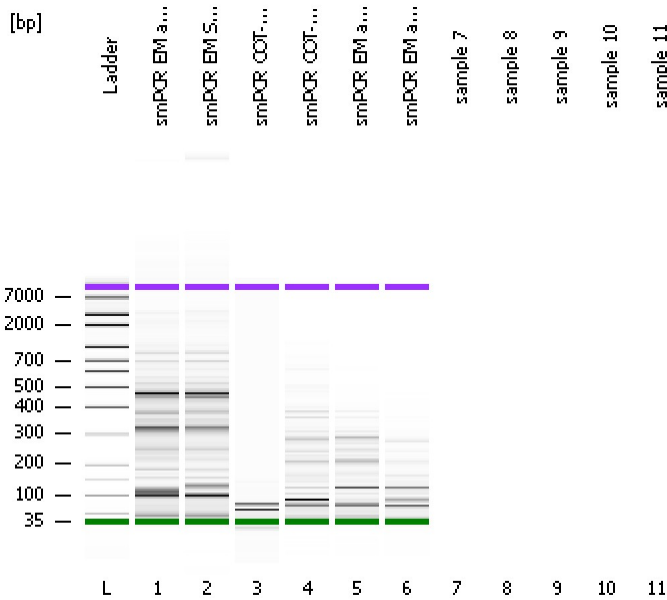


Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-13\2012-06-13_001.xad

Created: 6/13/2012 9:48:47 AM
 Modified: 6/13/2012 10:18:59 AM

Electrophoresis File Run Summary



Instrument Information:

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

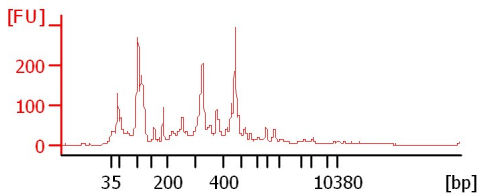
Assay Information:

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

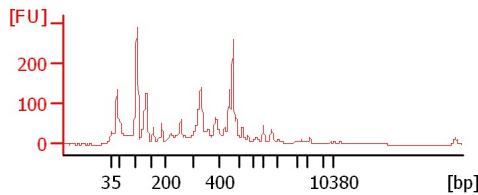
Chip Information:

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

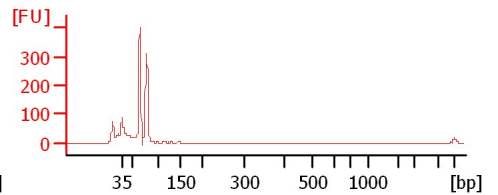
smPCR EM ax VS-2



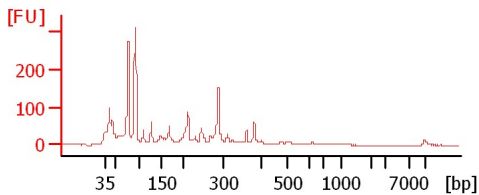
smPCR EM SCPY-1



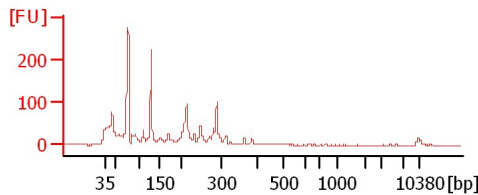
smPCR COT-EP-2



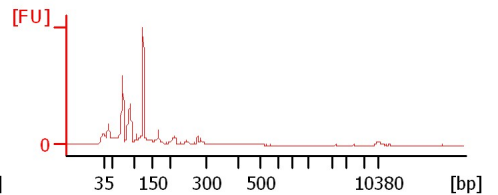
smPCR COT-HI-2



smPCR EM ax PY-2



smPCR EM ax RT-1



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-13\2012-06-13_001.xad

Created: 6/13/2012 9:48:47 AM
 Modified: 6/13/2012 10:18:59 AM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
smPCR EM ax VS-2		<input type="checkbox"/>	✓			
smPCR EM SCPY-1		<input type="checkbox"/>	✓			
smPCR COT-EP-2		<input type="checkbox"/>	✓			
smPCR COT-HI-2		<input type="checkbox"/>	✓			
smPCR EM ax PY-2		<input type="checkbox"/>	✓			
smPCR EM ax RT-1		<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\2012-06-13\2012-06-13_001.xad

Created: 6/13/2012 9:48:47 AM
Modified: 6/13/2012 10:18:59 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

