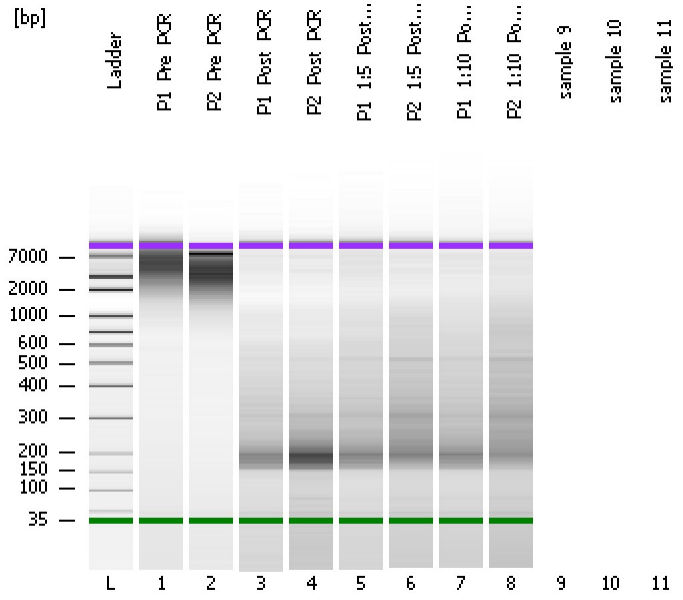
Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2016-03-02\2016-03-02_001.xad

Created: 3/2/2016 2:24:28 PM
Modified: 3/2/2016 2:59:10 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

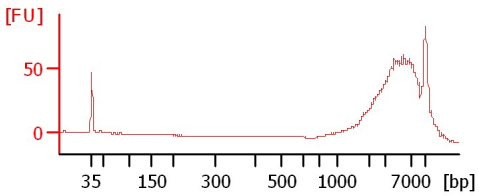
Chip Information:

Chip Lot #:

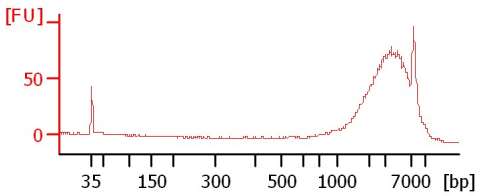
Reagent Kit Lot #:

Chip Comments:

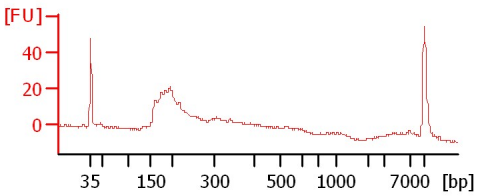
P1_Pre_PCR



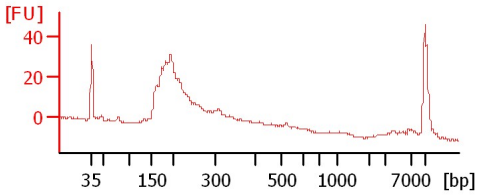
P2_Pre_PCR



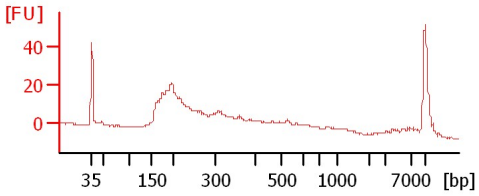
P1_Post_PCR



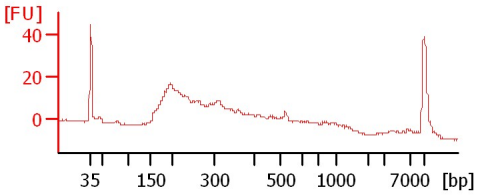
P2_Post_PCR



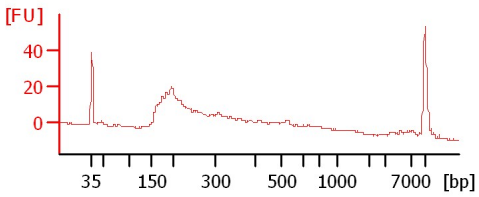
P1_1:5_Post_PCR



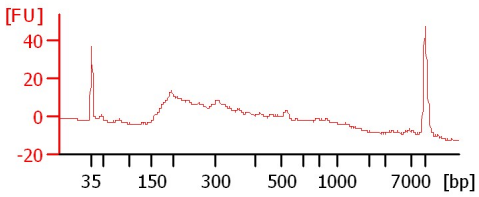
P2_1:5_Post_PCR



P1_1:10_Post_PCR



P2_1:10_Post_PCR



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2016-03-02\2016-03-02_001.xad

Created: 3/2/2016 2:24:28 PM
Modified: 3/2/2016 2:59:10 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
P1_Pre_PCR		☐	✔			
P2_Pre_PCR		☐	✔			
P1_Post_PCR		☐	✔			
P2_Post_PCR		☐	✔			
P1_1:5_Post_PCR		☐	✔			
P2_1:5_Post_PCR		☐	✔			
P1_1:10_Post_PCR		☐	✔			
P2_1:10_Post_PCR		☐	✔			
sample 9		☐				
sample 10		☐				
sample 11		☐				
Ladder		☐	✔			

Chip Lot # **Reagent Kit Lot #**

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2016-03-02\2016-03-02_001.xad

Created: 3/2/2016 2:24:28 PM
Modified: 3/2/2016 2:59:10 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/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

