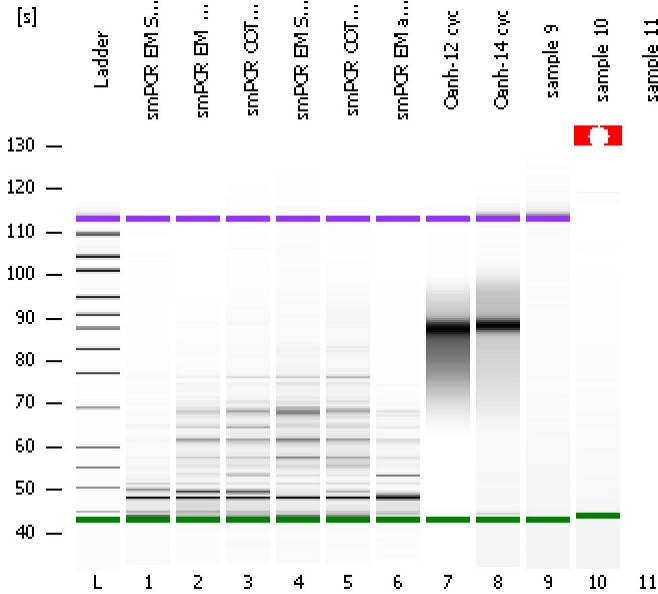


Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-05\2012-06-05\_001.xad

Created: 6/5/2012 9:52:27 AM  
 Modified: 6/5/2012 10:30:27 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

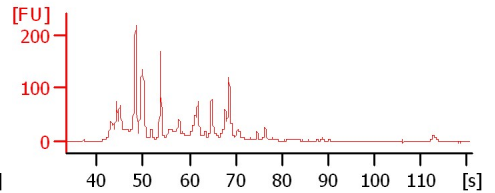
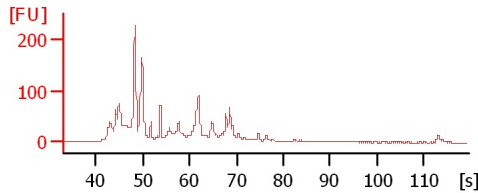
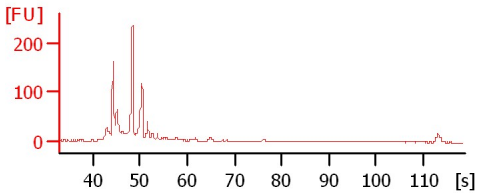
Chip Information:

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

smPCR EM SCPY-1

smPCR EM\_ax PY-1

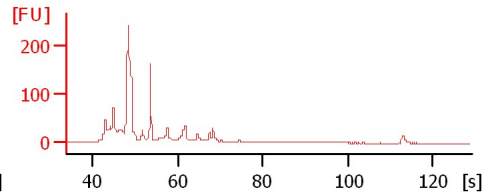
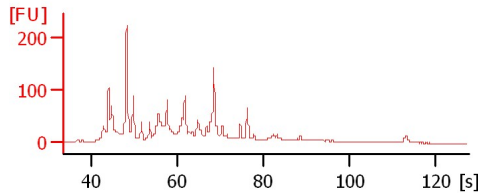
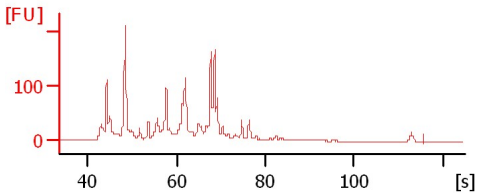
smPCR COT\_EP-1



smPCR EM SCPY-2

smPCR COT\_HI-1

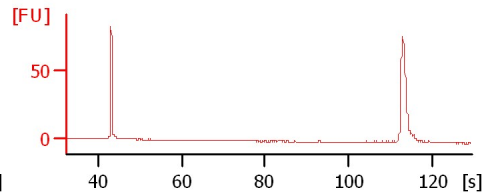
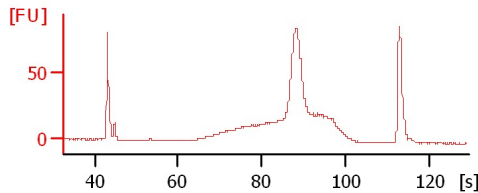
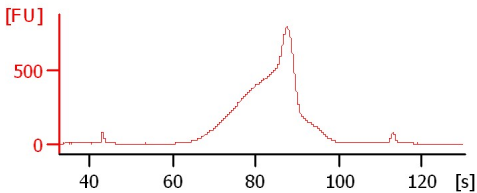
smPCR EM ax VS-1



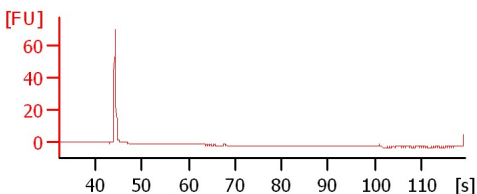
Oanh-12 cyc

Oanh-14 cyc

sample 9



sample 10



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-05\2012-06-05\_001.xad

Created: 6/5/2012 9:52:27 AM  
Modified: 6/5/2012 10:30:27 AM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
smPCR EM SCPY-1		<input type="checkbox"/>	✓			
smPCR EM_ax PY-1		<input type="checkbox"/>	✓			
smPCR COT_EP-1		<input type="checkbox"/>	✓			
smPCR EM SCPY-2		<input type="checkbox"/>	✓			
smPCR COT_HI-1		<input type="checkbox"/>	✓			
smPCR EM ax VS-1		<input type="checkbox"/>	✓			
Oanh-12 cyc		<input type="checkbox"/>	✓			
Oanh-14 cyc		<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\2012-06-05\2012-06-05\_001.xad

Created: 6/5/2012 9:52:27 AM  
Modified: 6/5/2012 10:30:27 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/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