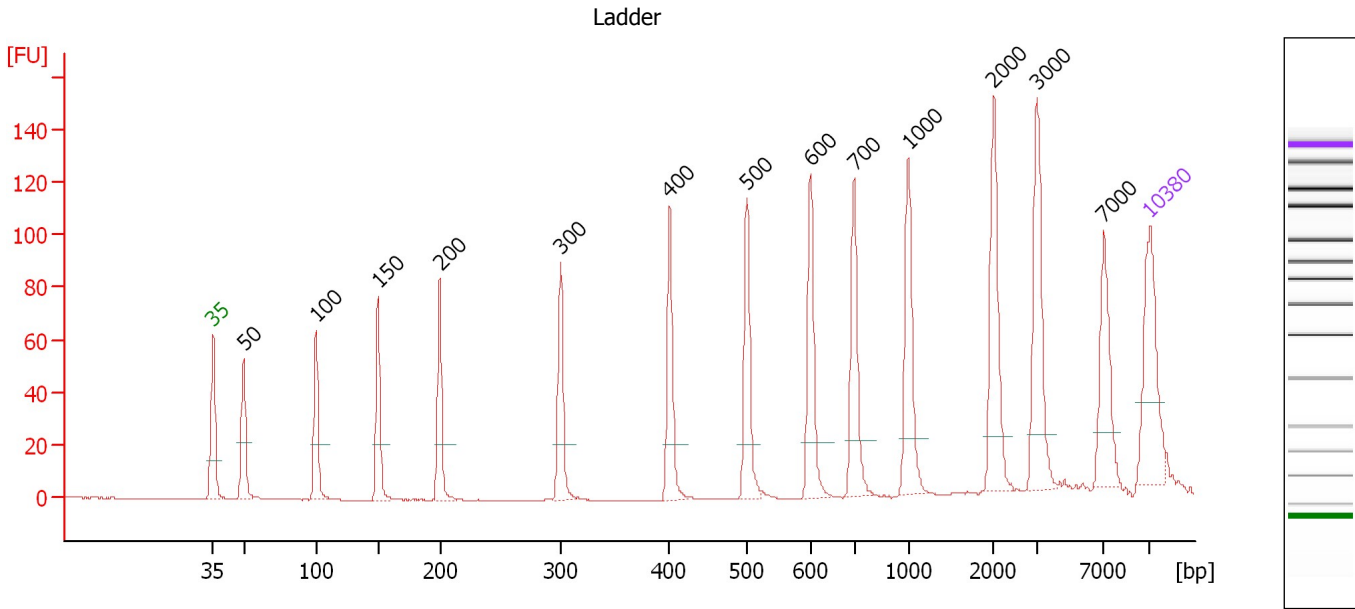
Ladder

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\2012-06-13\2012-06-13_001.xad

Created: 6/13/2012 9:48:47 AM
 Modified: 6/13/2012 10:18:59 AM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

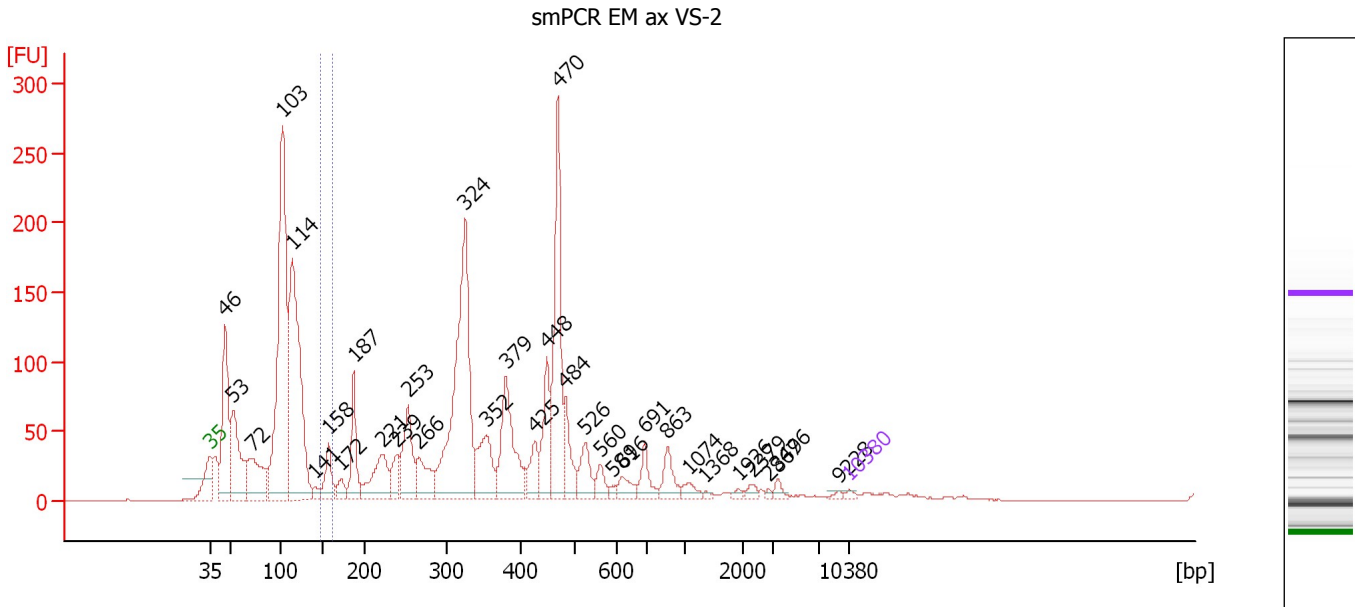
Peak table for Ladder

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	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\2012-06-13\2012-06-13_001.xad

Created: 6/13/2012 9:48:47 AM
 Modified: 6/13/2012 10:18:59 AM

Electropherogram Summary Continued ...



