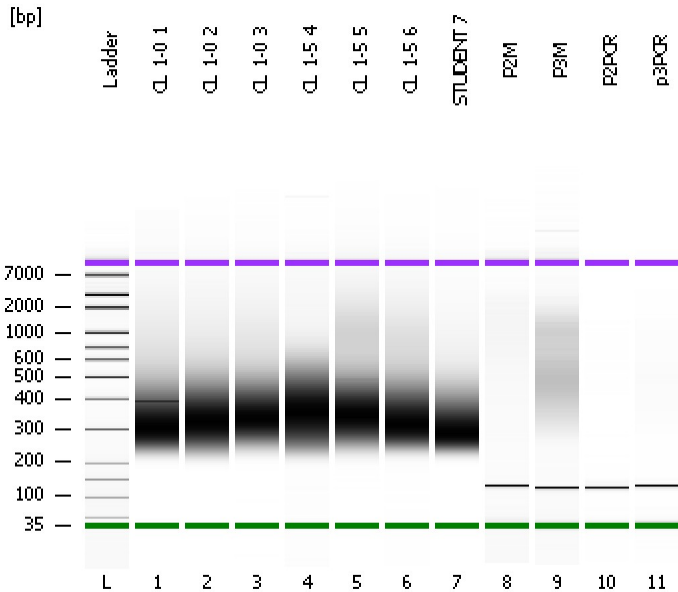


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-30\2012-11-30_002.xad

Created: 11/30/2012 11:47:40 AM
Modified: 11/30/2012 12:29:03 PM

Electrophoresis File Run Summary



Instrument Information:

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

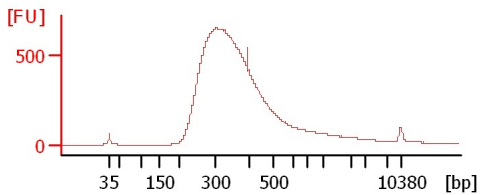
Assay Information:

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

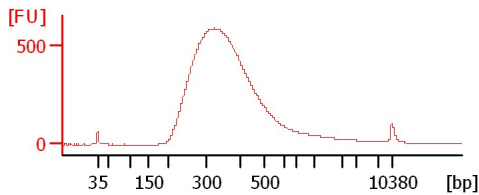
Chip Information:

