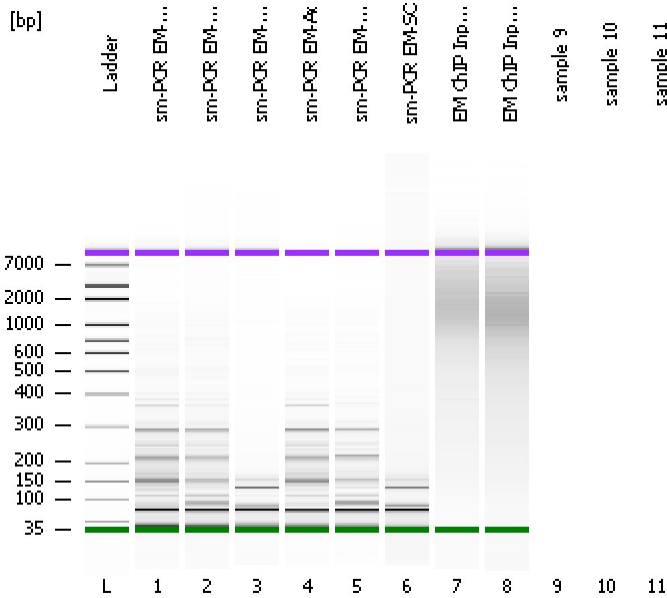


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-17\2012-05-17_001.xad

Created: 5/17/2012 10:21:11 AM
Modified: 5/17/2012 10:53:56 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

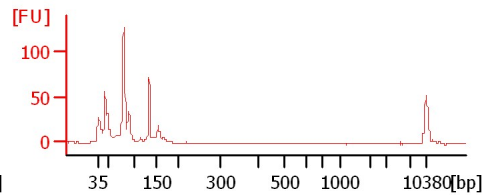
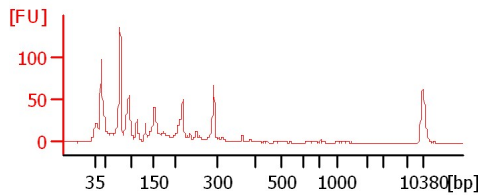
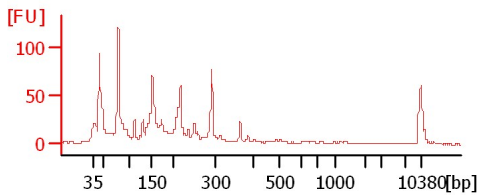
Chip Information:

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

sm-PCR EM-Ax (1/5)

sm-PCR EM-Cot (1/5)

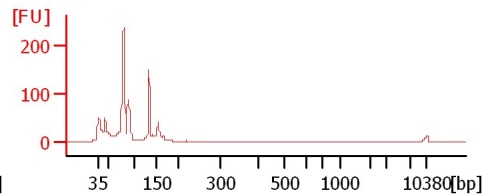
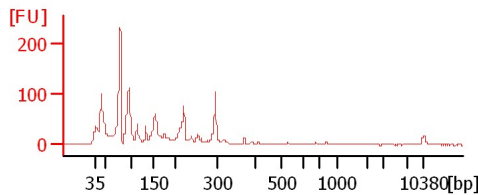
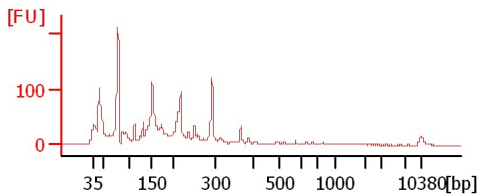
sm-PCR EM-SC (1/5)



sm-PCR EM-Ax

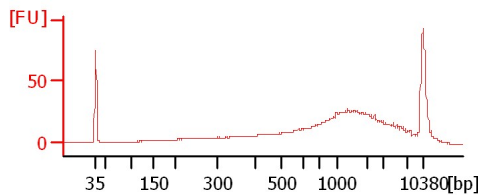
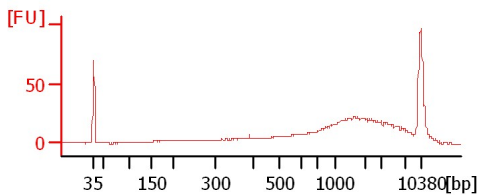
sm-PCR EM-Cot

sm-PCR EM-SC



EM ChIP Input 1

EM ChIP Input 2



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-17\2012-05-17_001.xad

Created: 5/17/2012 10:21:11 AM
Modified: 5/17/2012 10:53:56 AM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
sm-PCR EM-Ax (1/5)		<input type="checkbox"/>	✓			
sm-PCR EM-Cot (1/5)		<input type="checkbox"/>	✓			
sm-PCR EM-SC (1/5)		<input type="checkbox"/>	✓			
sm-PCR EM-Ax		<input type="checkbox"/>	✓			
sm-PCR EM-Cot		<input type="checkbox"/>	✓			
sm-PCR EM-SC		<input type="checkbox"/>	✓			
EM ChIP Input 1		<input type="checkbox"/>	✓			
EM ChIP Input 2		<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\2012-05-17\2012-05-17_001.xad

Created: 5/17/2012 10:21:11 AM
Modified: 5/17/2012 10:53:56 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