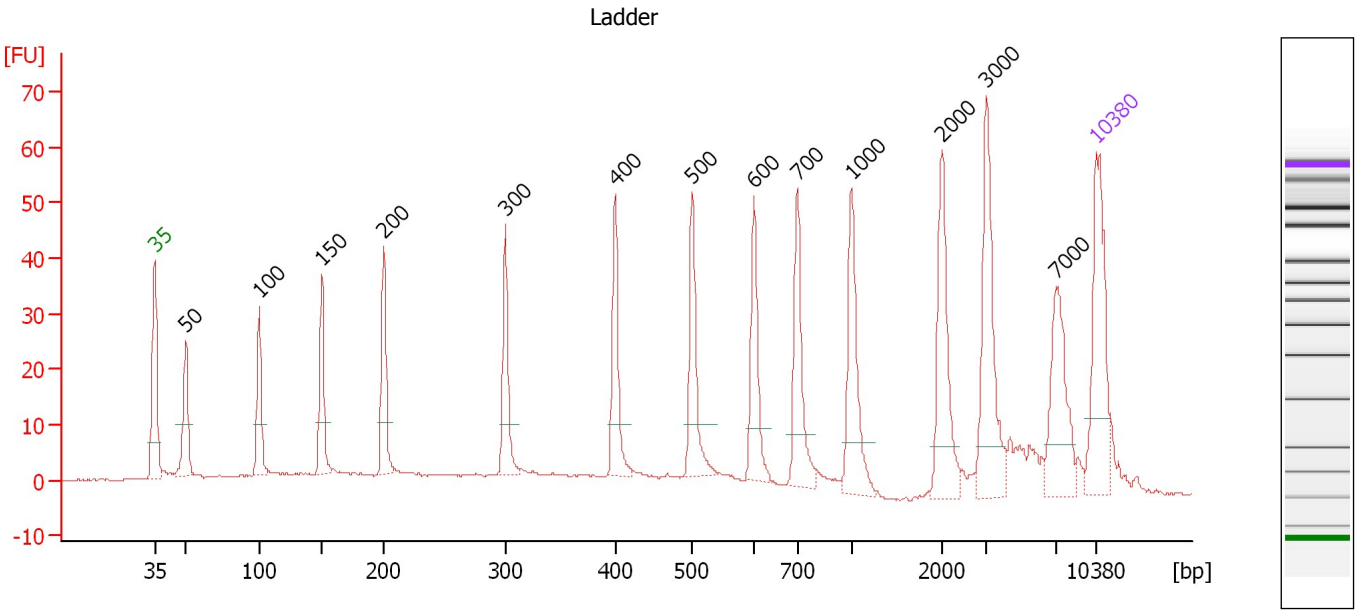
Ladder

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\2016-03-02\2016-03-02_001.xad

Created: 3/2/2016 2:24:28 PM
Modified: 3/2/2016 2:59:10 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