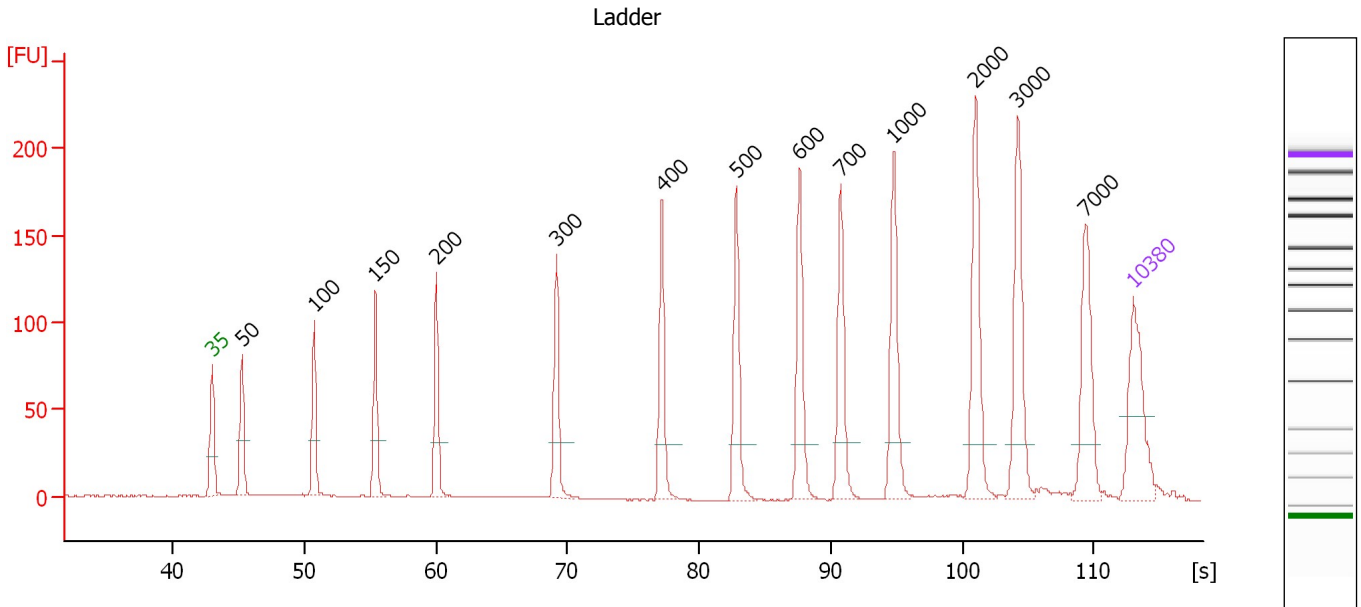
**Ladder**

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\2012-06-05\2012-06-05\_001.xad

Created: 6/5/2012 9:52:27 AM  
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**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.1

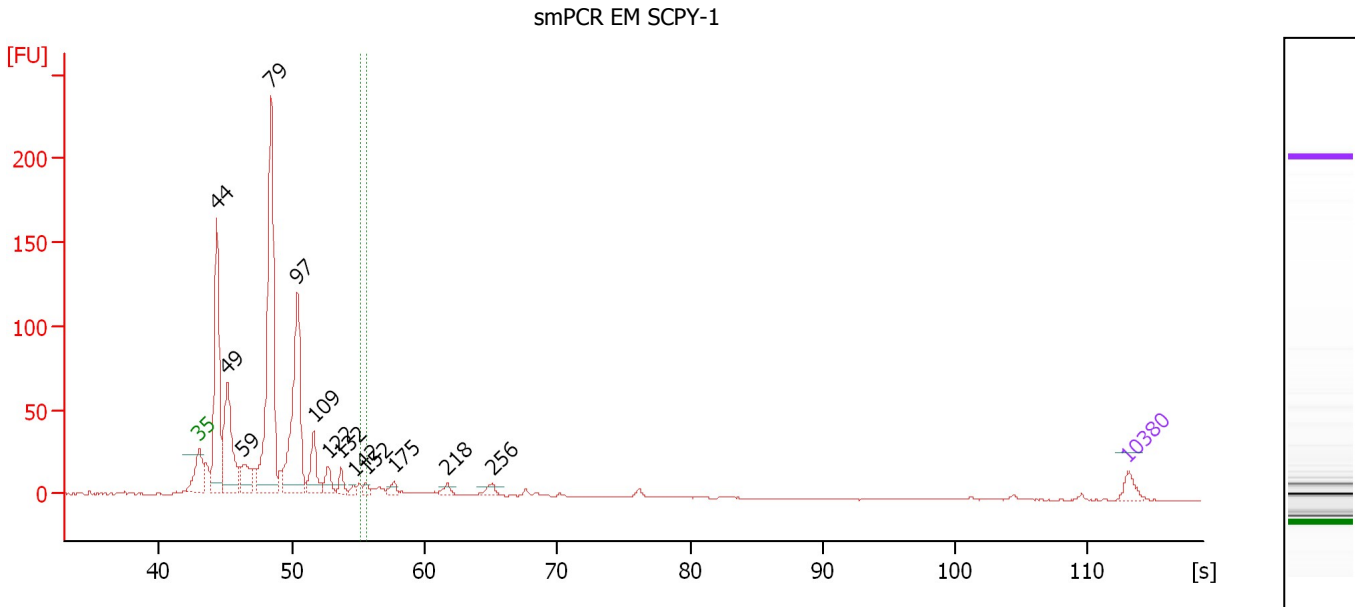
**Peak table for Ladder**

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\2012-06-05\2012-06-05\_001.xad

Created: 6/5/2012 9:52:27 AM  
 Modified: 6/5/2012 10:30:27 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : smPCR EM SCPY-1**

Number of peaks found: 13                      Corr. Area 1: 5.6  
 Noise: 0.2

**Peak table for sample 1 : smPCR EM SCPY-1**

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	44	1,908.61	66,064.6	
3	49	1,228.94	38,137.7	
4	59	339.84	8,658.0	
5	79	3,236.37	62,284.8	
6	97	1,916.95	29,981.7	
7	109	426.69	5,910.3	
8	122	181.00	2,255.8	
9	132	119.71	1,378.4	
10	142	41.86	446.5	
11	152	60.38	603.4	
12	175	77.64	673.4	
13	218	73.96	513.6	
14	256	87.20	517.0	
15	10,380	75.00	10.9	Upper Marker