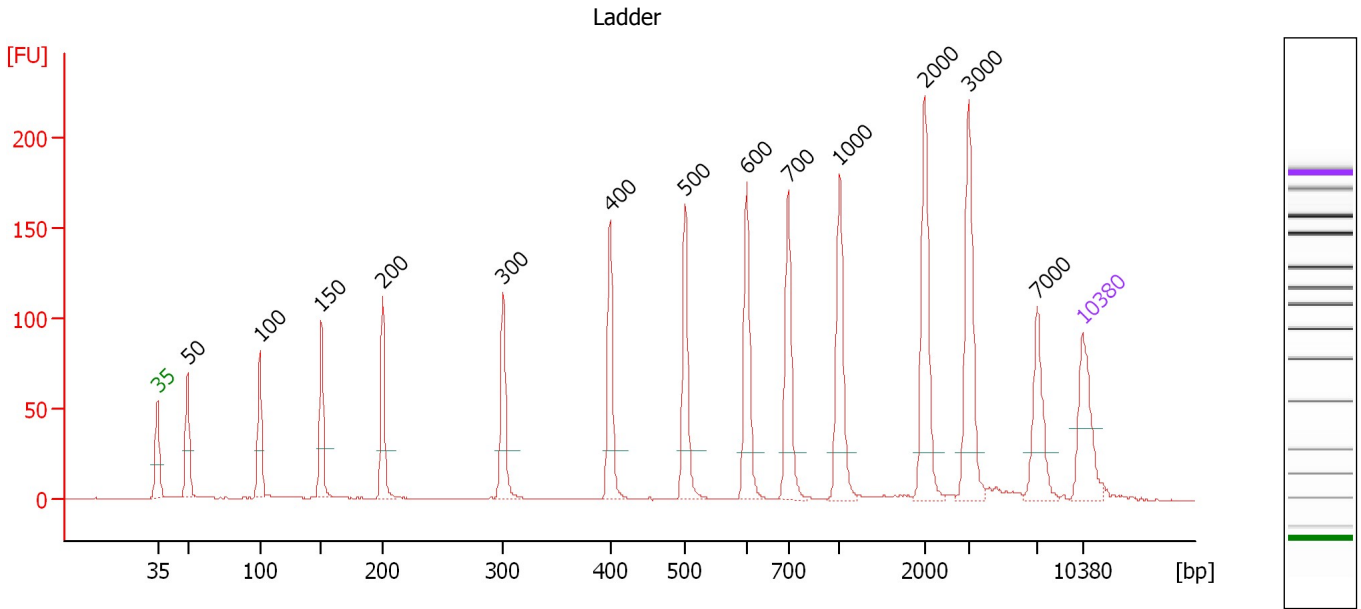
Ladder

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\2012-05-17\2012-05-17_001.xad

Created: 5/17/2012 10:21:11 AM
 Modified: 5/17/2012 10:53:56 AM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

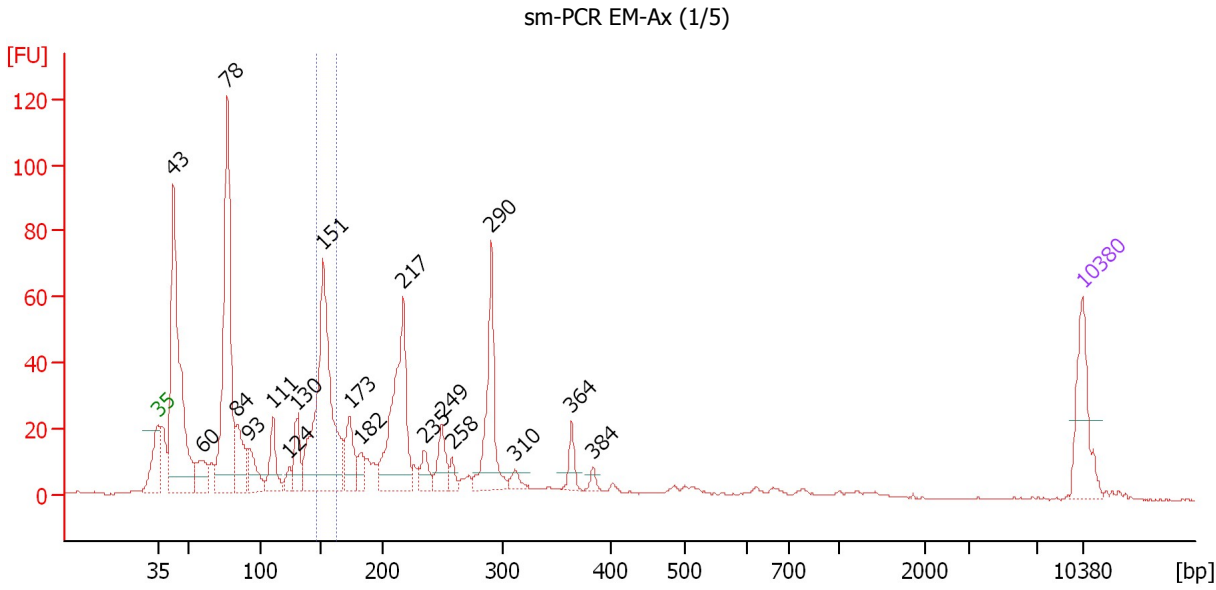
Peak table for Ladder

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\2012-05-17\2012-05-17_001.xad

Created: 5/17/2012 10:21:11 AM
 Modified: 5/17/2012 10:53:56 AM

Electropherogram Summary Continued ...