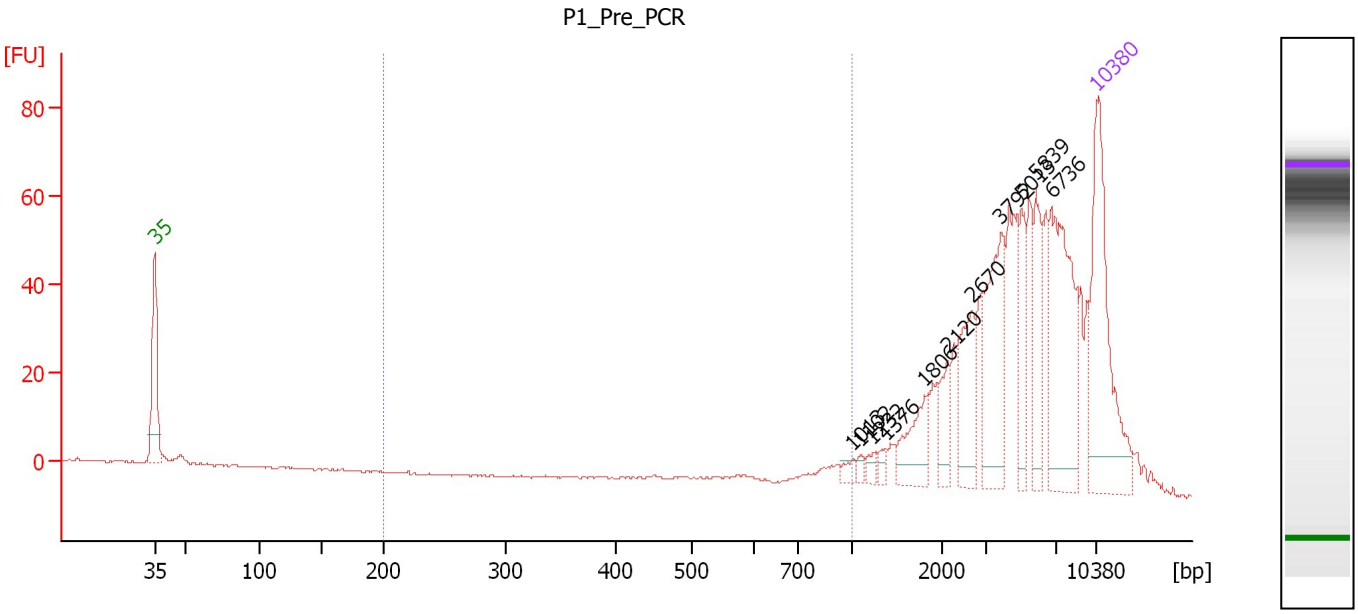
Peak table for Ladder

Peak		Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1		35	125.00	5,411.3	Lower Marker	43.00
2		50	150.00	4,545.5	Ladder Peak	45.33
3		100	150.00	2,272.7	Ladder Peak	50.77
4		150	150.00	1,515.2	Ladder Peak	55.44
5		200	150.00	1,136.4	Ladder Peak	60.01
6		300	150.00	757.6	Ladder Peak	69.06
7		400	150.00	568.2	Ladder Peak	77.20
8		500	150.00	454.5	Ladder Peak	82.92
9		600	150.00	378.8	Ladder Peak	87.53
10		700	150.00	324.7	Ladder Peak	90.73
11		1,000	150.00	227.3	Ladder Peak	94.76
12		2,000	150.00	113.6	Ladder Peak	101.48
13		3,000	150.00	75.8	Ladder Peak	104.82
14		7,000	150.00	32.5	Ladder Peak	109.94
15		10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2016-03-02\2016-03-02_001.xad

Created: 3/2/2016 2:24:28 PM
Modified: 3/2/2016 2:59:10 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : P1_Pre_PCR

Number of peaks found:	11	Corr. Area 1:	31.9
Noise:	0.2		

Peak table for sample 1 : P1_Pre_PCR

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	1,013	4.06	6.1		94.85
3	1,102	3.01	4.1		95.44
4	1,232	4.25	5.2		96.32
5	1,376	3.99	4.4		97.28
6	1,806	22.49	18.9		100.18
7	2,120	15.65	11.2		101.88
8	2,670	33.36	18.9		103.72
9	3,792	54.62	21.8		105.83
10	5,013	23.66	7.2		107.39
11	5,839	29.78	7.7		108.45
12	6,736	79.60	17.9		109.60
13	10,380	75.00	10.9	Upper Marker	113.00

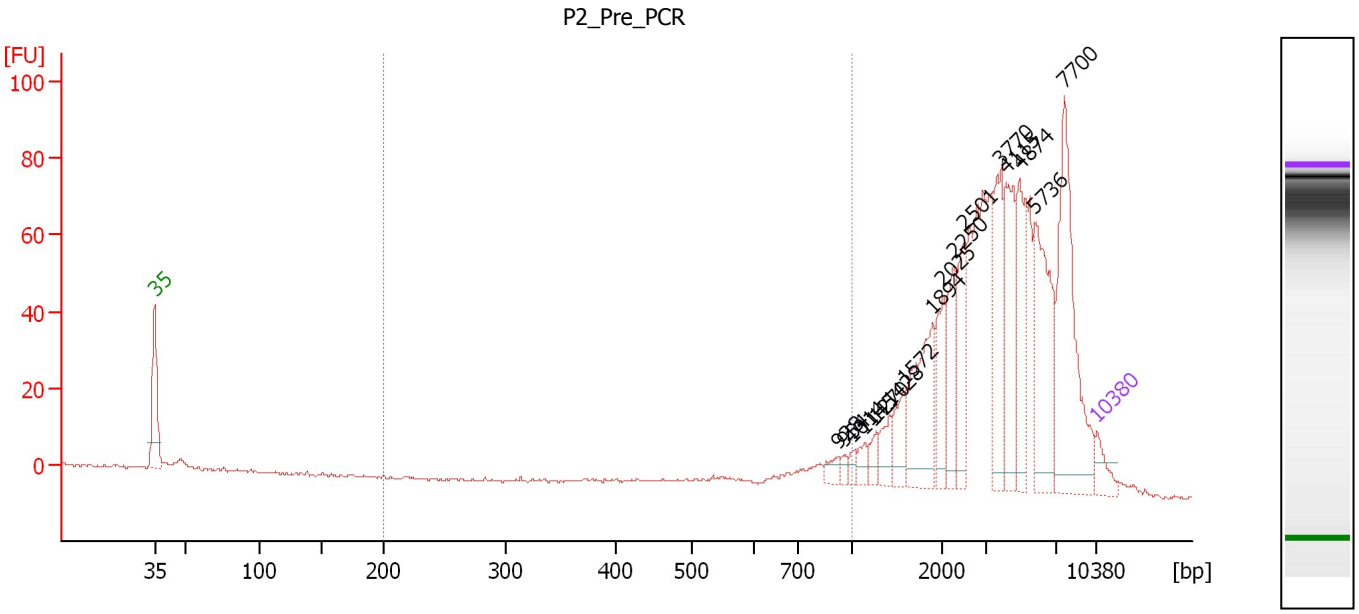
Region table for sample 1 : P1_Pre_PCR

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	711	31.9	64.3	26.73	5	27.1

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2016-03-02\2016-03-02_001.xad

Created: 3/2/2016 2:24:28 PM
Modified: 3/2/2016 2:59:10 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : P2_Pre_PCR