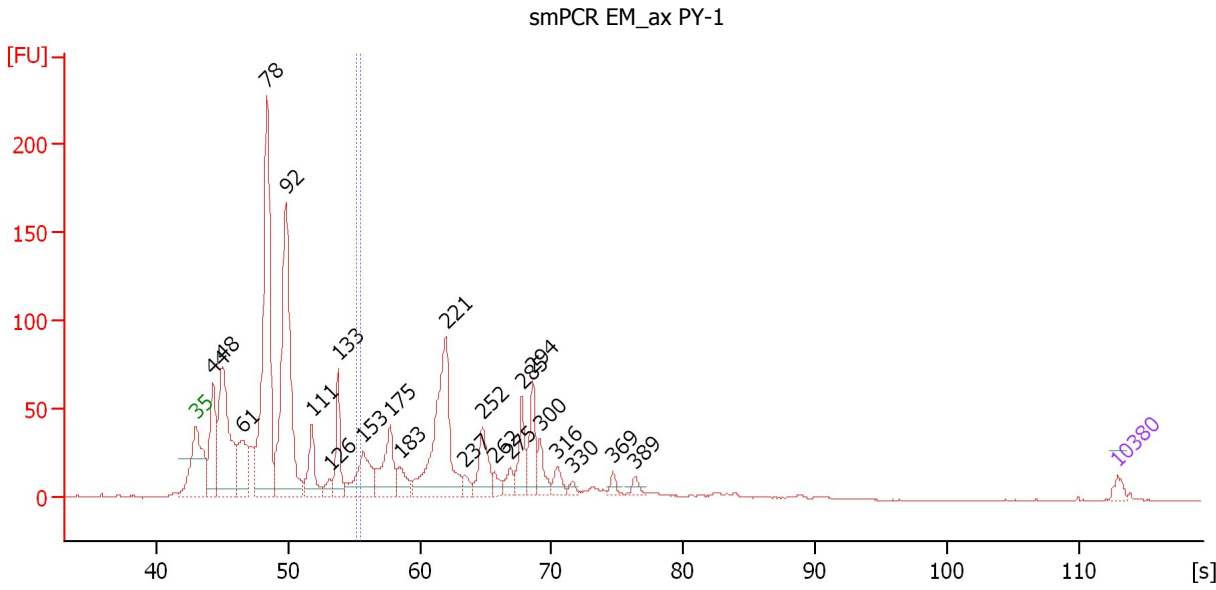
**Region table for sample 1 : smPCR EM SCPY-1**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
148	152	150	529.1	52.29	5.6	0	1.0	Green

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-05\2012-06-05\_001.xad

Created: 6/5/2012 9:52:27 AM  
 Modified: 6/5/2012 10:30:27 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : smPCR EM\_ax PY-1**

Number of peaks found: 23                      Corr. Area 1: 12.7  
 Noise: 0.2

**Peak table for sample 2 : smPCR EM\_ax PY-1**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	44	1,457.60	50,692.2	
3	48	2,761.02	87,427.2	
4	61	1,016.45	25,174.8	
5	78	5,151.29	99,642.9	
6	92	4,620.53	76,299.2	
7	111	742.87	10,108.4	
8	126	192.79	2,313.6	
9	133	796.90	9,090.1	
10	153	981.11	9,716.5	
11	175	1,002.99	8,666.7	
12	183	347.49	2,873.3	
13	221	2,689.79	18,444.6	
14	237	146.94	940.8	
15	252	681.51	4,099.5	
16	262	165.37	957.3	
17	275	188.35	1,037.0	
18	285	571.18	3,040.9	
19	294	626.94	3,235.8	
20	300	332.38	1,679.6	
21	316	212.24	1,017.5	
22	330	81.00	371.6	
23	369	103.96	427.1	
24	389	101.85	396.6	
25	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-05\2012-06-05\_001.xad

Created: 6/5/2012 9:52:27 AM  
Modified: 6/5/2012 10:30:27 AM

**Electropherogram Summary Continued ...**

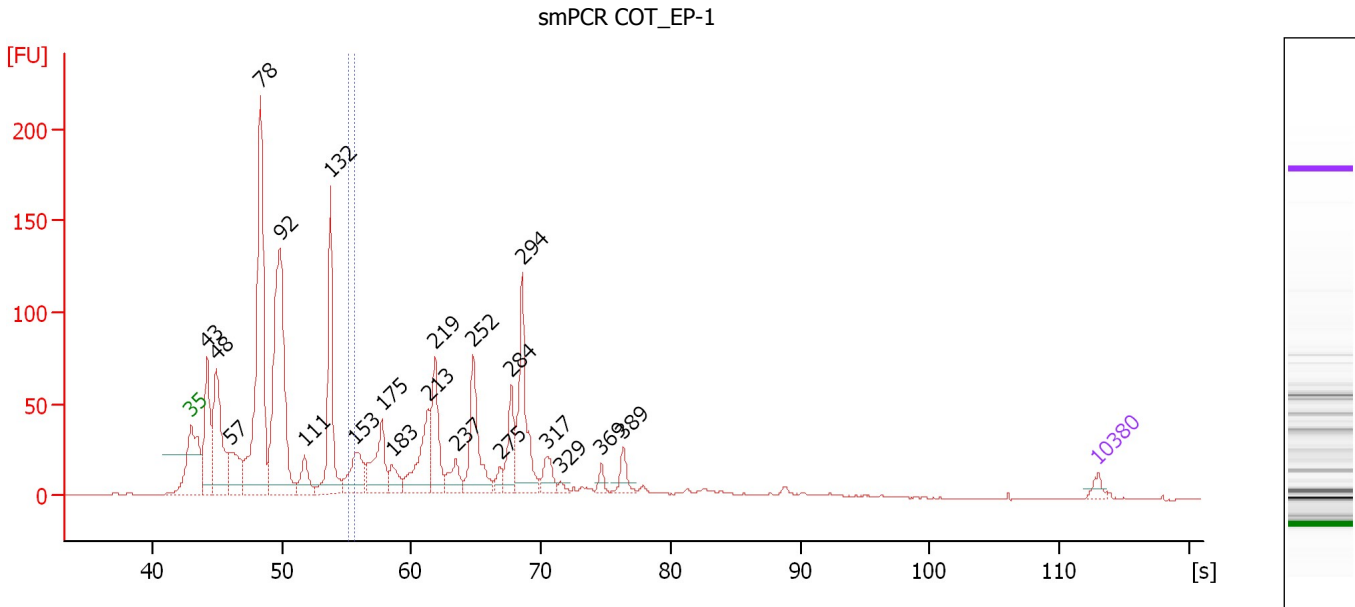
... Region table for sample 2 : smPCR EM\_ax PY-1