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

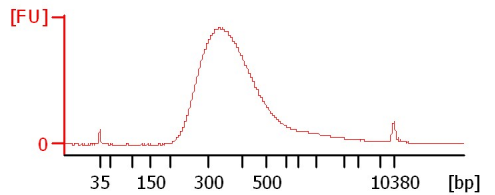
CL 1-0 1



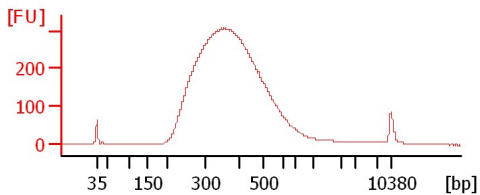
CL 1-0 2



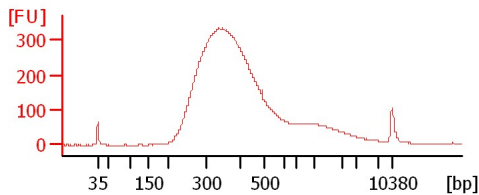
CL 1-0 3



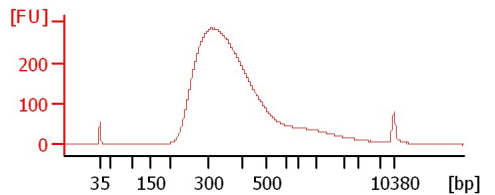
CL 1-5 4



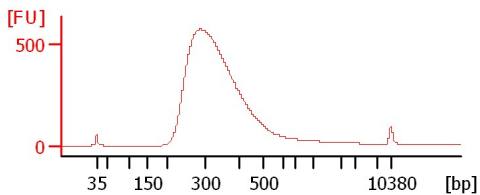
CL 1-5 5



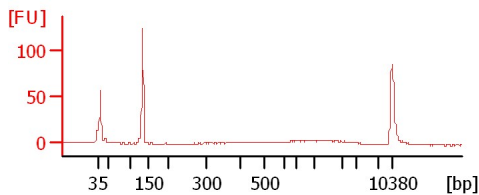
CL 1-5 6



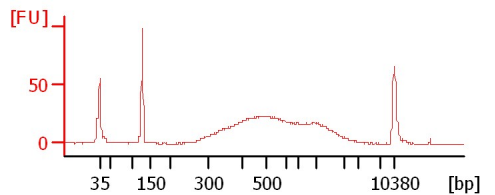
STUDENT 7



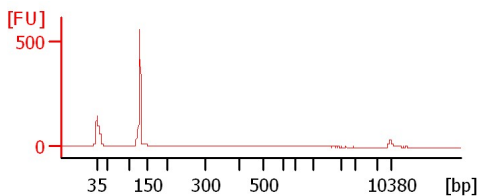
P2M



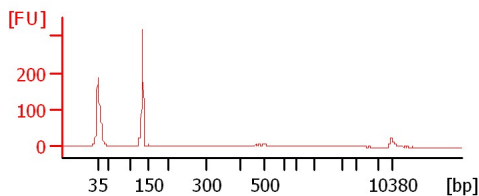
P3M



P2PCR



p3PCR



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-30\2012-11-30_002.xad

Created: 11/30/2012 11:47:40 AM
 Modified: 11/30/2012 12:29:03 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
CL 1-0 1		<input type="checkbox"/>	✓			
CL 1-0 2		<input type="checkbox"/>	✓			
CL 1-0 3		<input type="checkbox"/>	✓			
CL 1-5 4		<input type="checkbox"/>	✓			
CL 1-5 5		<input type="checkbox"/>	✓			
CL 1-5 6		<input type="checkbox"/>	✓			
STUDENT 7		<input type="checkbox"/>	✓			
P2M		<input type="checkbox"/>	✓			
P3M		<input type="checkbox"/>	✓			
P2PCR		<input type="checkbox"/>	✓			
p3PCR		<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\2012-11-30\2012-11-30_002.xad

Created: 11/30/2012 11:47:40 AM
Modified: 11/30/2012 12:29:03 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/ μ l] : 1950
Uses Standard Area for Ladder Fragments
Lower Marker Concentration [pg/ μ l] : 125
Upper Marker Concentration [pg/ μ 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