Number of peaks found:	16	Corr. Area 1:	52.2
Noise:	0.4		

Peak table for sample 2 : P2_Pre_PCR

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	928	50.04	81.7		93.79
3	954	29.19	46.4		94.14
4	1,014	32.53	48.6		94.85
5	1,145	54.95	72.7		95.73
6	1,270	52.57	62.7		96.57
7	1,428	96.11	102.0		97.63
8	1,572	135.38	130.5		98.60
9	1,894	405.09	324.0		100.77
10	2,025	207.17	155.0		101.56
11	2,250	239.31	161.2		102.31
12	2,501	222.98	135.1		103.15
13	3,770	380.66	153.0		105.80
14	4,115	337.03	124.1		106.24
15	4,874	330.83	102.8		107.21
16	5,736	522.50	138.0		108.32
17	7,700	759.21	149.4		110.57
18	10,380	75.00	10.9	Upper Marker	113.00

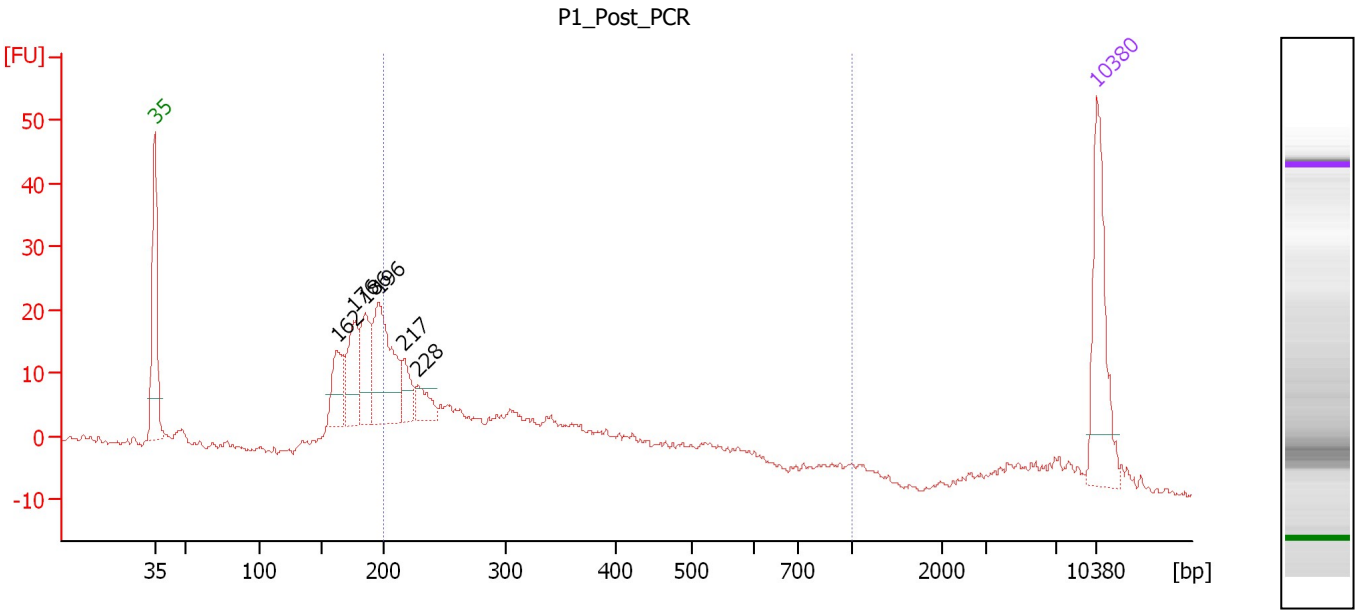
Region table for sample 2 : P2_Pre_PCR

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	735	52.2	814.9	358.89	5	24.2

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2016-03-02\2016-03-02_001.xad

Created: 3/2/2016 2:24:28 PM
Modified: 3/2/2016 2:59:10 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : P1_Post_PCR

Number of peaks found:	6	Corr. Area 1:	271.6
Noise:	0.6		

Peak table for sample 3 : P1_Post_PCR

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	162	47.93	447.6		56.55
3	176	63.12	543.6		57.81
4	186	56.20	458.8		58.69
5	196	121.04	934.6		59.66
6	217	26.00	181.4		61.57
7	228	21.97	146.0		62.54
8	10,380	75.00	10.9	Upper Marker	113.00