Overall Results for sample 1 : sm-PCR EM-Ax (1/5)

Number of peaks found: 19 Corr. Area 1: 128.8
 Noise: 0.2

Peak table for sample 1 : sm-PCR EM-Ax (1/5)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	43	507.42	17,922.8	
3	60	58.07	1,464.6	
4	78	463.61	9,053.1	
5	84	91.94	1,656.1	
6	93	56.30	920.5	
7	111	69.96	955.9	
8	124	19.01	232.0	
9	130	63.77	744.2	
10	151	443.68	4,447.5	
11	173	75.66	662.1	
12	182	31.86	264.9	
13	217	263.59	1,837.4	
14	235	31.11	200.8	
15	249	51.35	312.6	
16	258	15.38	90.5	
17	290	156.83	819.0	
18	310	16.01	78.2	
19	364	27.42	114.1	
20	384	9.40	37.1	
21	10,380	75.00	10.9	Upper Marker

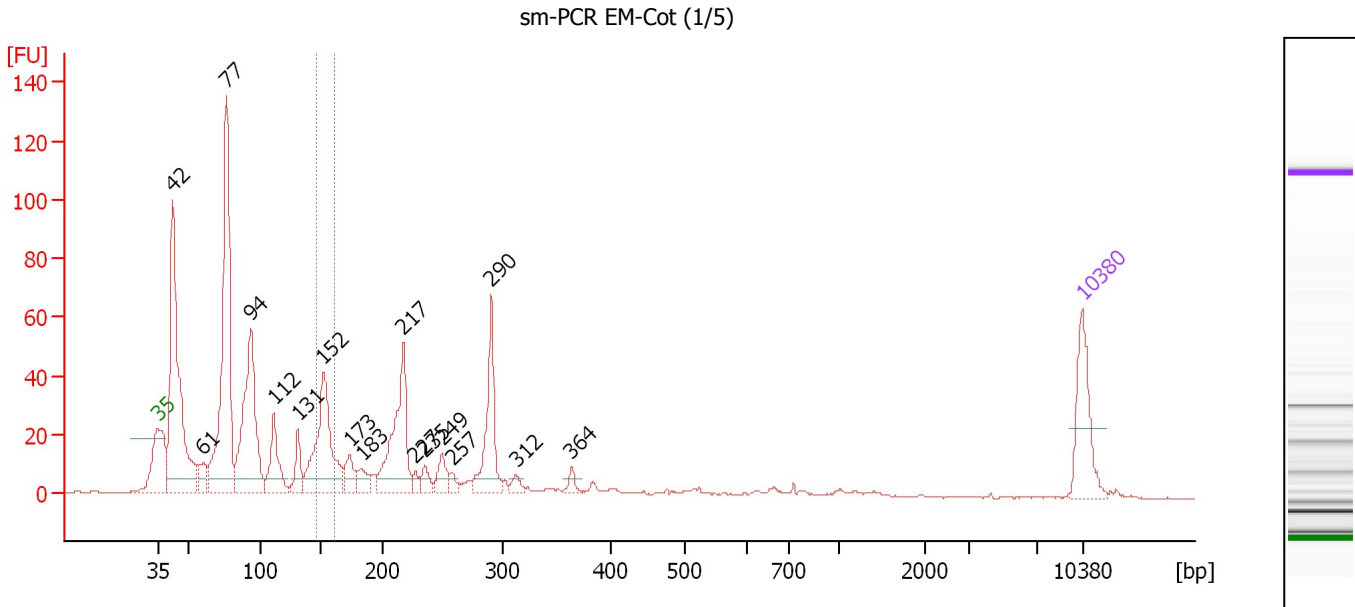
Region table for sample 1 : sm-PCR EM-Ax (1/5)

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
146	3,194.0	153	322.33	162	128.8	11	2.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-17\2012-05-17_001.xad

Created: 5/17/2012 10:21:11 AM
 Modified: 5/17/2012 10:53:56 AM

Electropherogram Summary Continued ...



Overall Results for sample 2 : sm-PCR EM-Cot (1/5)

Number of peaks found: 17 Corr. Area 1: 72.9
 Noise: 0.2

Peak table for sample 2 : sm-PCR EM-Cot (1/5)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	42	485.00	17,292.1	
3	61	36.99	920.9	
4	77	495.77	9,736.8	
5	94	307.28	4,938.2	
6	112	91.32	1,237.6	
7	131	44.59	514.9	
8	152	233.15	2,329.9	
9	173	37.59	328.8	
10	183	27.36	226.6	
11	217	188.59	1,316.4	
12	227	12.05	80.4	
13	235	21.07	135.9	
14	249	31.66	192.4	
15	257	11.88	69.9	
16	290	126.17	658.8	
17	312	13.10	63.6	
18	364	11.43	47.6	
19	10,380	75.00	10.9	Upper Marker

Region table for sample 2 : sm-PCR EM-Cot (1/5)

