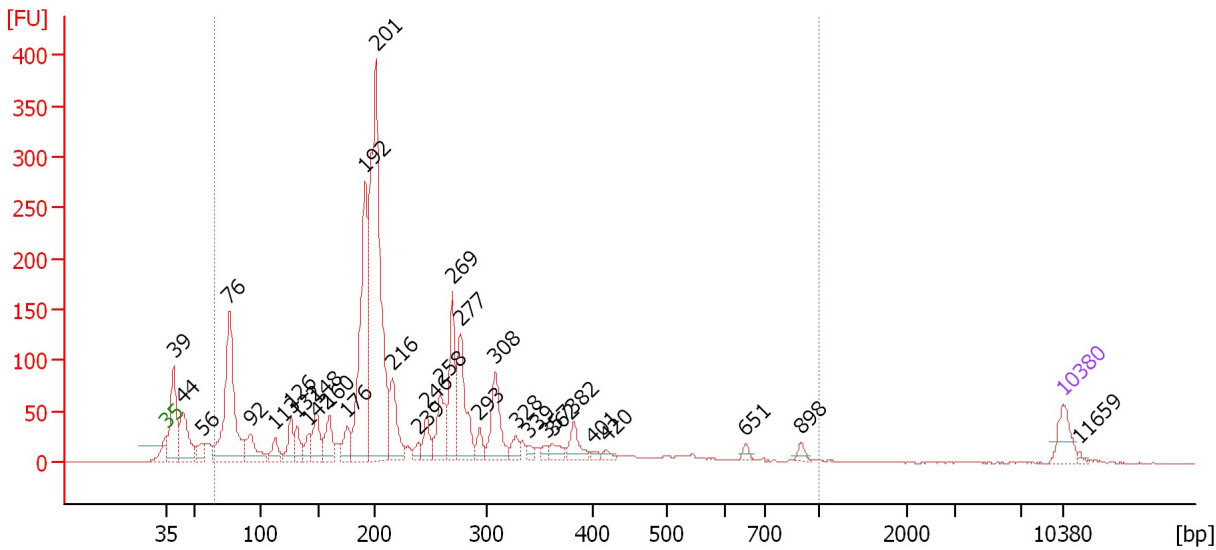
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
66	1,000	237	53,147.9	5,725.10	2,525.7	89	57.0	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-27\2012-06-27\_004.xad

Created: 6/27/2012 12:23:16 PM  
 Modified: 6/27/2012 12:55:35 PM

**Electropherogram Summary Continued ...**

#37 sRNA PCR 1:6 (6/25/12) 15 cyc



**Overall Results for sample 4 : #37 sRNA PCR 1:6 (6/25/12) 15 cyc**

Number of peaks found: 32                      Corr. Area 1: 2,657.1  
 Noise: 0.2

**Peak table for sample 4 : #37 sRNA PCR 1:6 (6/25/12) 15 cyc**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	39	342.66	13,417.4	
3	44	251.49	8,674.0	
4	56	62.11	1,689.0	
5	76	737.04	14,621.4	
6	92	143.37	2,353.5	
7	113	74.53	1,003.6	
8	126	112.29	1,345.1	
9	132	83.38	957.2	
10	142	73.04	779.6	
11	148	140.35	1,432.6	
12	160	132.14	1,251.3	
13	176	96.54	832.9	
14	192	750.37	5,930.0	
15	201	1,468.72	11,055.1	
16	216	218.34	1,531.8	
17	239	37.44	237.6	
18	246	86.81	534.0	
19	258	184.21	1,079.9	
20	269	276.11	1,554.7	
21	277	307.05	1,681.5	
22	293	53.86	278.2	
23	308	219.24	1,080.2	
24	328	45.13	208.7	
25	339	20.92	93.5	
26	357	22.23	94.4	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-27\2012-06-27\_004.xad

Created: 6/27/2012 12:23:16 PM  
 Modified: 6/27/2012 12:55:35 PM

### Electropherogram Summary Continued ...

#### ... Peak table for sample 4 : #37 sRNA PCR 1:6 (6/25/12) 15 cyc

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	362	45.39	189.9	
28	382	79.85	316.5	
29	401	13.28	50.2	
30	420	17.67	63.8	
31	651	15.87	37.0	
32	898	19.52	32.9	
33	10,380	75.00	10.9	Upper Marker
34	11,659	0.00	0.0	