Overall Results for sample 1 : smPCR EM ax VS-2

Number of peaks found: 33 Corr. Area 1: 42.4
 Noise: 0.3

Peak table for sample 1 : smPCR EM ax VS-2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	46	4,598.14	150,852.8	
3	53	3,543.53	101,783.9	
4	72	2,589.42	54,791.7	
5	103	12,329.49	181,877.0	
6	114	9,887.75	131,321.8	
7	141	245.02	2,628.4	
8	158	1,214.48	11,671.1	
9	172	505.89	4,451.4	
10	187	1,783.64	14,424.7	
11	221	2,018.52	13,820.8	
12	239	813.17	5,161.3	
13	253	2,202.03	13,191.6	
14	266	1,410.04	8,036.9	
15	324	8,711.89	40,681.0	
16	352	1,859.63	7,993.6	
17	379	3,088.22	12,343.9	
18	425	899.00	3,204.1	
19	448	1,742.04	5,886.9	
20	470	4,500.51	14,521.2	
21	484	1,176.58	3,685.3	
22	526	948.36	2,733.1	
23	560	466.69	1,262.2	
24	589	118.95	306.2	
25	616	461.55	1,136.1	
26	691	683.03	1,498.5	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-13\2012-06-13_001.xad


Created: 6/13/2012 9:48:47 AM
 Modified: 6/13/2012 10:18:59 AM

Electropherogram Summary Continued ...

... Peak table for sample 1 : smPCR EM ax VS-2

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
27	863	713.56	1,253.3	
28	1,074	281.49	396.9	
29	1,368	62.86	69.6	
30	1,926	88.43	69.6	
31	2,379	148.14	94.4	
32	2,867	51.30	27.1	
33	3,496	155.17	67.2	
34	9,228	67.81	11.1	
35	10,380	75.00	10.9	Upper Marker

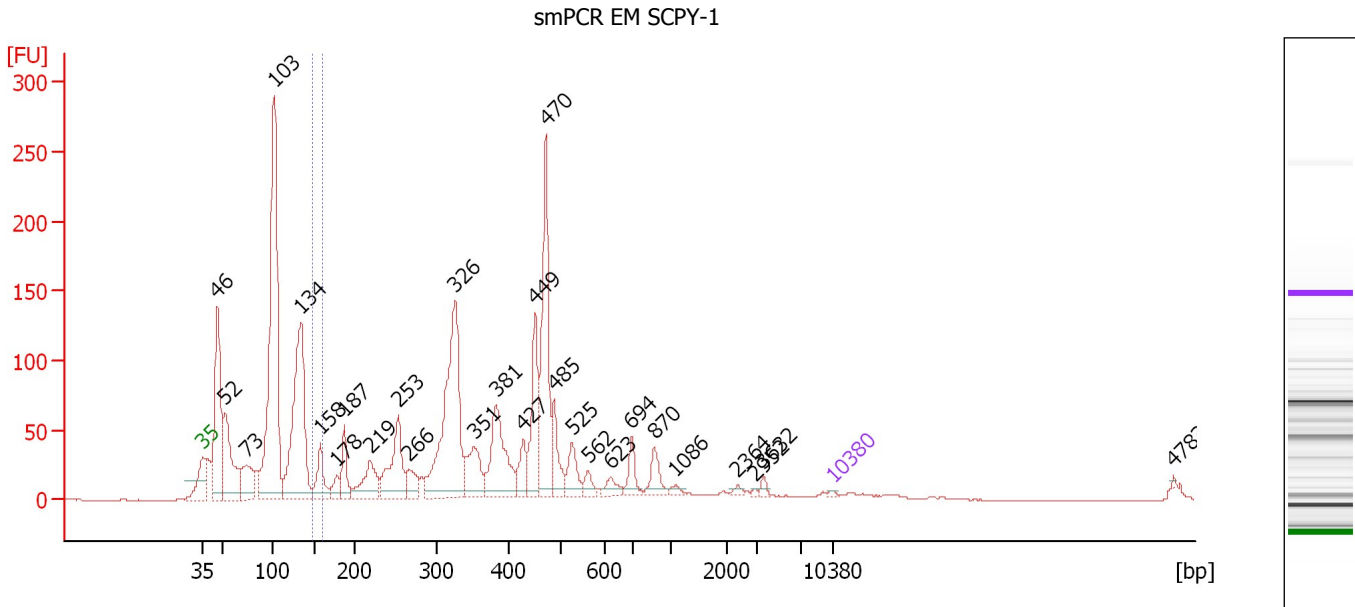
Region table for sample 1 : smPCR EM ax VS-2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
149	162	156	10,019.0	1,031.53	42.4	1	2.0	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-13\2012-06-13_001.xad

Created: 6/13/2012 9:48:47 AM
 Modified: 6/13/2012 10:18:59 AM

Electropherogram Summary Continued ...