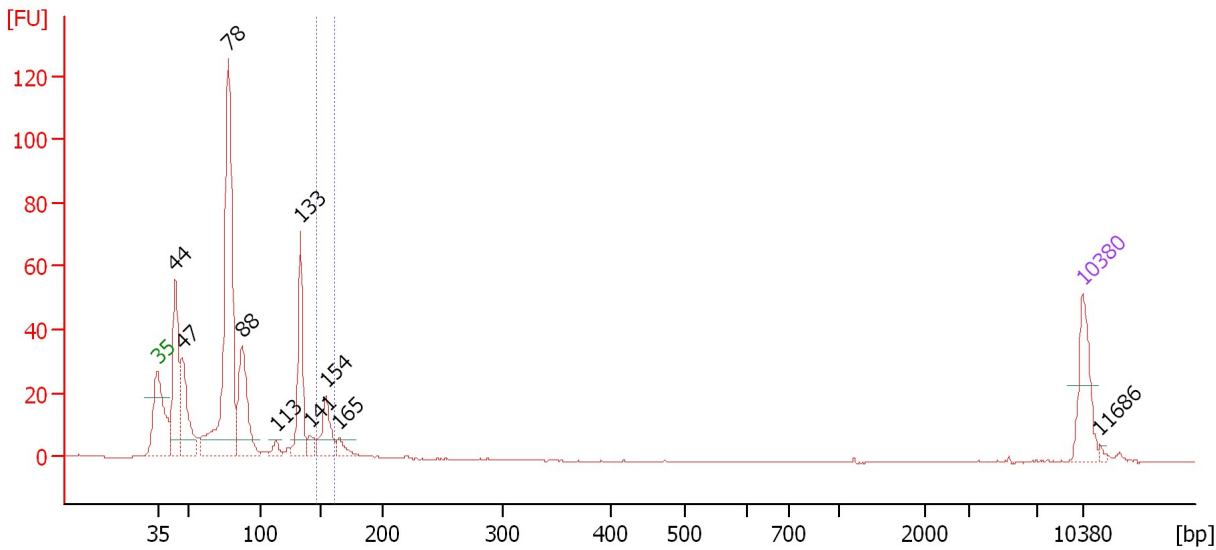
From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
146	1,624.0	153	163.39	161	72.9	7	2.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-17\2012-05-17_001.xad

Created: 5/17/2012 10:21:11 AM
 Modified: 5/17/2012 10:53:56 AM

Electropherogram Summary Continued ...

sm-PCR EM-SC (1/5)



Overall Results for sample 3 : sm-PCR EM-SC (1/5)

Number of peaks found: 10 Corr. Area 1: 30.5
 Noise: 0.1

Peak table for sample 3 : sm-PCR EM-SC (1/5)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	44	245.10	8,488.1	
3	47	166.55	5,340.5	
4	78	695.98	13,470.8	
5	88	207.74	3,575.3	
6	113	18.95	253.0	
7	133	187.50	2,138.4	
8	141	24.98	268.6	
9	154	88.39	871.5	
10	165	26.85	247.1	
11	10,380	75.00	10.9	Upper Marker
12	11,686	0.00	0.0	

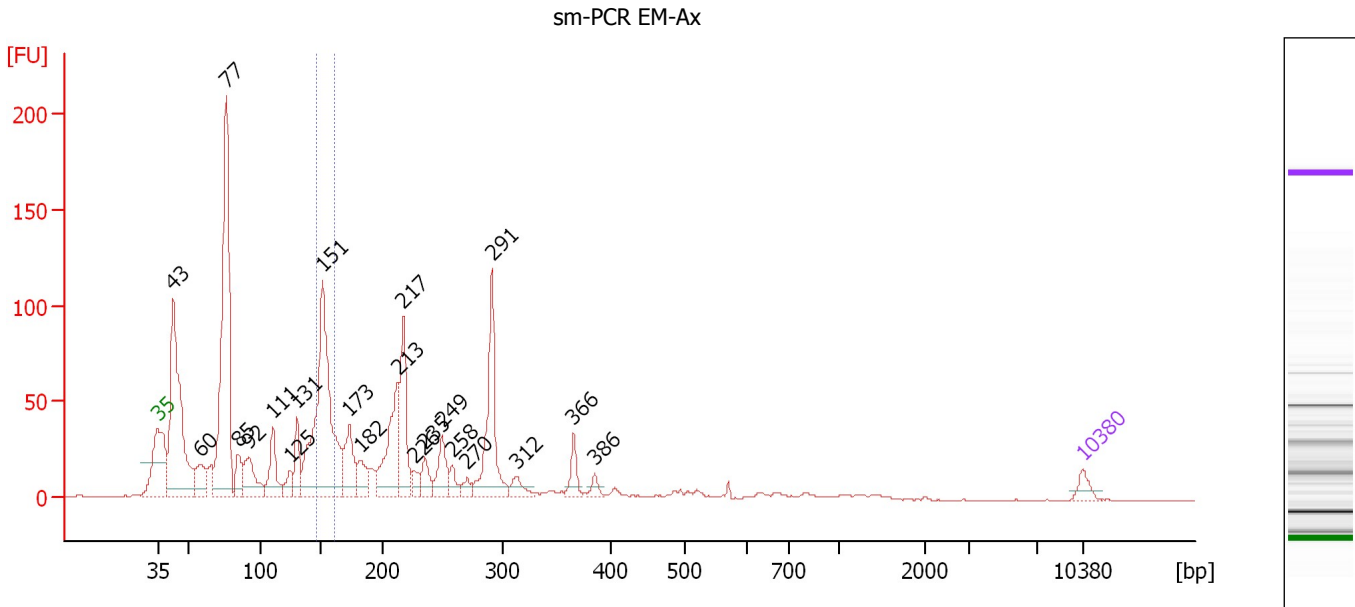
Region table for sample 3 : sm-PCR EM-SC (1/5)

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
145	918.6	153	92.91	162	30.5	6	2.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-17\2012-05-17_001.xad

Created: 5/17/2012 10:21:11 AM
 Modified: 5/17/2012 10:53:56 AM

Electropherogram Summary Continued ...