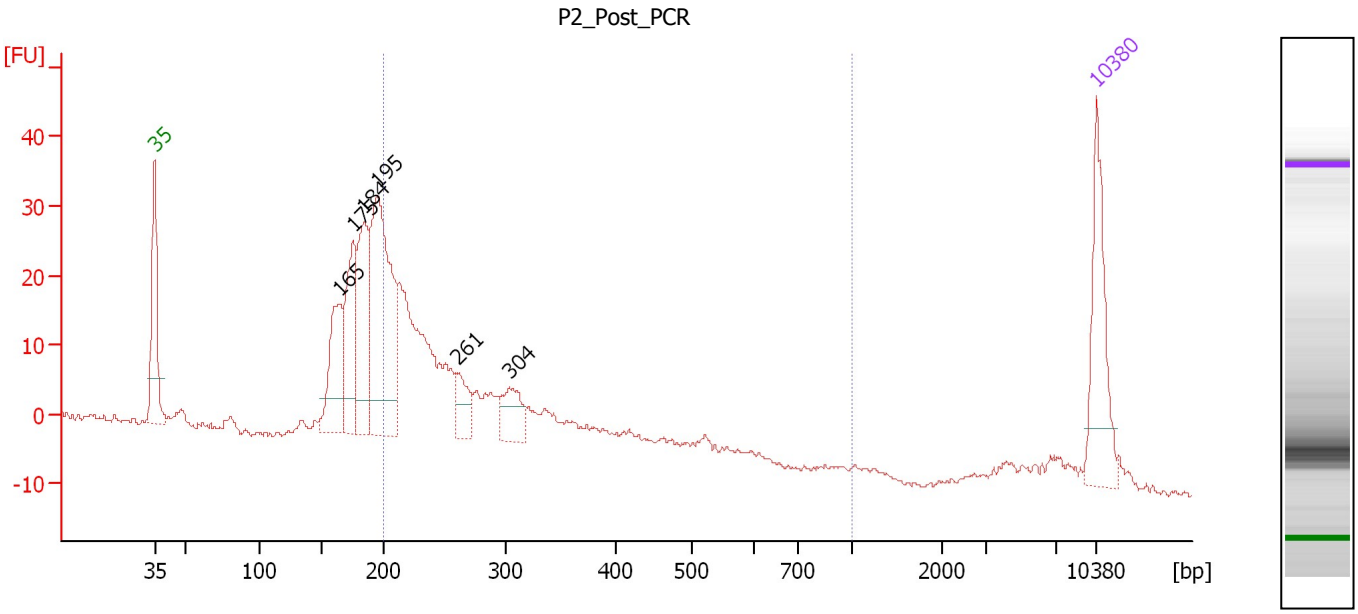
Region table for sample 3 : P1_Post_PCR

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	347	271.6	2,885.6	552.81	59	41.8

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2016-03-02\2016-03-02_001.xad

Created: 3/2/2016 2:24:28 PM
Modified: 3/2/2016 2:59:10 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : P2_Post_PCR

Number of peaks found:	6	Corr. Area 1:	273.2
Noise:	0.4		

Peak table for sample 4 : P2_Post_PCR

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	165	102.36	942.1		56.77
3	175	104.98	909.2		57.72
4	184	116.67	959.6		58.57
5	195	250.24	1,949.0		59.51
6	261	35.35	205.5		65.50
7	304	41.55	207.3		69.37
8	10,380	75.00	10.9	Upper Marker	113.00

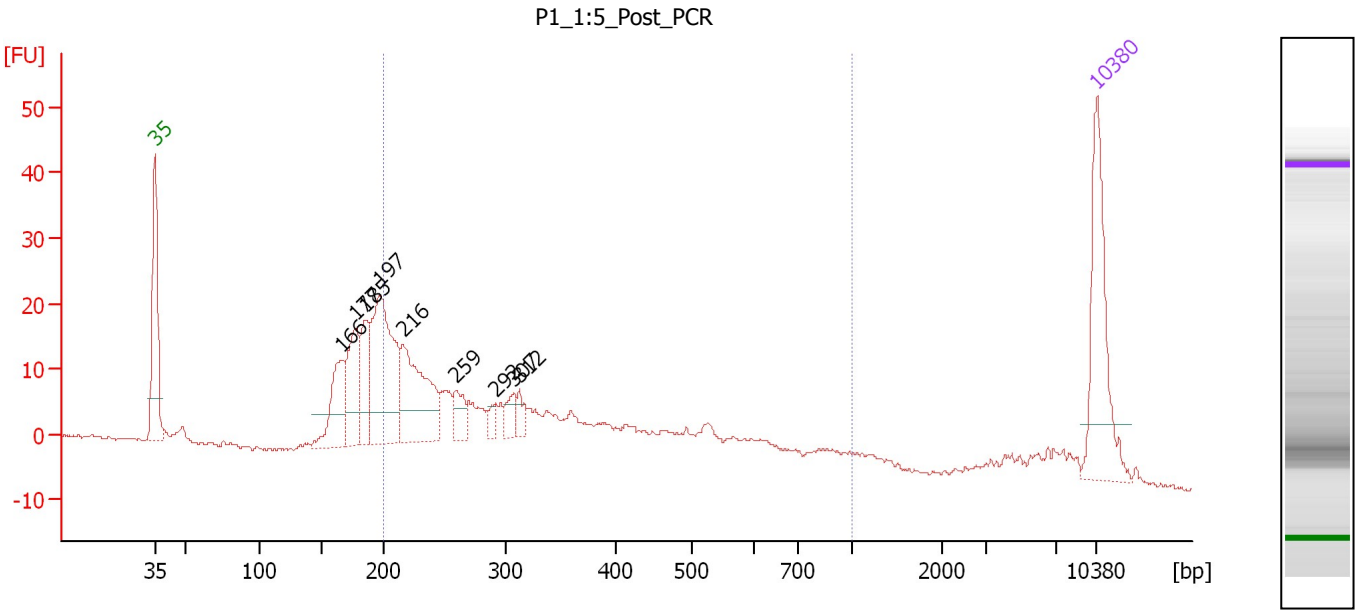
Region table for sample 4 : P2_Post_PCR

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	292	273.2	3,640.3	633.52	55	32.7

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2016-03-02\2016-03-02_001.xad

Created: 3/2/2016 2:24:28 PM
Modified: 3/2/2016 2:59:10 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : P1_1:5_Post_PCR

Number of peaks found:	9	Corr. Area 1:	334.6
Noise:	0.3		

Peak table for sample 5 : P1_1:5_Post_PCR

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	166	61.06	558.2		56.88
3	177	64.49	552.8		57.88
4	185	46.21	378.1		58.65
5	197	150.85	1,161.9		59.71
6	216	107.83	757.2		61.44
7	259	21.78	127.3		65.37
8	292	9.19	47.7		68.30
9	307	14.04	69.3		69.65
10	312	9.85	47.8		70.08
11	10,380	75.00	10.9	Upper Marker	113.00