Overall Results for sample 2 : smPCR EM SCPY-1

Number of peaks found: 28 Corr. Area 1: 33.2
 Noise: 0.2

Peak table for sample 2 : smPCR EM SCPY-1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	46	7,997.68	265,857.6	
3	52	4,820.63	140,364.6	
4	73	2,498.02	51,575.5	
5	103	18,737.24	276,132.7	
6	134	11,185.24	126,227.3	
7	158	1,903.76	18,255.4	
8	178	713.76	6,078.9	
9	187	1,563.52	12,675.8	
10	219	2,252.09	15,599.6	
11	253	3,564.46	21,359.3	
12	266	1,148.20	6,541.0	
13	326	9,650.10	44,901.5	
14	351	2,207.38	9,523.7	
15	381	4,016.70	15,969.1	
16	427	1,165.73	4,138.2	
17	449	3,267.61	11,016.6	
18	470	6,110.59	19,701.3	
19	485	1,649.90	5,150.7	
20	525	1,206.46	3,483.9	
21	562	499.09	1,345.0	
22	623	542.87	1,319.7	
23	694	870.73	1,900.8	
24	870	897.59	1,563.8	
25	1,086	201.88	281.7	
26	2,364	145.02	93.0	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-13\2012-06-13_001.xad


Created: 6/13/2012 9:48:47 AM
 Modified: 6/13/2012 10:18:59 AM

Electropherogram Summary Continued ...

... Peak table for sample 2 : smPCR EM SCPY-1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	2,952	69.28	35.6	
28	3,632	182.64	76.2	
29	10,380	75.00	10.9	Upper Marker
30	47,833	0.00	0.0	

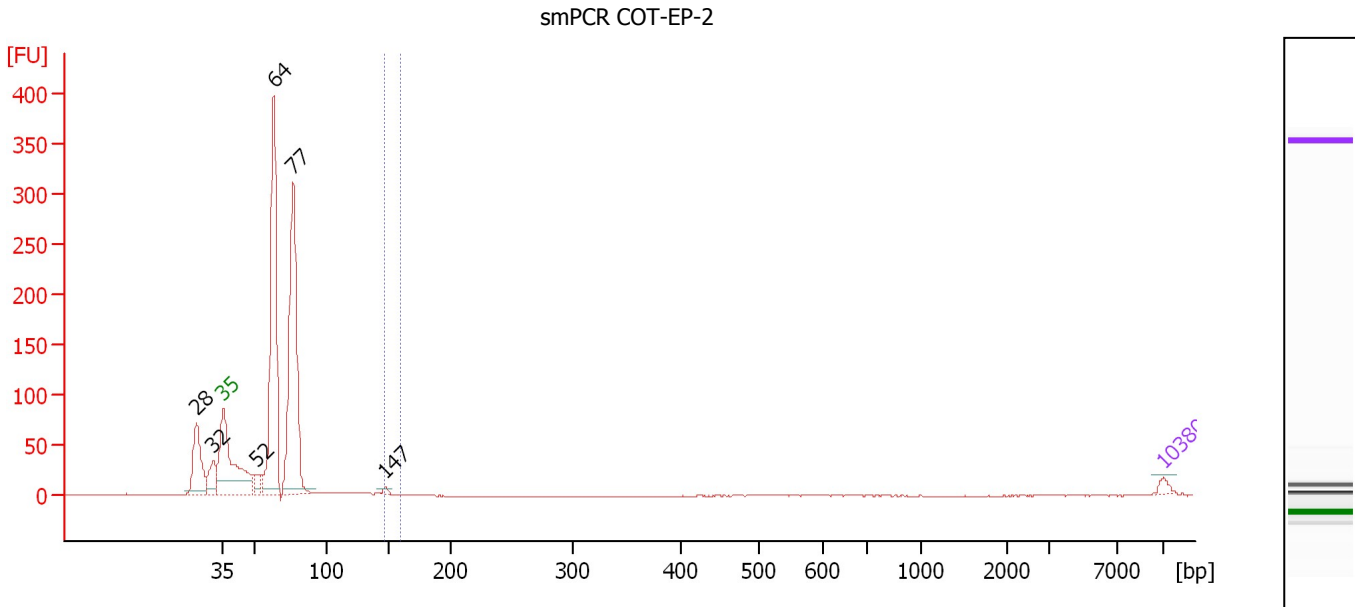
Region table for sample 2 : smPCR EM SCPY-1

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
148	160	155	11,973.3	1,227.32	33.2	1	2.1	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-13\2012-06-13_001.xad

Created: 6/13/2012 9:48:47 AM
 Modified: 6/13/2012 10:18:59 AM

Electropherogram Summary Continued ...