Overall Results for sample 4 : sm-PCR EM-Ax

Number of peaks found: 22 Corr. Area 1: 184.4
 Noise: 0.2

Peak table for sample 4 : sm-PCR EM-Ax

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	43	2,575.39	91,211.4	
3	60	406.22	10,337.2	
4	77	3,234.85	63,608.2	
5	85	289.29	5,132.9	
6	92	500.80	8,204.6	
7	111	468.83	6,391.9	
8	125	152.59	1,854.1	
9	131	350.68	4,071.1	
10	151	2,823.79	28,358.4	
11	173	533.90	4,679.1	
12	182	275.63	2,298.5	
13	213	902.22	6,427.1	
14	217	775.34	5,409.6	
15	226	128.63	862.0	
16	235	208.55	1,344.5	
17	249	345.02	2,095.9	
18	258	126.71	744.6	
19	270	87.88	492.7	
20	291	1,020.06	5,318.2	
21	312	139.62	677.1	
22	366	183.92	761.7	
23	386	74.75	293.3	
24	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-17\2012-05-17_001.xad

Created: 5/17/2012 10:21:11 AM
Modified: 5/17/2012 10:53:56 AM

Electropherogram Summary Continued ...

... Region table for sample 4 :

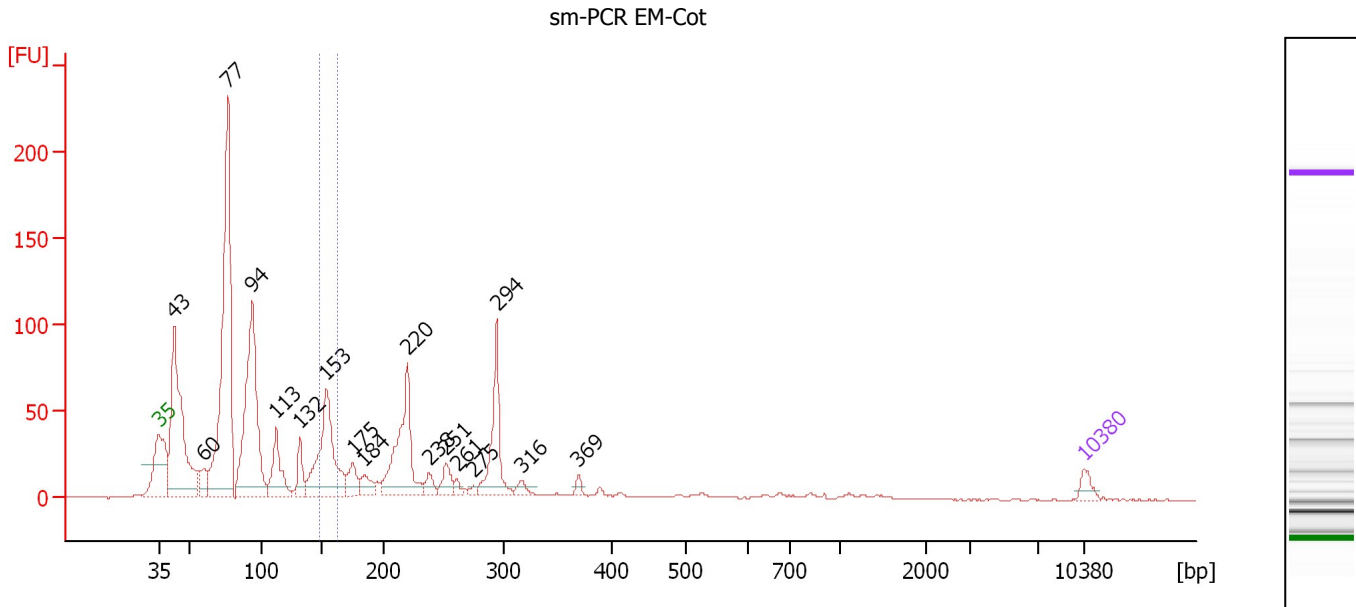
sm-PCR EM-Ax

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Co lor
147	18,120.7	153	1,823.86	161	184.4	11	2.4	■

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-17\2012-05-17_001.xad

Created: 5/17/2012 10:21:11 AM
 Modified: 5/17/2012 10:53:56 AM

Electropherogram Summary Continued ...



Overall Results for sample 5 : sm-PCR EM-Cot

Number of peaks found: 17 Corr. Area 1: 105.6
 Noise: 0.2

Peak table for sample 5 : sm-PCR EM-Cot

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	43	2,359.19	83,790.4	
3	60	242.87	6,105.8	
4	77	3,577.82	70,086.9	
5	94	2,365.93	37,964.0	
6	113	559.57	7,511.7	
7	132	254.12	2,912.1	
8	153	1,373.97	13,599.0	
9	175	229.43	1,985.0	
10	184	185.90	1,529.7	
11	220	1,139.87	7,850.8	
12	238	118.90	757.6	
13	251	179.23	1,079.8	
14	261	53.17	309.1	
15	275	38.71	213.4	
16	294	731.91	3,776.1	
17	316	75.21	360.1	
18	369	50.04	205.3	
19	10,380	75.00	10.9	Upper Marker