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/ $\mu$ l]	Corr. Area	% of Total	Size distribution in CV [%]	Color
148	152	149	1,802.0	177.70	12.7	1	0.8	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-05\2012-06-05\_001.xad

Created: 6/5/2012 9:52:27 AM  
 Modified: 6/5/2012 10:30:27 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : smPCR COT\_EP-1**

Number of peaks found: 21                      Corr. Area 1: 17.6  
 Noise: 0.2

**Peak table for sample 3 : smPCR COT\_EP-1**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	43	1,545.09	54,235.8	
3	48	2,082.88	66,035.7	
4	57	902.79	23,931.4	
5	78	5,099.52	99,047.7	
6	92	4,511.20	74,266.8	
7	111	472.70	6,444.5	
8	132	2,105.51	24,153.5	
9	153	765.96	7,584.1	
10	175	994.11	8,592.1	
11	183	340.47	2,813.9	
12	213	1,079.78	7,663.8	
13	219	1,018.56	7,034.1	
14	237	379.08	2,421.8	
15	252	1,206.82	7,263.4	
16	275	156.86	864.3	
17	284	627.86	3,348.5	
18	294	1,467.18	7,570.0	
19	317	304.55	1,457.7	
20	329	61.54	283.0	
21	369	108.98	447.9	
22	389	218.78	851.6	
23	10,380	75.00	10.9	Upper Marker



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-05\2012-06-05\_001.xad

Created: 6/5/2012 9:52:27 AM  
Modified: 6/5/2012 10:30:27 AM

**Electropherogram Summary Continued ...**

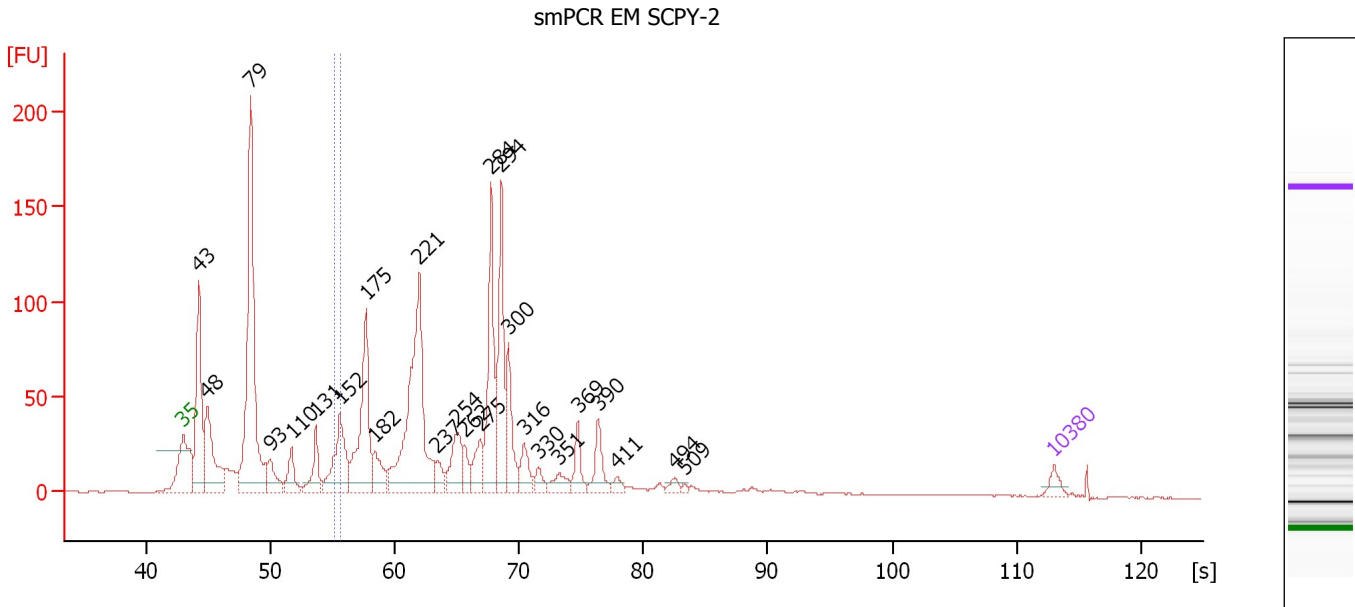
... Region table for sample 3 : smPCR COT EP-1

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
147	153	150	2,522.3	249.03	17.6	1	1.2	■

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-05\2012-06-05\_001.xad

Created: 6/5/2012 9:52:27 AM  
 Modified: 6/5/2012 10:30:27 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : smPCR EM SCPY-2**

Number of peaks found: 25                      Corr. Area 1: 22.9  
 Noise: 0.2

**Peak table for sample 4 : smPCR EM SCPY-2**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	43	1,575.50	55,234.3	
3	48	1,086.74	34,481.7	
4	79	3,491.70	67,100.2	
5	93	344.67	5,612.0	
6	110	323.60	4,441.3	
7	131	396.92	4,581.1	
8	152	883.62	8,798.8	
9	175	1,388.51	12,028.9	
10	182	338.03	2,809.2	
11	221	2,448.79	16,765.9	
12	237	169.46	1,081.4	
13	254	469.13	2,798.0	
14	262	178.74	1,035.1	
15	275	306.06	1,686.8	
16	284	1,159.73	6,178.6	
17	294	1,082.82	5,582.5	
18	300	554.29	2,798.9	
19	316	243.80	1,170.3	
20	330	111.82	513.2	
21	351	158.01	681.9	
22	369	217.47	892.1	
23	390	285.86	1,111.3	
24	411	65.59	241.6	
25	494	61.92	190.1	
26	509	22.20	66.1	