Overall Results for sample 3 : smPCR COT-EP-2

Number of peaks found: 6 Corr. Area 1: 4.8
 Noise: 0.1

Peak table for sample 3 : smPCR COT-EP-2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	28	0.00	0.0	
2	32	0.00	0.0	
3	35	125.00	5,411.3	Lower Marker
4	52	301.44	8,700.6	
5	64	5,490.91	130,294.9	
6	77	5,386.58	105,935.5	
7	147	70.23	721.9	
8	10,380	75.00	10.9	Upper Marker

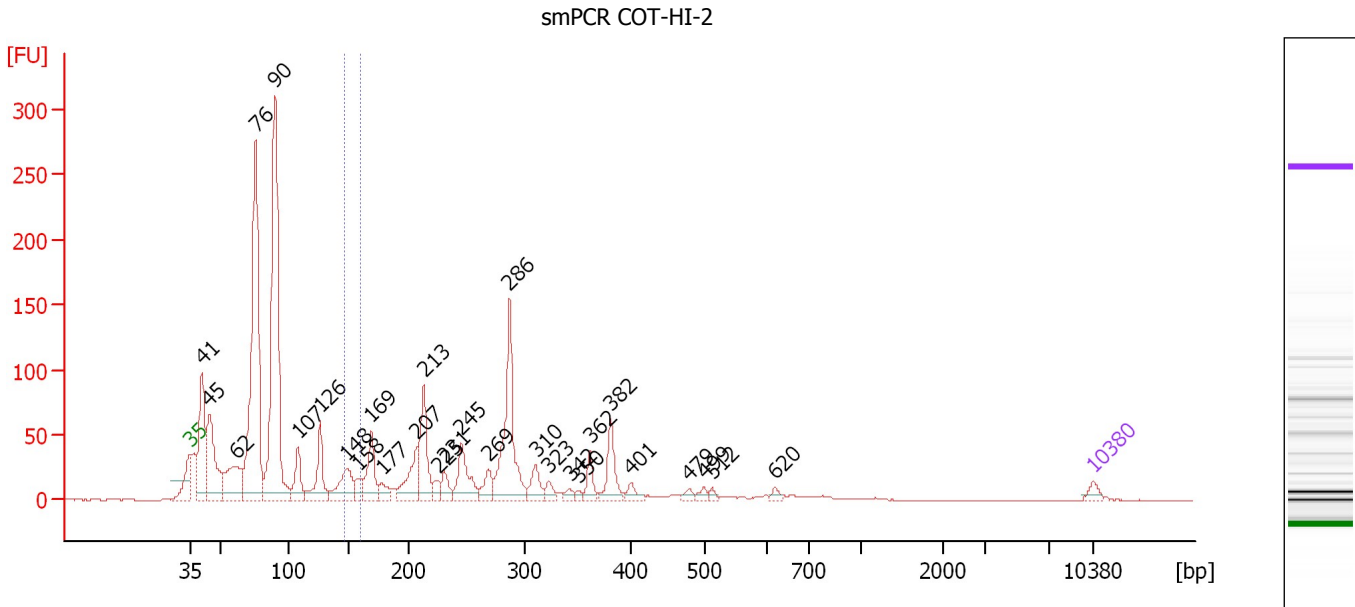
Region table for sample 3 : smPCR COT-EP-2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
147	160	149	521.7	51.28	4.8	0	1.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-13\2012-06-13_001.xad

Created: 6/13/2012 9:48:47 AM
 Modified: 6/13/2012 10:18:59 AM

Electropherogram Summary Continued ...