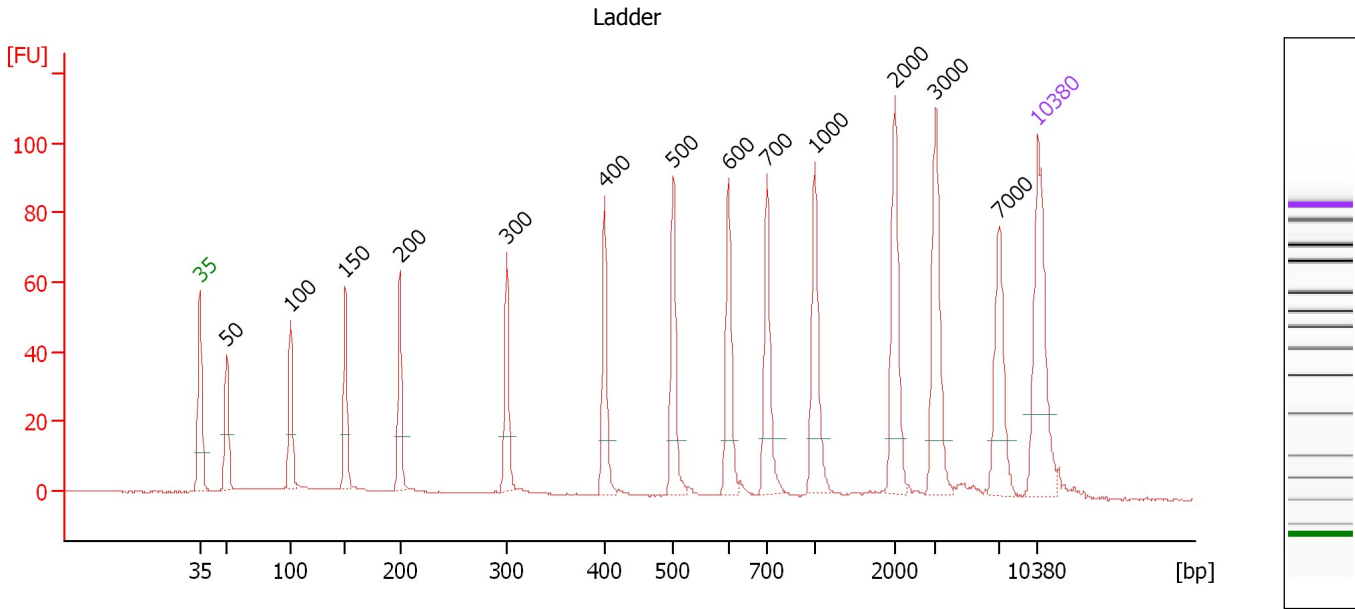
Ladder

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\2012-11-30\2012-11-30_002.xad

Created: 11/30/2012 11:47:40 AM
 Modified: 11/30/2012 12:29:03 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

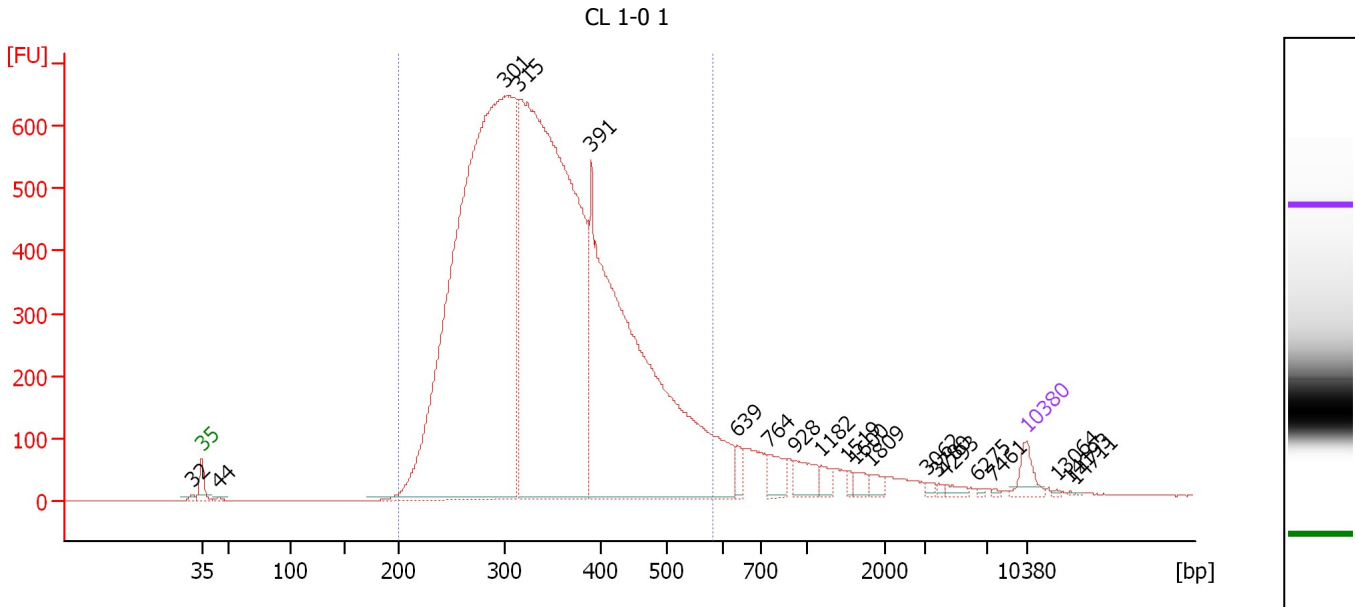
Peak table for Ladder

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\2012-11-30\2012-11-30_002.xad