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-05\2012-06-05\_001.xad

Created: 6/5/2012 9:52:27 AM  
Modified: 6/5/2012 10:30:27 AM

**Electropherogram Summary Continued ...****... Peak table for sample 4 : smPCR EM SCPY-2**

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

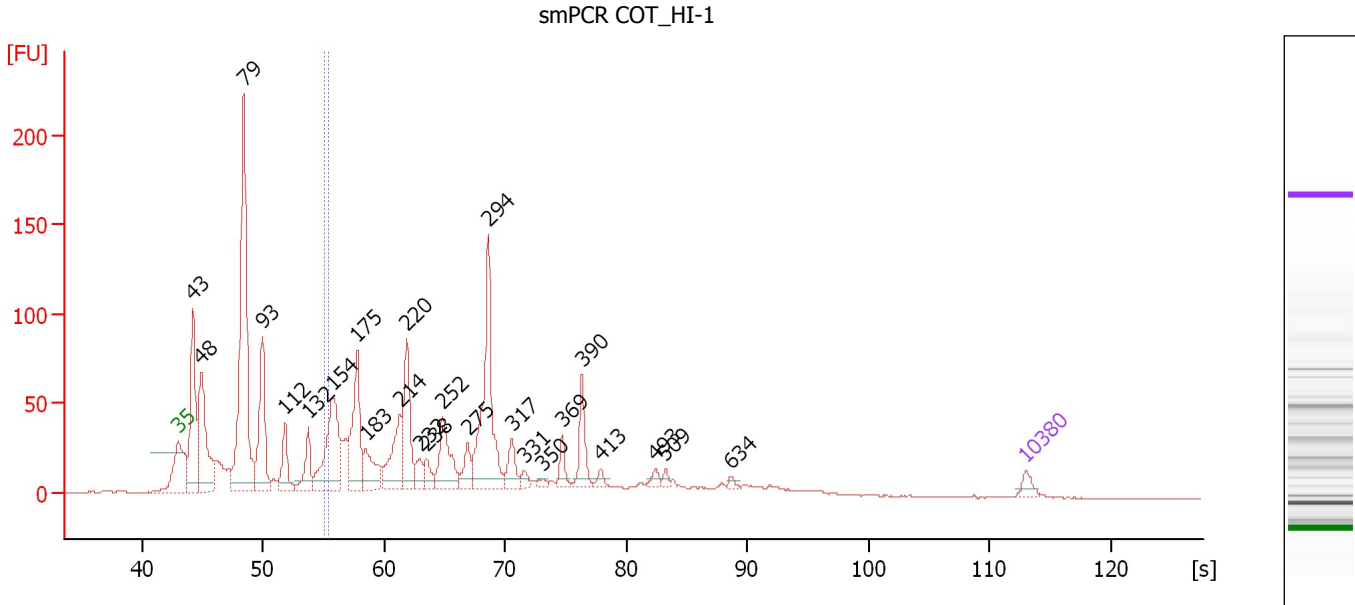
**Region table for sample 4 : smPCR EM SCPY-2**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/ $\mu$ l]	Corr. Area	% of Total	Size distribution in CV [%]	Color
147	152	150	2,391.3	236.28	22.9	1	1.0	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-05\2012-06-05\_001.xad

Created: 6/5/2012 9:52:27 AM  
 Modified: 6/5/2012 10:30:27 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : smPCR COT HI-1**

Number of peaks found: 25                      Corr. Area 1: 20.1  
 Noise: 0.2

**Peak table for sample 5 : smPCR COT HI-1**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	43	1,499.22	52,993.6	
3	48	1,436.72	45,804.0	
4	79	3,621.91	69,811.5	
5	93	1,194.59	19,502.0	
6	112	455.43	6,184.3	
7	132	405.70	4,653.7	
8	154	1,336.04	13,142.3	
9	175	1,027.57	8,871.7	
10	183	458.43	3,793.0	
11	214	640.46	4,535.5	
12	220	858.16	5,902.3	
13	232	175.93	1,148.9	
14	238	169.96	1,080.4	
15	252	618.41	3,711.2	
16	275	240.45	1,322.9	
17	294	1,525.07	7,848.4	
18	317	255.18	1,218.1	
19	331	78.01	357.5	
20	350	50.63	219.2	
21	369	155.74	638.9	
22	390	365.94	1,422.7	
23	413	63.23	232.1	
24	493	73.70	226.7	
25	509	48.67	144.9	
26	634	37.96	90.7	


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-05\2012-06-05\_001.xad

Created: 6/5/2012 9:52:27 AM  
Modified: 6/5/2012 10:30:27 AM

**Electropherogram Summary Continued ...****... Peak table for sample 5 : smPCR COT HI-1**

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

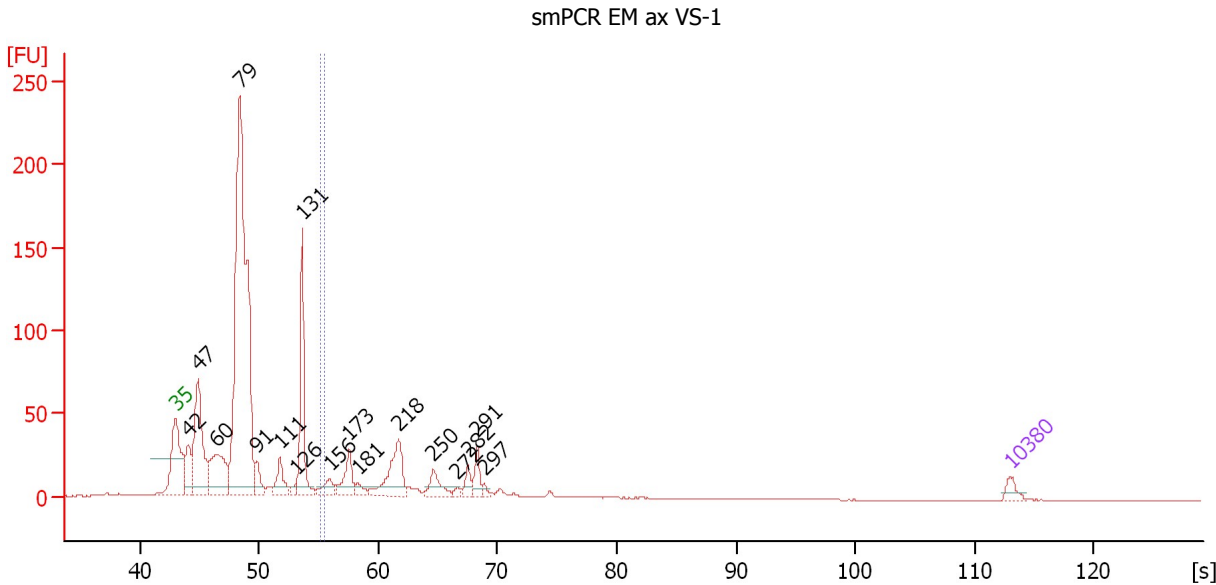
**Region table for sample 5 : smPCR COT HI-1**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/ $\mu$ l]	Corr. Area	% of Total	Size distribution in CV [%]	Color
147	151	149	2,145.9	210.32	20.1	1	0.8	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-05\2012-06-05\_001.xad