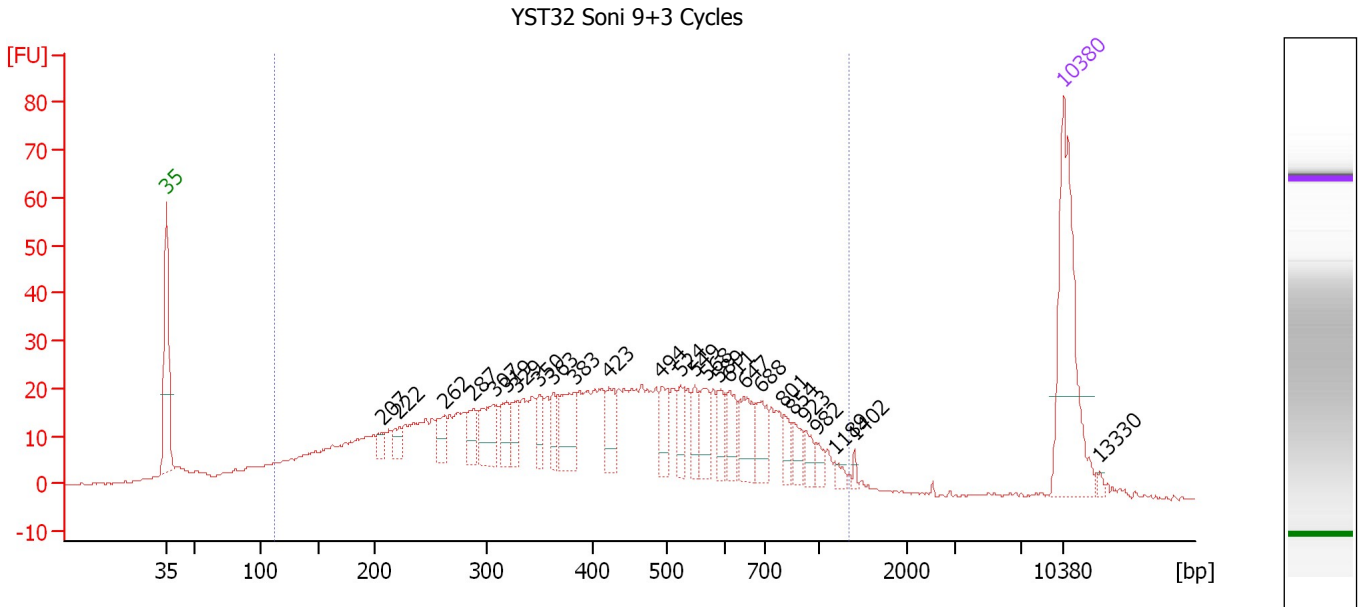
#### Region table for sample 4 : #37 sRNA PCR 1:6 (6/25/12) 15 cyc

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
65	1,000	241	52,795.0	5,982.05	2,657.1	89	53.8	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-27\2012-06-27\_004.xad

Created: 6/27/2012 12:23:16 PM  
 Modified: 6/27/2012 12:55:35 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : YST32 Soni 9+3 Cycles**

Number of peaks found: 26                      Corr. Area 1: 976.1  
 Noise: 0.2

**Peak table for sample 5 : YST32 Soni 9+3 Cycles**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	207	6.58	48.2	
3	222	9.09	62.0	
4	262	14.15	81.8	
5	287	16.95	89.3	
6	307	28.60	141.3	
7	319	16.39	77.9	
8	329	13.64	62.9	
9	350	13.32	57.7	
10	363	13.34	55.6	
11	383	32.31	127.9	
12	423	18.76	67.2	
13	494	15.63	47.9	
14	524	14.26	41.2	
15	549	12.69	35.0	
16	568	18.09	48.3	
17	589	12.80	32.9	
18	611	17.44	43.3	
19	647	23.20	54.4	
20	688	19.99	44.0	
21	801	8.92	16.9	
22	854	9.96	17.7	
23	923	8.49	13.9	
24	982	5.24	8.1	
25	1,189	3.42	4.4	
26	1,402	2.12	2.3	


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-27\2012-06-27\_004.xad

Created: 6/27/2012 12:23:16 PM  
Modified: 6/27/2012 12:55:35 PM

**Electropherogram Summary Continued ...****... Peak table for sample 5 : YST32 Soni 9+3 Cycles**

Peak	Size [bp]	Conc. [pg/ $\mu$ l]	Molarity [pmol/l]	Observations
27	10,380	75.00	10.9	Upper Marker
28	13,330	0.00	0.0	