Overall Results for sample 4 : smPCR COT-HI-2

Number of peaks found: 29 Corr. Area 1: 47.9
 Noise: 0.2

Peak table for sample 4 : smPCR COT-HI-2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	41	1,779.08	65,738.1	
3	45	1,596.68	53,968.9	
4	62	1,043.53	25,568.7	
5	76	5,329.02	106,315.3	
6	90	5,615.71	94,884.2	
7	107	575.91	8,146.1	
8	126	820.65	9,876.6	
9	148	698.12	7,135.1	
10	158	230.02	2,204.7	
11	169	705.41	6,331.3	
12	177	232.04	1,982.9	
13	207	653.00	4,780.5	
14	213	1,020.12	7,259.8	
15	225	175.73	1,184.5	
16	231	244.49	1,605.6	
17	245	702.68	4,339.5	
18	269	287.08	1,619.1	
19	286	1,816.03	9,605.2	
20	310	309.15	1,511.7	
21	323	150.68	707.8	
22	342	95.65	423.3	
23	350	58.65	253.9	
24	362	251.60	1,053.9	
25	382	509.82	2,024.6	
26	401	134.86	509.3	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-13\2012-06-13_001.xad


Created: 6/13/2012 9:48:47 AM
 Modified: 6/13/2012 10:18:59 AM

Electropherogram Summary Continued ...

... Peak table for sample 4 : smPCR COT-HI-2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	479	77.46	244.9	
28	499	80.56	244.5	
29	512	56.47	167.1	
30	620	62.36	152.3	
31	10,380	75.00	10.9	Upper Marker

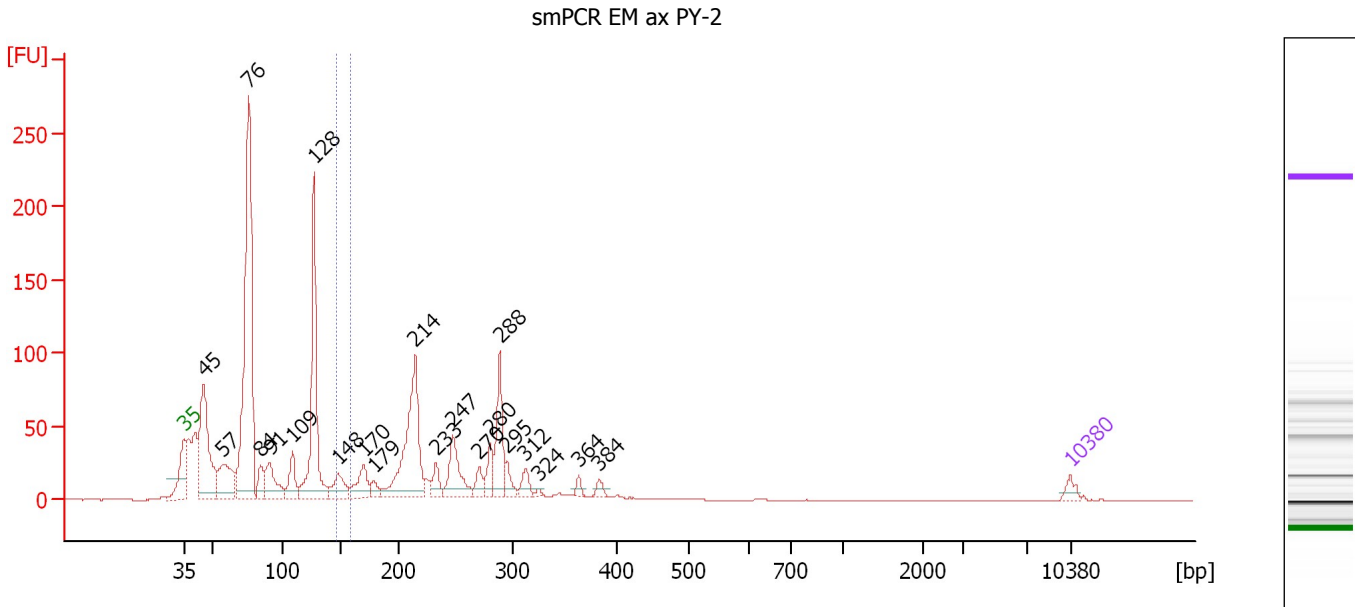
Region table for sample 4 : smPCR COT-HI-2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
147	160	153	5,390.8	542.57	47.9	2	2.7	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-13\2012-06-13_001.xad

Created: 6/13/2012 9:48:47 AM
 Modified: 6/13/2012 10:18:59 AM

Electropherogram Summary Continued ...



Overall Results for sample 5 : smPCR EM ax PY-2

Number of peaks found: 21 Corr. Area 1: 29.8
 Noise: 0.1

Peak table for sample 5 : smPCR EM ax PY-2


Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	45	1,958.01	65,904.0	
3	57	828.39	21,860.2	
4	76	4,744.74	94,502.3	
5	84	289.23	5,202.5	
6	91	605.00	10,047.8	
7	109	408.24	5,658.5	
8	128	2,354.45	27,970.7	
9	148	370.24	3,789.2	
10	170	410.64	3,651.9	
11	179	146.62	1,244.0	
12	214	1,866.28	13,187.2	
13	233	208.57	1,358.7	
14	247	620.55	3,799.0	
15	270	176.51	989.4	
16	280	274.05	1,482.4	
17	288	719.64	3,779.7	
18	295	167.48	861.6	
19	312	164.91	800.7	
20	324	30.49	142.4	
21	364	72.46	301.7	
22	384	83.43	329.6	
23	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-13\2012-06-13_001.xad

Created: 6/13/2012 9:48:47 AM
Modified: 6/13/2012 10:18:59 AM

Electropherogram Summary Continued ...