Created: 6/5/2012 9:52:27 AM  
 Modified: 6/5/2012 10:30:27 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : smPCR EM ax VS-1**

Number of peaks found: 17                      Corr. Area 1: 5.0  
 Noise: 0.1

**Peak table for sample 6 : smPCR EM ax VS-1**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	42	459.74	16,548.1	
3	47	1,576.03	50,362.4	
4	60	956.52	23,994.9	
5	79	6,690.44	129,106.8	
6	91	258.46	4,290.1	
7	111	367.42	5,013.1	
8	126	77.11	930.5	
9	131	1,305.37	15,110.4	
10	156	206.22	2,008.3	
11	173	398.69	3,482.0	
12	181	110.47	923.6	
13	218	710.14	4,926.2	
14	250	245.77	1,489.0	
15	272	41.85	232.8	
16	282	131.06	704.8	
17	291	192.26	1,002.2	
18	297	40.33	206.0	
19	10,380	75.00	10.9	Upper Marker

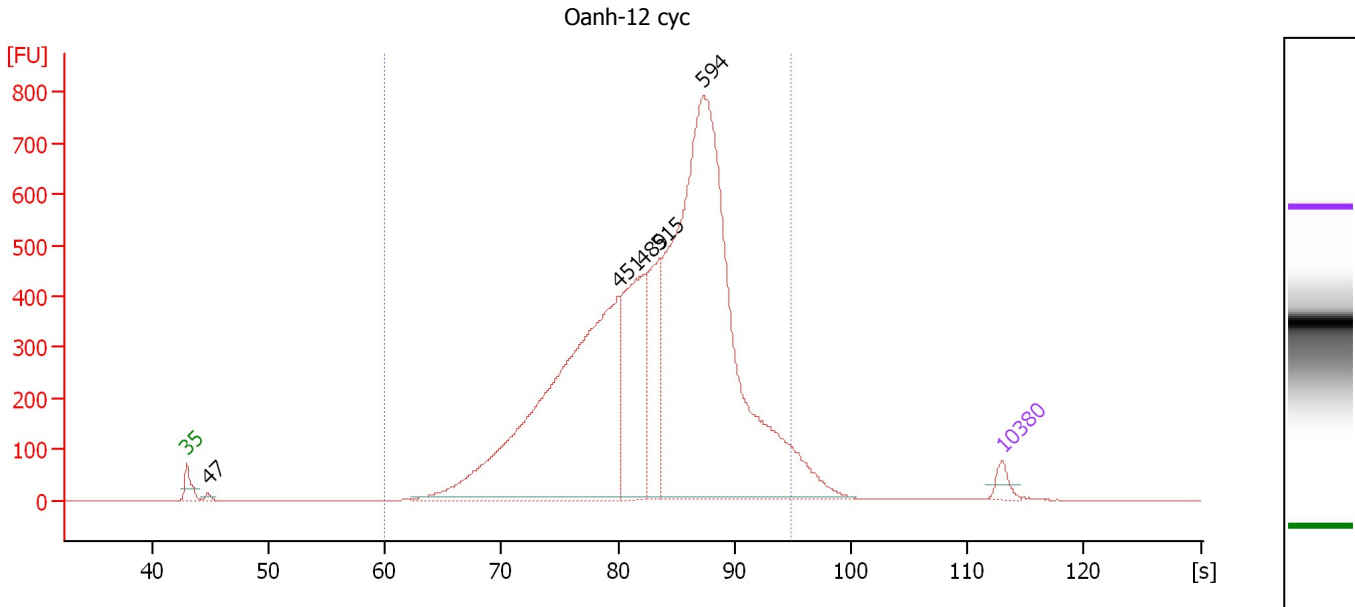
**Region table for sample 6 : smPCR EM ax VS-1**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
148	152	149	531.4	52.33	5.0	0	0.9	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-05\2012-06-05\_001.xad

Created: 6/5/2012 9:52:27 AM  
 Modified: 6/5/2012 10:30:27 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : Oanh-12 cyc**

Number of peaks found: 5                      Corr. Area 1: 11,298.3  
 Noise: 0.2

**Peak table for sample 7 : Oanh-12 cyc**

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	47	33.77	1,093.3	
3	451	4,495.45	15,117.6	
4	489	1,425.69	4,419.7	
5	515	905.86	2,666.9	
6	594	6,187.75	15,788.4	
7	10,380	75.00	10.9	Upper Marker

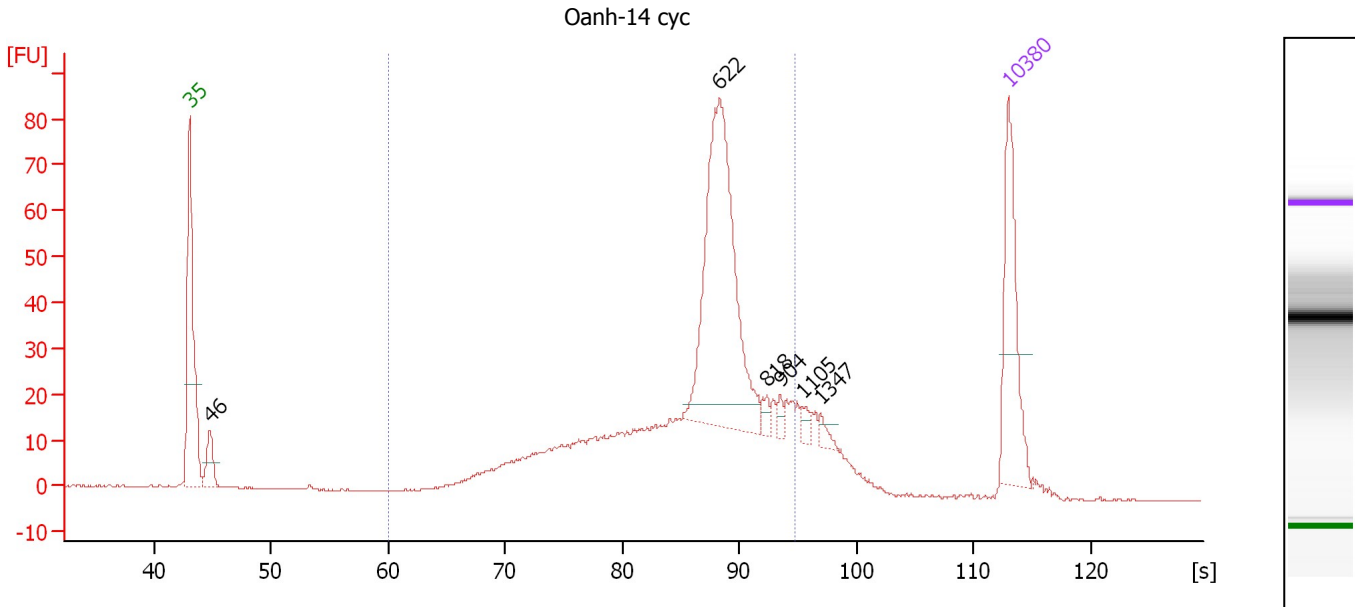
**Region table for sample 7 : Oanh-12 cyc**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	521	42,876.9	13,399.76	11,298.3	97	25.5	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-05\2012-06-05\_001.xad