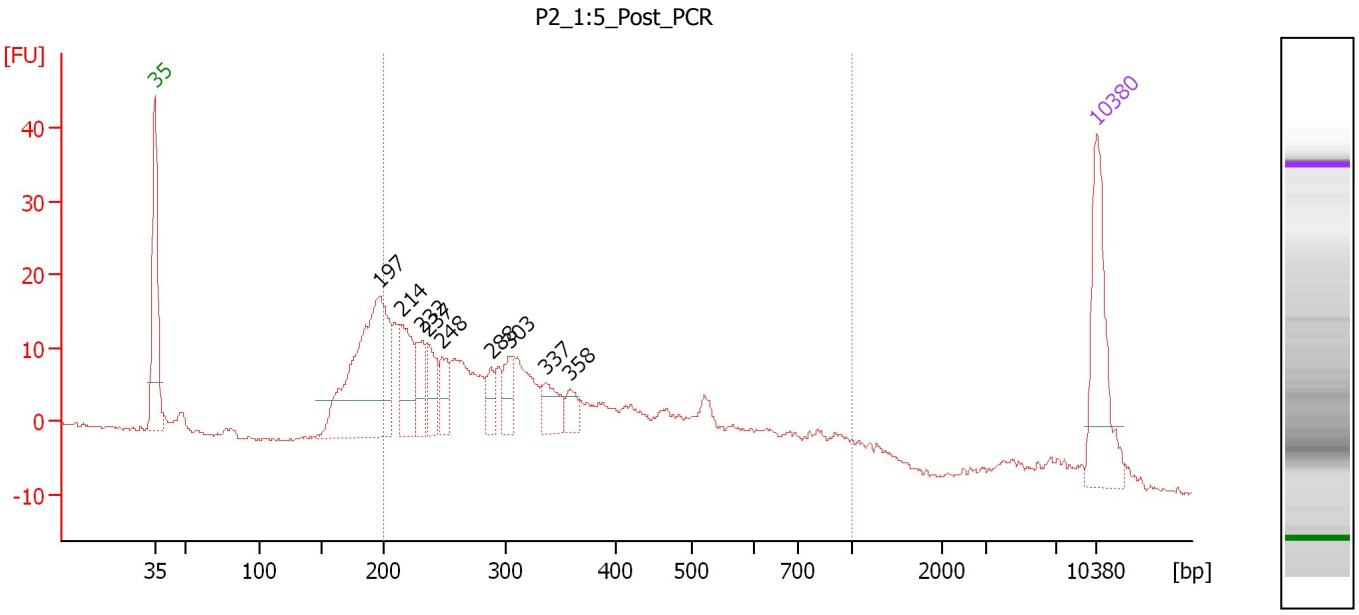
Region table for sample 5 : P1_1:5_Post_PCR

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	377	334.6	3,110.5	620.41	65	45.5

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2016-03-02\2016-03-02_001.xad

Created: 3/2/2016 2:24:28 PM
Modified: 3/2/2016 2:59:10 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : P2_1:5_Post_PCR

Number of peaks found:	9	Corr. Area 1:	388.7
Noise:	0.2		

Peak table for sample 6 : P2_1:5_Post_PCR

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	197	244.75	1,881.2		59.75
3	214	62.91	444.8		61.30
4	232	35.51	231.9		62.91
5	237	35.61	227.8		63.35
6	248	29.45	179.8		64.37
7	288	19.45	102.3		67.97
8	303	26.59	132.8		69.34
9	337	30.08	135.3		72.06
10	358	17.00	71.9		73.81
11	10,380	75.00	10.9	Upper Marker	113.00

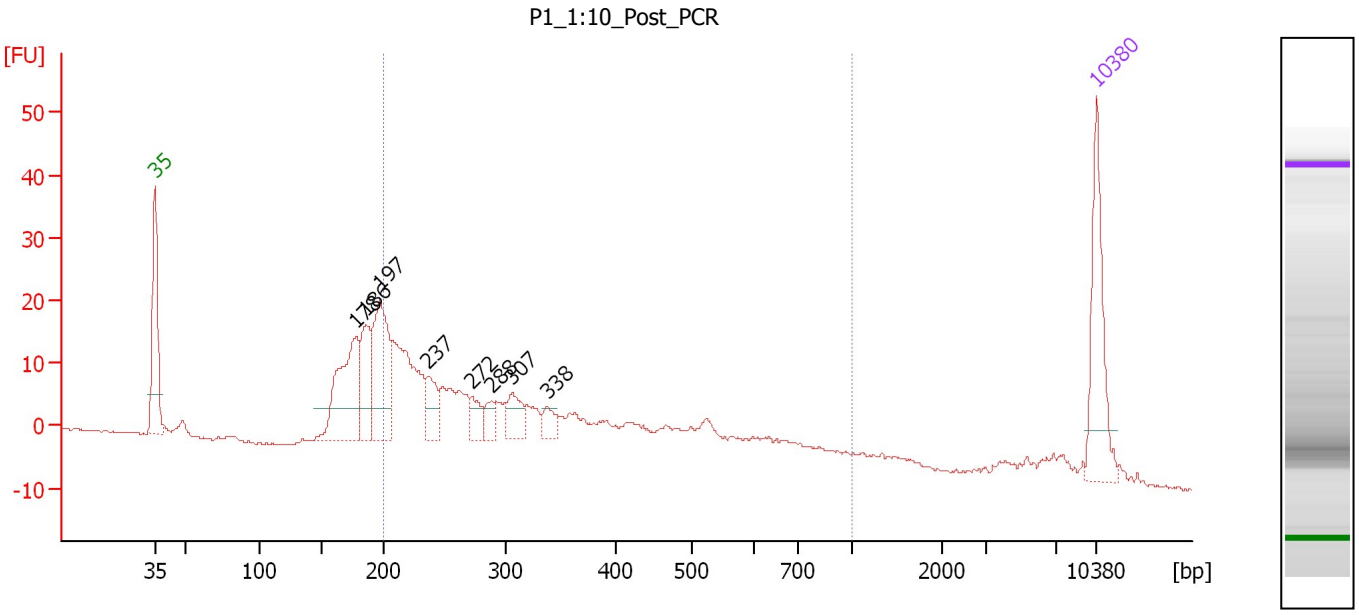
Region table for sample 6 : P2_1:5_Post_PCR