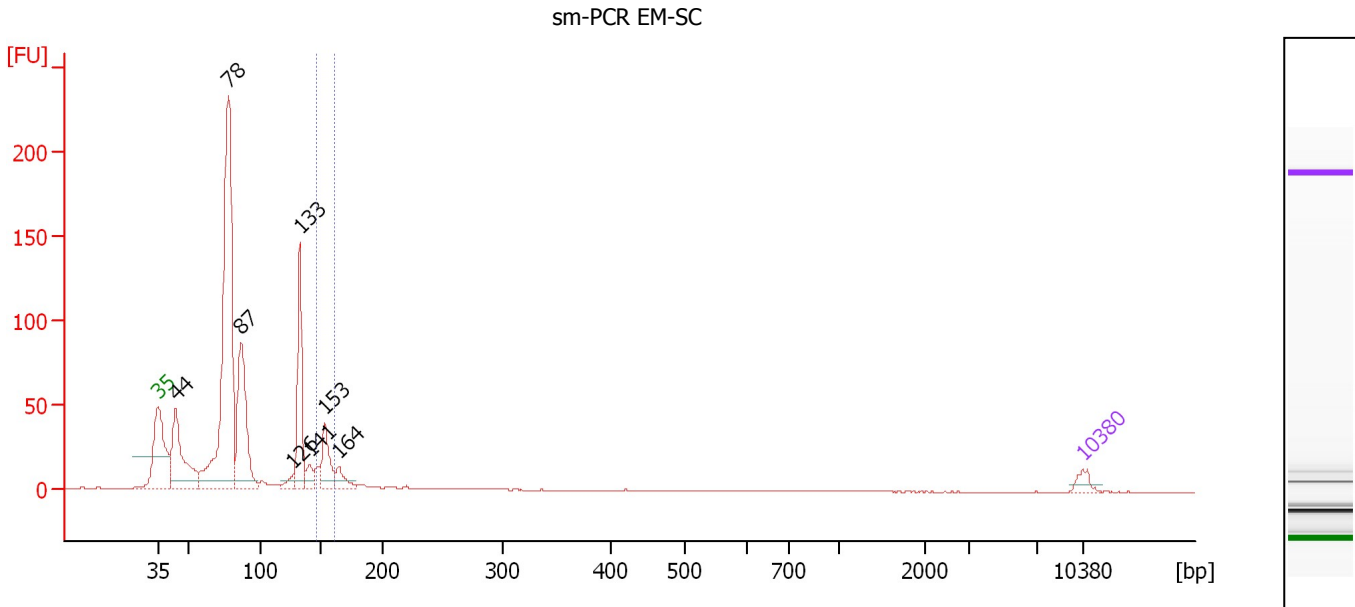
Region table for sample 5 : sm-PCR EM-Cot

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
147	9,358.5	154	948.94	162	105.6	6	2.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-17\2012-05-17_001.xad

Created: 5/17/2012 10:21:11 AM
 Modified: 5/17/2012 10:53:56 AM

Electropherogram Summary Continued ...



Overall Results for sample 6 : sm-PCR EM-SC

Number of peaks found: 8 Corr. Area 1: 55.2
 Noise: 0.1

Peak table for sample 6 : sm-PCR EM-SC

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	44	1,333.14	45,916.1	
3	78	4,763.19	92,148.6	
4	87	1,645.28	28,565.6	
5	126	115.26	1,382.9	
6	133	1,156.03	13,217.6	
7	141	180.57	1,942.6	
8	153	524.51	5,200.3	
9	164	218.51	2,014.3	
10	10,380	75.00	10.9	Upper Marker

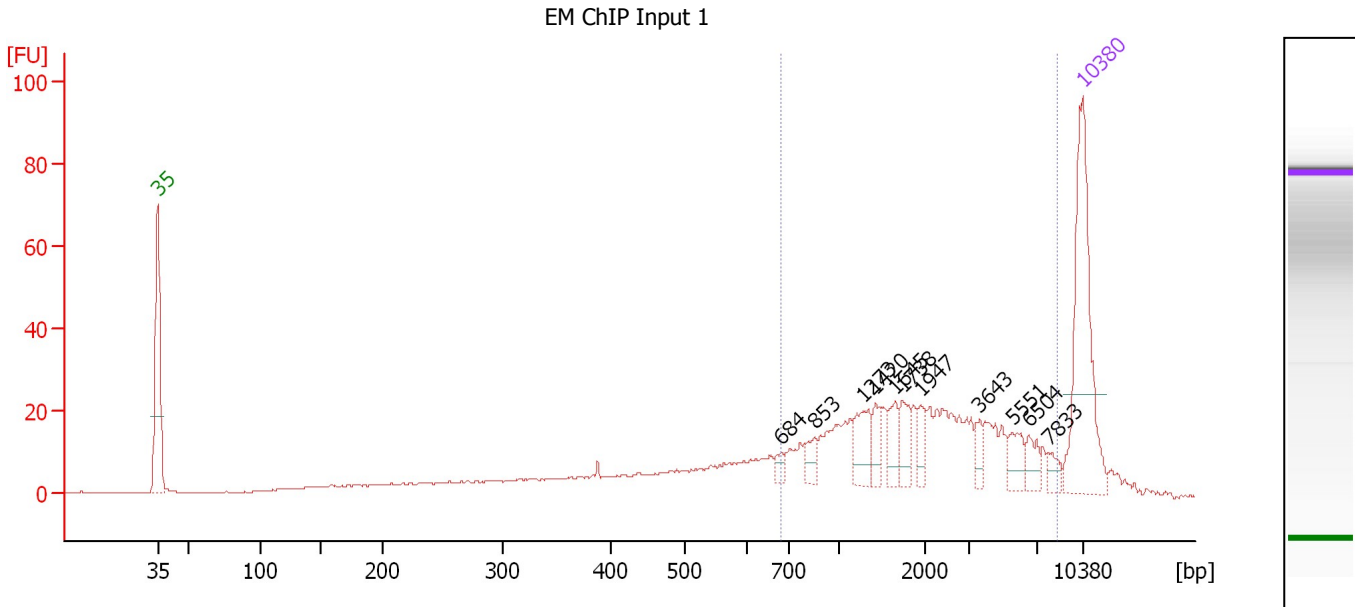
Region table for sample 6 : sm-PCR EM-SC