Created: 6/5/2012 9:52:27 AM  
 Modified: 6/5/2012 10:30:27 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : Oanh-14 cyc**

Number of peaks found: 6                      Corr. Area 1: 680.3  
 Noise: 0.2

**Peak table for sample 8 : Oanh-14 cyc**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	46	31.65	1,032.2	
3	622	258.88	631.0	
4	818	7.58	14.0	
5	904	6.03	10.1	
6	1,105	7.19	9.9	
7	1,347	6.23	7.0	
8	10,380	75.00	10.9	Upper Marker

**Region table for sample 8 : Oanh-14 cyc**

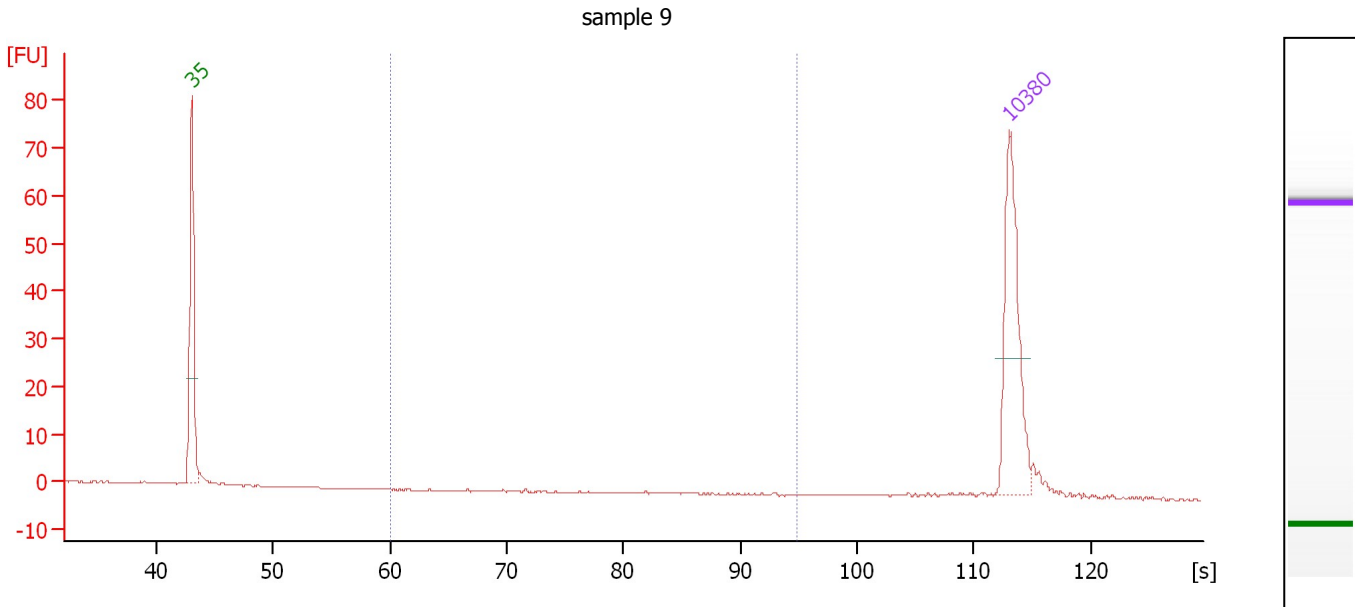
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	586	2,198.9	754.81	680.3	86	26.5	Blue



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-05\2012-06-05\_001.xad

Created: 6/5/2012 9:52:27 AM  
 Modified: 6/5/2012 10:30:27 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : sample 9**

Number of peaks found: 0                      Corr. Area 1: 0.0  
 Noise: 0.1

**Peak table for sample 9 : sample 9**

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

**Region table for sample 9 : sample 9**

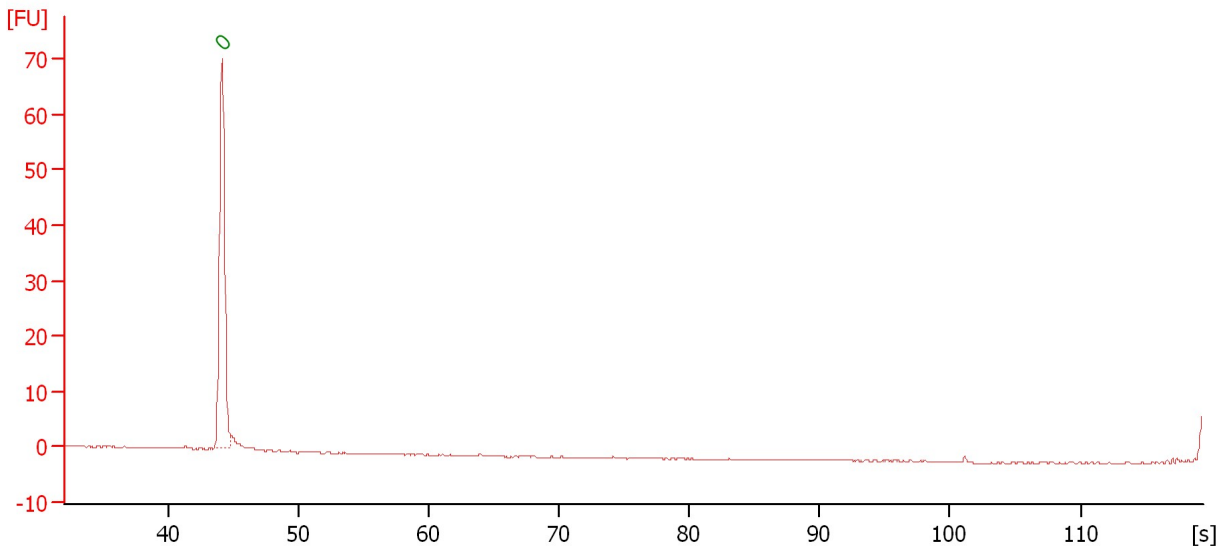
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	679	0.0	0.01	0.0	0	36.1	Blue