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	381	388.7	4,179.0	847.41	76	45.2

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2016-03-02\2016-03-02_001.xad

Created: 3/2/2016 2:24:28 PM
Modified: 3/2/2016 2:59:10 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : P1_1:10_Post_PCR

Number of peaks found:	8	Corr. Area 1:	323.7
Noise:	0.2		

Peak table for sample 7 : P1_1:10_Post_PCR

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	178	138.54	1,181.6		57.96
3	186	64.57	526.5		58.71
4	197	135.04	1,037.4		59.75
5	237	35.30	225.9		63.33
6	272	21.03	117.0		66.57
7	288	17.35	91.1		68.01
8	307	30.01	148.3		69.60
9	338	17.45	78.3		72.13
10	10,380	75.00	10.9	Upper Marker	113.00

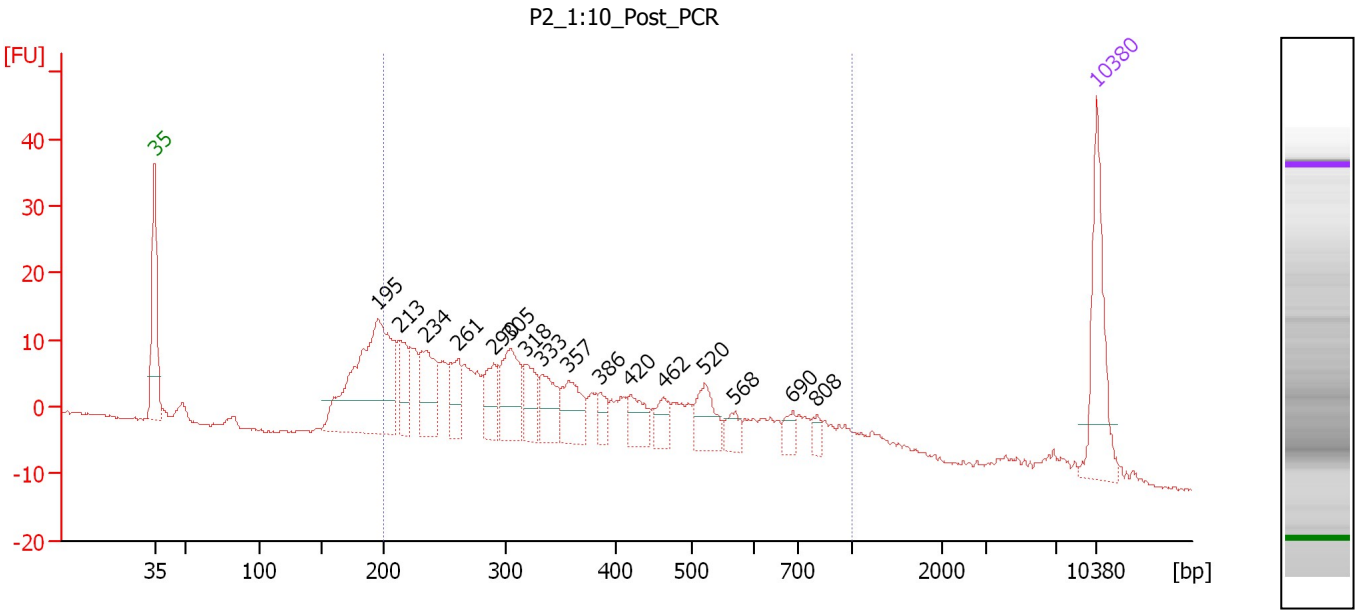
Region table for sample 7 : P1_1:10_Post_PCR

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	378	323.7	3,754.8	750.67	67	45.0

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2016-03-02\2016-03-02_001.xad

Created: 3/2/2016 2:24:28 PM
Modified: 3/2/2016 2:59:10 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : P2_1:10_Post_PCR

Number of peaks found:	16	Corr. Area 1:	395.5
Noise:	0.2		

Peak table for sample 8 : P2_1:10_Post_PCR

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	195	255.31	1,980.9		59.58
3	213	50.75	360.8		61.19
4	234	67.85	438.7		63.12
5	261	37.35	217.2		65.49
6	290	42.23	220.5		68.17
7	305	73.88	367.5		69.43
8	318	38.60	183.8		70.55
9	333	42.61	193.8		71.76
10	357	49.25	209.2		73.68
11	386	18.18	71.4		76.05
12	420	31.13	112.4		78.33
13	462	20.94	68.7		80.75
14	520	40.26	117.3		83.84
15	568	15.00	40.0		86.06
16	690	14.33	31.5		90.41
17	808	8.56	16.1		92.18
18	10,380	75.00	10.9	Upper Marker	113.00