Created: 11/30/2012 11:47:40 AM
 Modified: 11/30/2012 12:29:03 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : CL 1-0 1

Number of peaks found: 20 Corr. Area 1: 13,954.5
 Noise: 0.2

Peak table for sample 1 : CL 1-0 1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	32	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	44	14.72	503.8	
4	301	6,666.62	33,574.8	
5	315	5,534.71	26,597.1	
6	391	3,633.68	14,065.7	
7	639	52.76	125.1	
8	764	112.46	223.1	
9	928	112.09	183.0	
10	1,182	52.63	67.4	
11	1,519	20.33	20.3	
12	1,600	39.84	37.7	
13	1,809	37.82	31.7	
14	3,062	13.87	6.9	
15	3,780	9.73	3.9	
16	4,293	23.10	8.2	
17	6,275	7.32	1.8	
18	7,461	6.63	1.3	
19	10,380	75.00	10.9	Upper Marker
20	13,064	0.00	0.0	
21	14,193	0.00	0.0	
22	14,711	0.00	0.0	

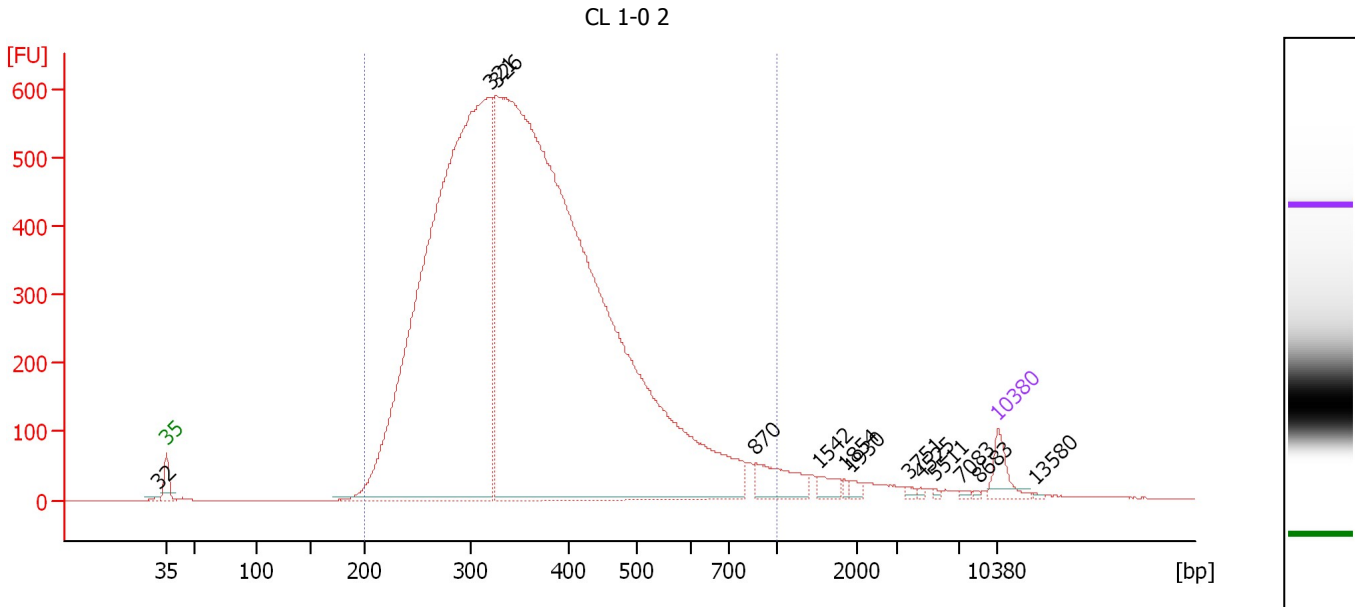
Region table for sample 1 : CL 1-0 1

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	585	347	71,639.9	15,346.64	13,954.5	92	22.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-30\2012-11-30_002.xad