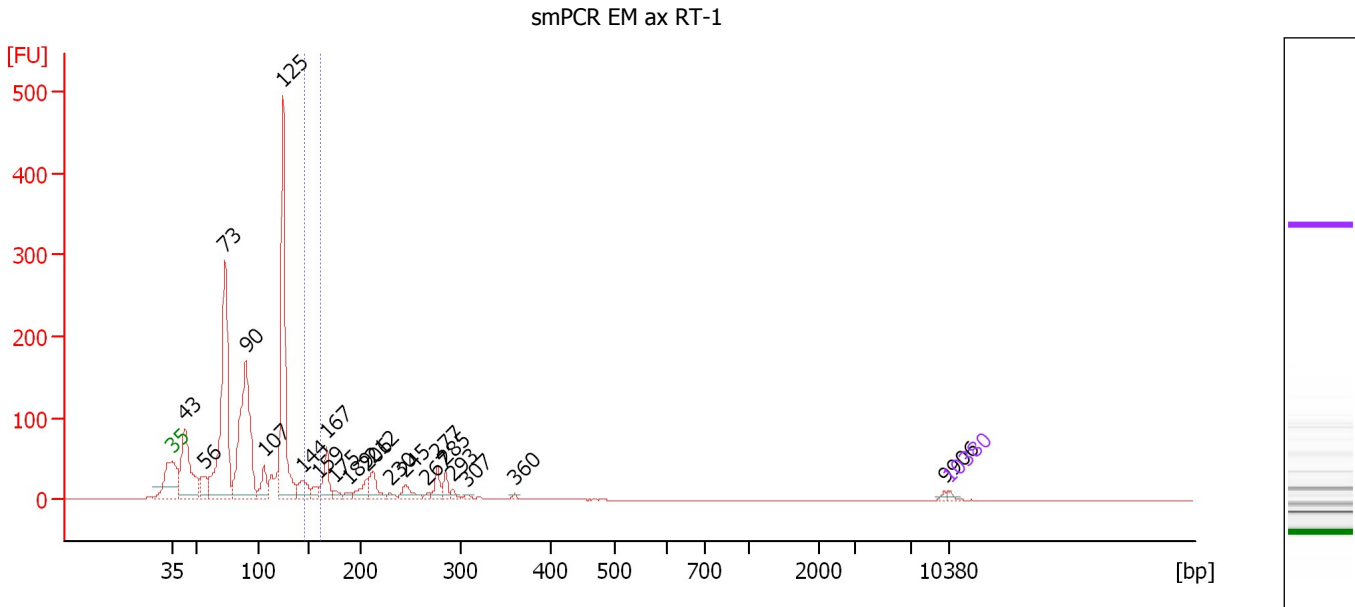
... Region table for sample 5 : smPCR EM ax PY-2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/ μ l]	Corr. Area	% of Total	Size distribution in CV [%]	Color
147	159	152	3,077.9	308.31	29.8	2	2.3	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-13\2012-06-13_001.xad

Created: 6/13/2012 9:48:47 AM
 Modified: 6/13/2012 10:18:59 AM

Electropherogram Summary Continued ...



Overall Results for sample 6 : smPCR EM ax RT-1

Number of peaks found: 22 Corr. Area 1: 40.9
 Noise: 0.2

Peak table for sample 6 : smPCR EM ax RT-1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	43	5,463.17	194,257.7	
3	56	1,192.94	32,493.3	
4	73	12,034.30	248,591.4	
5	90	10,034.55	168,587.0	
6	107	1,237.51	17,577.5	
7	125	10,502.00	127,448.1	
8	144	1,181.89	12,429.7	
9	159	468.32	4,473.6	
10	167	1,481.11	13,402.1	
11	175	354.53	3,074.5	
12	189	201.83	1,615.8	
13	206	780.38	5,739.4	
14	212	1,010.43	7,208.5	
15	230	175.90	1,159.3	
16	245	625.36	3,871.1	
17	267	118.03	669.6	
18	277	640.77	3,509.8	
19	285	463.29	2,462.0	
20	293	195.92	1,014.7	
21	307	111.58	550.6	
22	360	72.71	306.3	
23	9,906	67.63	10.3	
24	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-13\2012-06-13_001.xad

Created: 6/13/2012 9:48:47 AM
Modified: 6/13/2012 10:18:59 AM

Electropherogram Summary Continued ...