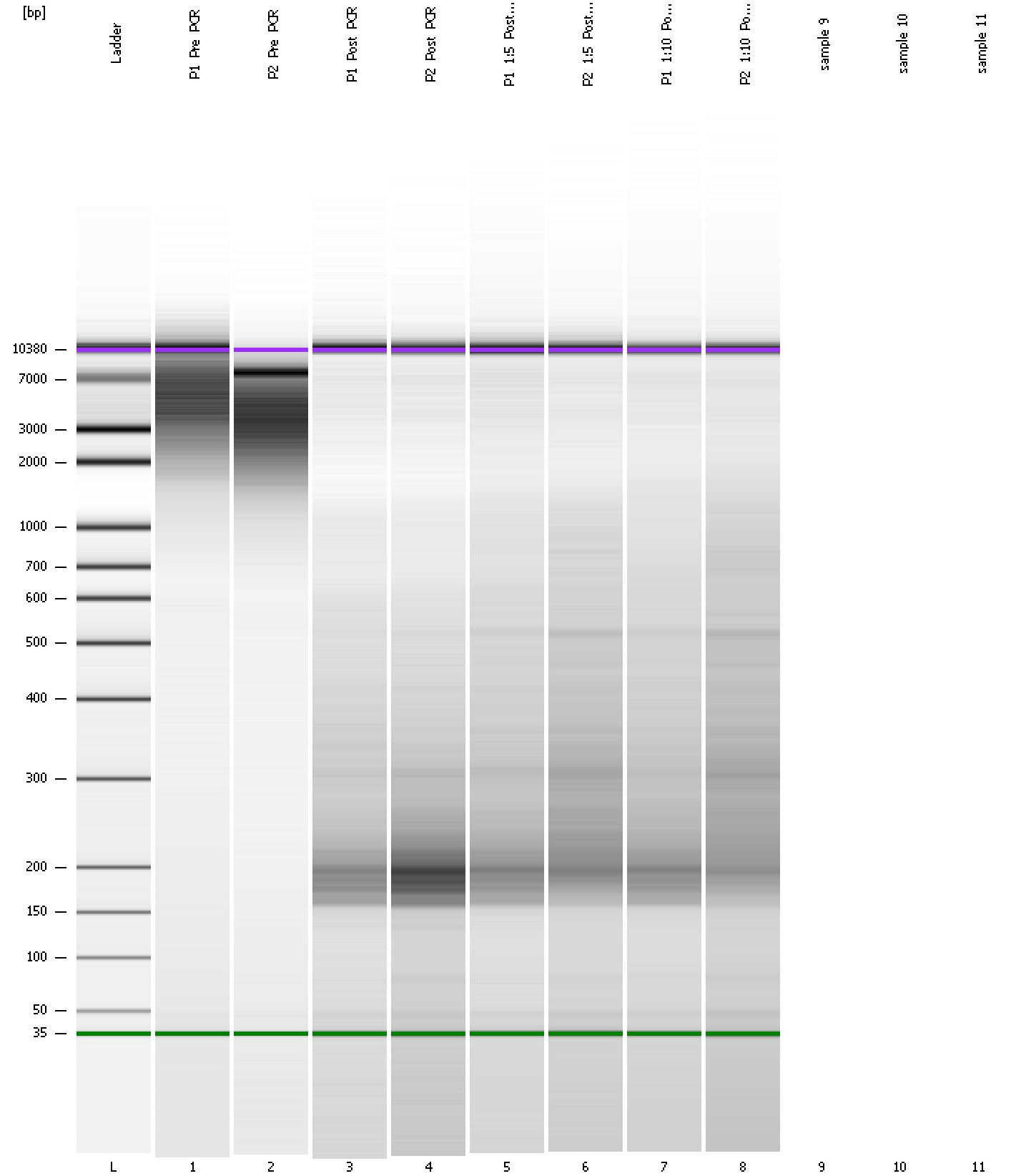
Region table for sample 8 : P2_1:10_Post_PCR

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	402	395.5	4,399.4	932.78	78	44.7

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2016-03-02\2016-03-02_001.xad

Created: 3/2/2016 2:24:28 PM
Modified: 3/2/2016 2:59:10 PM

Gel Image



Assay Class: High Sensitivity DNA Assay Created: 3/2/2016 2:24:28 PM
Data Path: C:\...ents and Settings\Bioanalyzer\2016-03-02\2016-03-02_001.xad Modified: 3/2/2016 2:59:10 PM

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\2016-03-02\2016-03-02_001.xad

Created: 3/2/2016 2:24:28 PM
Modified: 3/2/2016 2:59:10 PM

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		3/2/2016 2:57:10 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2016-03-02\2016-03-02_001.xad)		Instrument	Run		3/2/2016 2:24:34 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		3/2/2016 2:24:34 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		3/2/2016 2:24:34 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		3/2/2016 2:24:34 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		3/2/2016 2:24:34 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		3/2/2016 2:24:34 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		3/2/2016 2:24:34 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1