Created: 11/30/2012 11:47:40 AM
 Modified: 11/30/2012 12:29:03 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : CL 1-0 2

Number of peaks found: 13 Corr. Area 1: 13,882.3
 Noise: 0.4

Peak table for sample 2 : CL 1-0 2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	32	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	321	5,256.49	24,841.2	
4	326	8,147.20	37,827.0	
5	870	169.01	294.5	
6	1,542	45.72	44.9	
7	1,854	11.14	9.1	
8	1,930	20.19	15.8	
9	3,751	9.19	3.7	
10	4,525	5.89	2.0	
11	5,511	6.40	1.8	
12	7,083	7.75	1.7	
13	8,683	4.76	0.8	
14	10,380	75.00	10.9	Upper Marker
15	13,580	0.00	0.0	

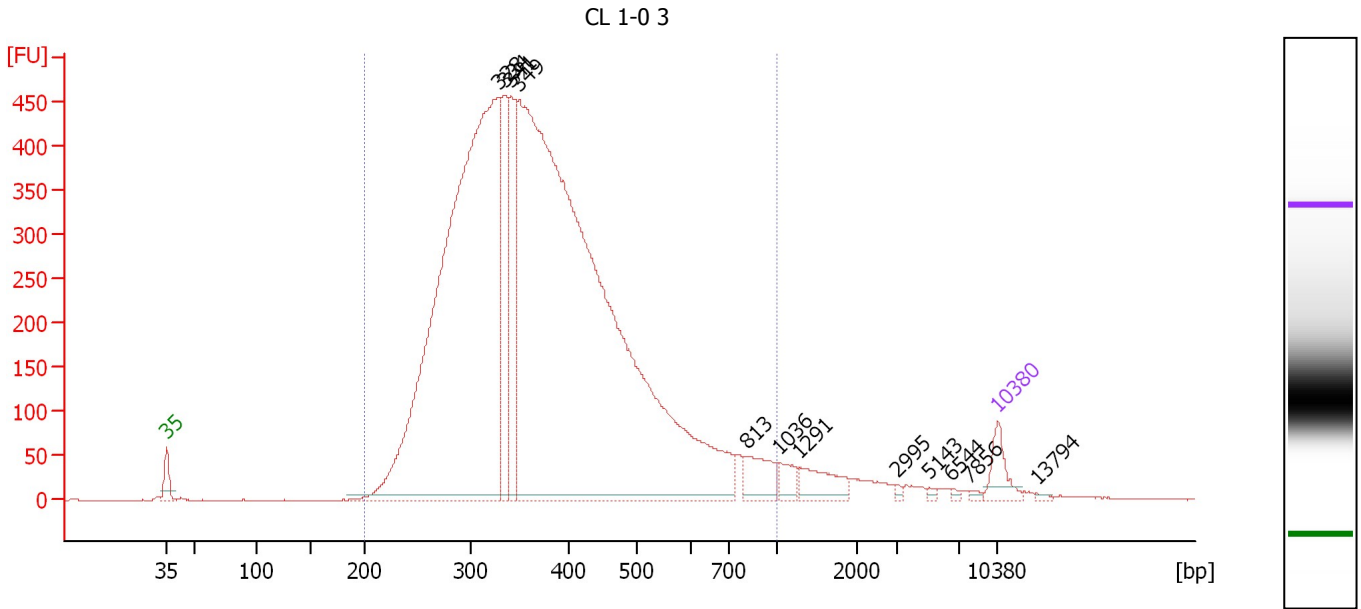
Region table for sample 2 : CL 1-0 2

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	372	58,125.8	12,891.68	13,882.3	97	31.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-30\2012-11-30_002.xad

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 Modified: 11/30/2012 12:29:03 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : CL 1-0 3