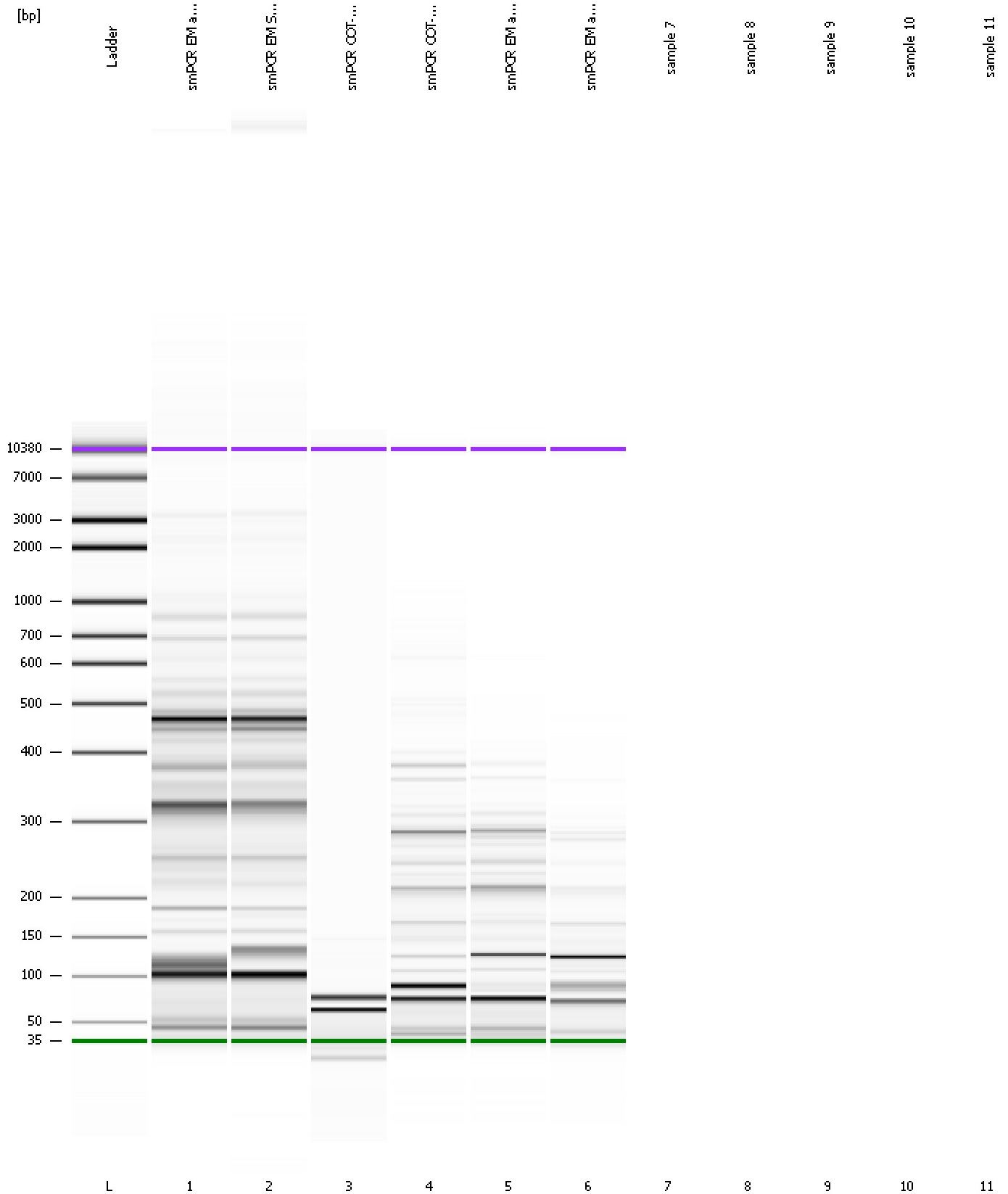
... Region table for sample 6 : smPCR EM ax RT-1

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
146	161	153	9,835.7	989.82	40.9	2	3.0	■

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-13\2012-06-13_001.xad

Created: 6/13/2012 9:48:47 AM
Modified: 6/13/2012 10:18:59 AM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-13\2012-06-13_001.xad

Created: 6/13/2012 9:48:47 AM
Modified: 6/13/2012 10:18:59 AM

Invalid Samples

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\2012-06-13\2012-06-13_001.xad

Created: 6/13/2012 9:48:47 AM
 Modified: 6/13/2012 10:18:59 AM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 7)		Instrument	Run		6/13/2012 10:15:49 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2012-06-13\2012-06-13_001.xad)		Instrument	Run		6/13/2012 9:48:52 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		6/13/2012 9:48:52 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		6/13/2012 9:48:52 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		6/13/2012 9:48:52 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		6/13/2012 9:48:52 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		6/13/2012 9:48:52 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		6/13/2012 9:48:52 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1