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-05\2012-06-05\_001.xad

Created: 6/5/2012 9:52:27 AM  
Modified: 6/5/2012 10:30:27 AM

**Electropherogram Summary Continued ...**

sample 10



**Setpoint Deviations for sample 10 : sample 10**

End Analysis Time Range [s] : 119.35

**Overall Results for sample 10 : sample 10**

Number of peaks found: 0      Noise: 0.1

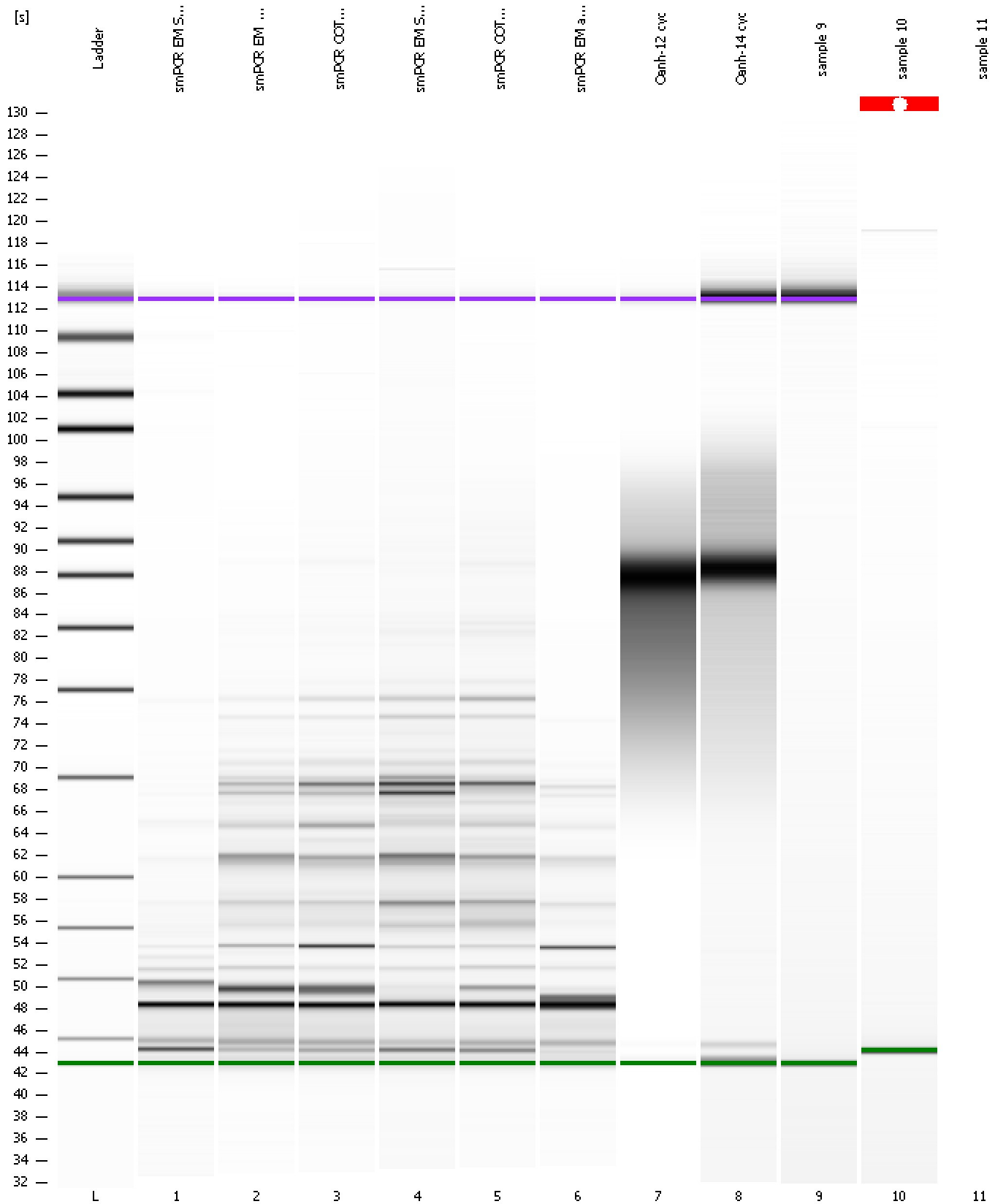
**Peak table for sample 10 : sample 10**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	0	0.00	0.0	Lower Marker

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-05\2012-06-05\_001.xad

Created: 6/5/2012 9:52:27 AM  
Modified: 6/5/2012 10:30:27 AM

**Gel Image**



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-05\2012-06-05\_001.xad

Created: 6/5/2012 9:52:27 AM  
Modified: 6/5/2012 10:30:27 AM

**Invalid Samples**

Sample 11 has not been run, no results available.

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-05\2012-06-05\_001.xad

Created: 6/5/2012 9:52:27 AM  
 Modified: 6/5/2012 10:30:27 AM

**Run Logbook**

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run aborted on port 1		Instrument	Run		6/5/2012 10:30:24 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2012-06-05\2012-06-05_001.xad)		Instrument	Run		6/5/2012 9:52:33 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		6/5/2012 9:52:33 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		6/5/2012 9:52:33 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		6/5/2012 9:52:33 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		6/5/2012 9:52:33 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		6/5/2012 9:52:33 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		6/5/2012 9:52:33 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1