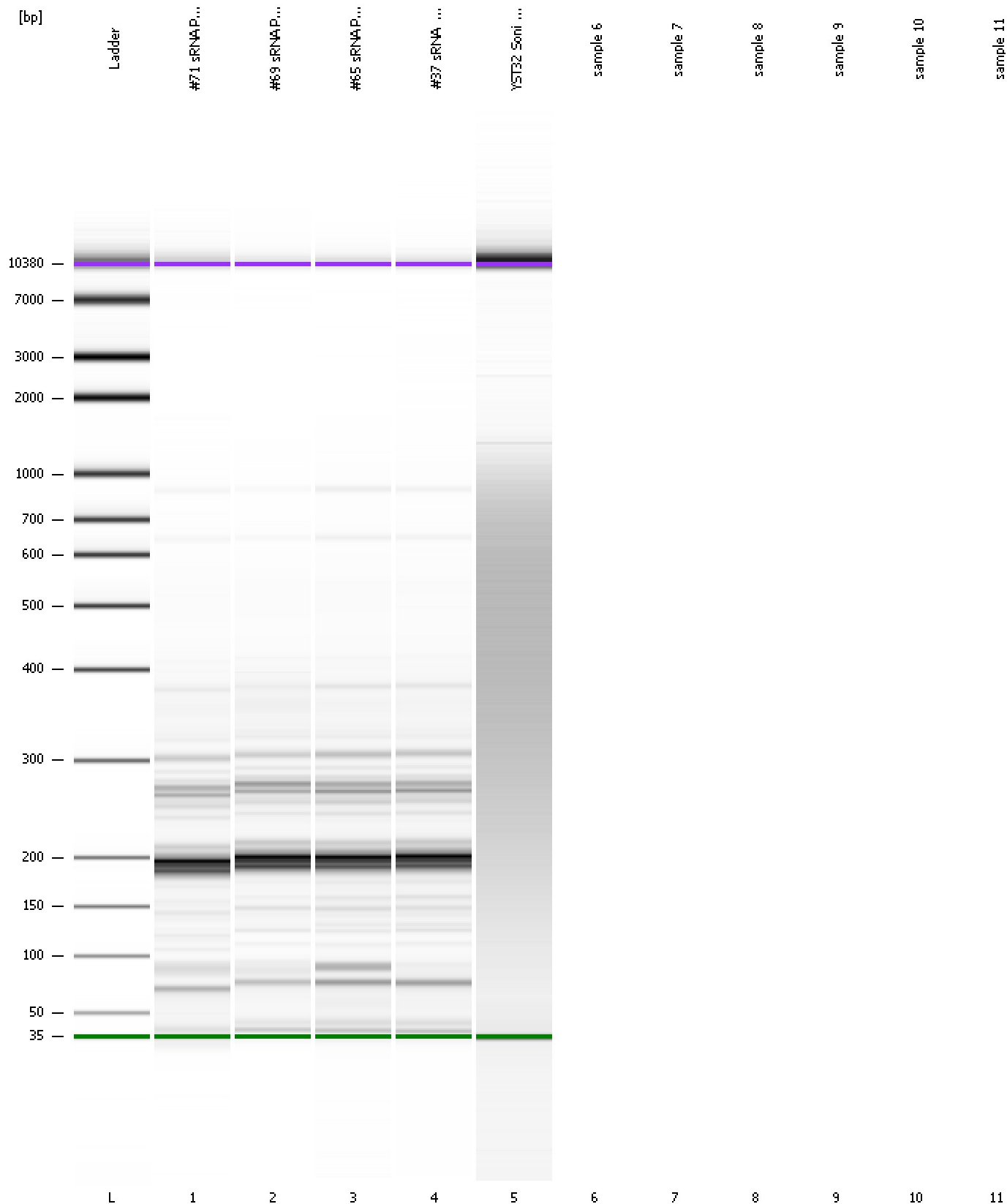
**Region table for sample 5 : YST32 Soni 9+3 Cycles**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/ $\mu$ l]	Corr. Area	% of Total	Size distribution in CV [%]	Color
113	1,329	449	5,077.3	1,047.35	976.1	91	48.2	

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-27\2012-06-27\_004.xad

Created: 6/27/2012 12:23:16 PM  
Modified: 6/27/2012 12:55:35 PM

Gel Image



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-27\2012-06-27\_004.xad

Created: 6/27/2012 12:23:16 PM  
Modified: 6/27/2012 12:55:35 PM

**Invalid Samples**

- Sample 6 has not been run, no results available.
- Sample 7 has not been run, no results available.
- 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\2012-06-27\2012-06-27\_004.xad

Created: 6/27/2012 12:23:16 PM  
 Modified: 6/27/2012 12:55:35 PM

**Run Logbook**

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 6)		Instrument	Run		6/27/2012 12:47:27 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2012-06-27\2012-06-27_004.xad)		Instrument	Run		6/27/2012 12:23:21 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		6/27/2012 12:23:21 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		6/27/2012 12:23:21 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		6/27/2012 12:23:21 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		6/27/2012 12:23:21 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		6/27/2012 12:23:21 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		6/27/2012 12:23:21 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1