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
146	5,851.8	153	591.94	161	55.2	6	2.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-17\2012-05-17_001.xad

Created: 5/17/2012 10:21:11 AM
 Modified: 5/17/2012 10:53:56 AM

Electropherogram Summary Continued ...



Overall Results for sample 7 : EM ChIP Input 1

Number of peaks found: 11 Corr. Area 1: 368.3
 Noise: 0.2

Peak table for sample 7 : EM ChIP Input 1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	684	5.32	11.8	
3	853	8.35	14.8	
4	1,273	19.23	22.9	
5	1,420	9.47	10.1	
6	1,645	11.43	10.5	
7	1,738	12.95	11.3	
8	1,947	8.70	6.8	
9	3,643	6.99	2.9	
10	5,551	12.35	3.4	
11	6,504	8.90	2.1	
12	7,833	5.81	1.1	
13	10,380	75.00	10.9	Upper Marker

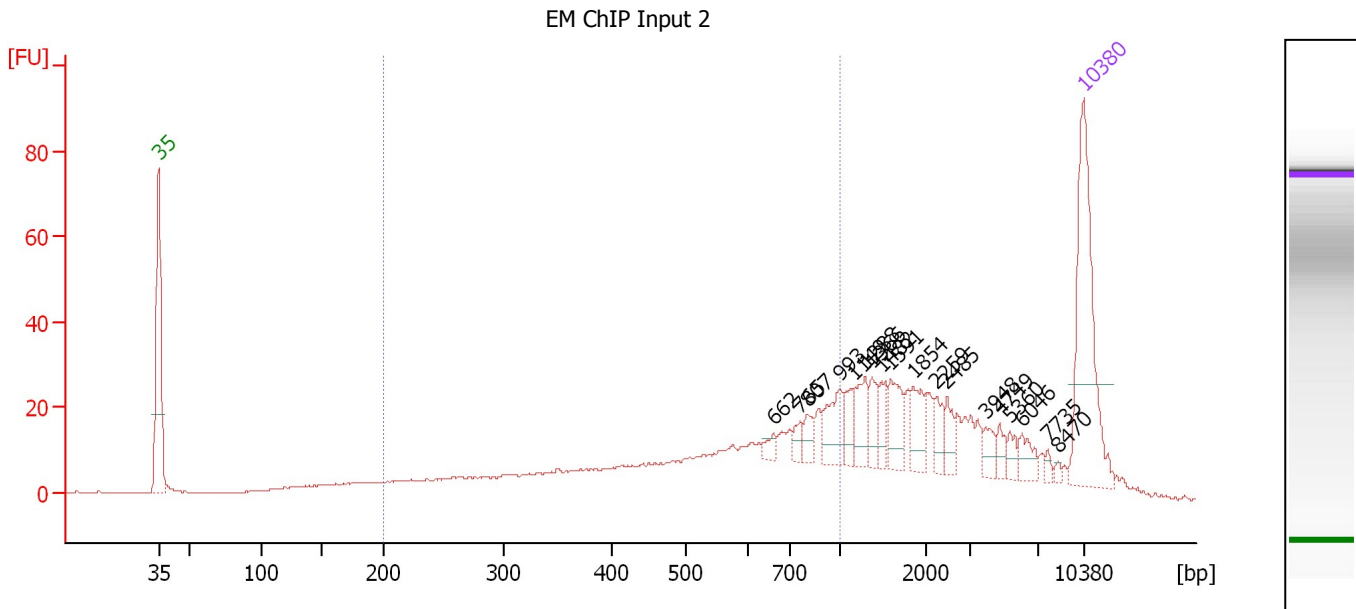
Region table for sample 7 : EM ChIP Input 1

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
683	247.7	2,634	267.64	8,432	368.3	60	72.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-17\2012-05-17_001.xad

Created: 5/17/2012 10:21:11 AM
 Modified: 5/17/2012 10:53:56 AM

Electropherogram Summary Continued ...



Overall Results for sample 8 : EM ChIP Input 2

Number of peaks found: 18 Corr. Area 1: 366.0
 Noise: 0.2

Peak table for sample 8 : EM ChIP Input 2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	662	5.23	12.0	
3	765	6.31	12.5	
4	807	8.16	15.3	
5	993	21.97	33.5	
6	1,149	11.33	14.9	
7	1,288	16.81	19.8	
8	1,366	11.49	12.7	
9	1,482	10.37	10.6	
10	1,591	18.43	17.6	
11	1,854	16.12	13.2	
12	2,259	8.50	5.7	
13	2,485	9.81	6.0	
14	3,948	7.29	2.8	
15	4,749	6.34	2.0	
16	5,360	5.72	1.6	
17	6,046	9.49	2.4	
18	7,735	2.55	0.5	
19	8,470	1.87	0.3	
20	10,380	75.00	10.9	Upper Marker

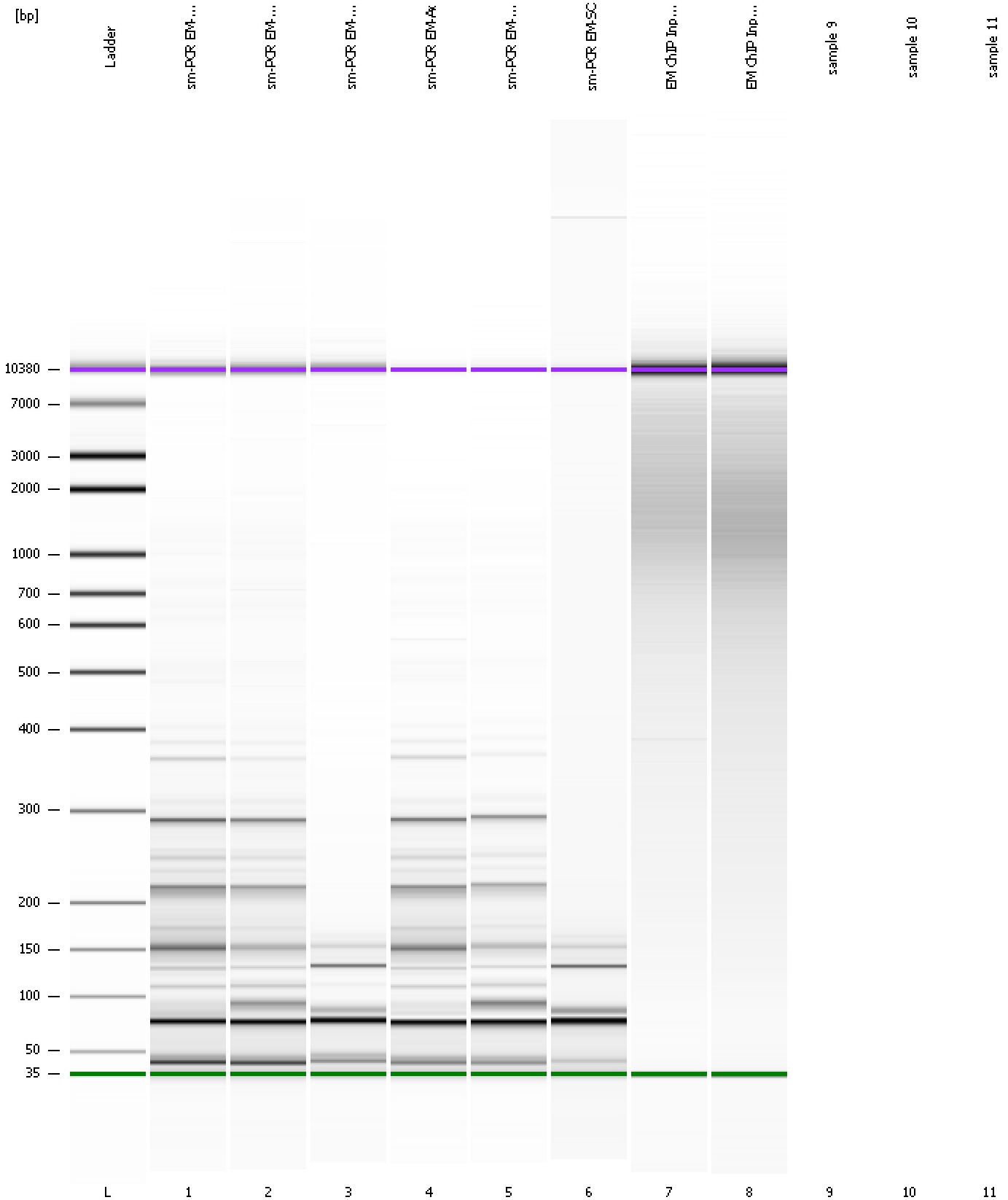
Region table for sample 8 : EM ChIP Input 2

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,235.1	566	356.90	1,000	366.0	48	38.4	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-17\2012-05-17_001.xad

Created: 5/17/2012 10:21:11 AM
Modified: 5/17/2012 10:53:56 AM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-17\2012-05-17_001.xad

Created: 5/17/2012 10:21:11 AM
Modified: 5/17/2012 10:53:56 AM

Invalid Samples

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\2012-05-17\2012-05-17_001.xad

Created: 5/17/2012 10:21:11 AM
 Modified: 5/17/2012 10:53:56 AM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 9)		Instrument	Run		5/17/2012 10:53:54 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2012-05-17\2012-05-17_001.xad)		Instrument	Run		5/17/2012 10:21:17 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		5/17/2012 10:21:17 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		5/17/2012 10:21:17 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		5/17/2012 10:21:17 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		5/17/2012 10:21:17 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		5/17/2012 10:21:17 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		5/17/2012 10:21:17 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1