Number of peaks found: 12 Corr. Area 1: 9,867.5
 Noise: 0.4

Peak table for sample 3 : CL 1-0 3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	328	3,885.11	17,944.8	
3	334	459.88	2,083.3	
4	341	482.84	2,146.1	
5	349	5,646.34	24,509.0	
6	813	131.16	244.4	
7	1,036	56.01	81.9	
8	1,291	108.10	126.9	
9	2,995	7.24	3.7	
10	5,143	8.40	2.5	
11	6,544	6.90	1.6	
12	7,856	8.38	1.6	
13	10,380	75.00	10.9	Upper Marker
14	13,794	0.00	0.0	

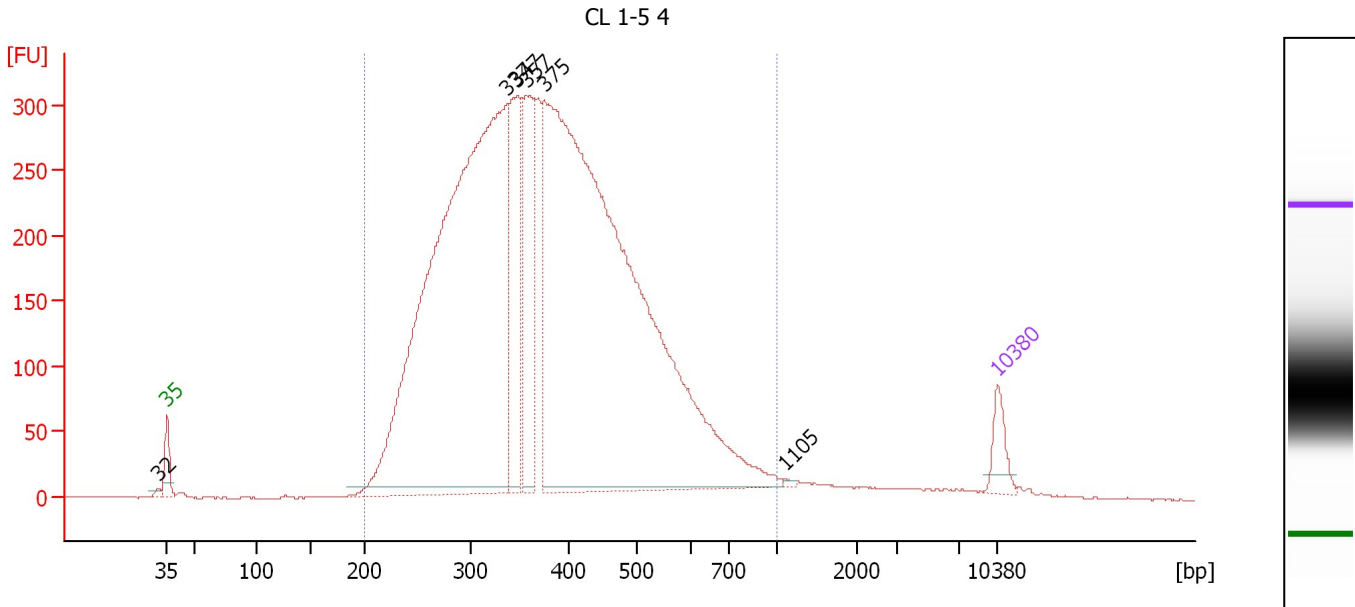
Region table for sample 3 : CL 1-0 3

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	386	44,472.8	10,302.17	9,867.5	96	30.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-30\2012-11-30_002.xad

Created: 11/30/2012 11:47:40 AM
 Modified: 11/30/2012 12:29:03 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : CL 1-5 4

Number of peaks found: 6 Corr. Area 1: 7,889.8
 Noise: 0.4

Peak table for sample 4 : CL 1-5 4

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	32	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	337	3,834.54	17,228.2	
4	347	531.39	2,317.5	
5	357	625.27	2,653.8	
6	375	4,492.74	18,155.1	
7	1,105	6.54	9.0	
8	10,380	75.00	10.9	Upper Marker

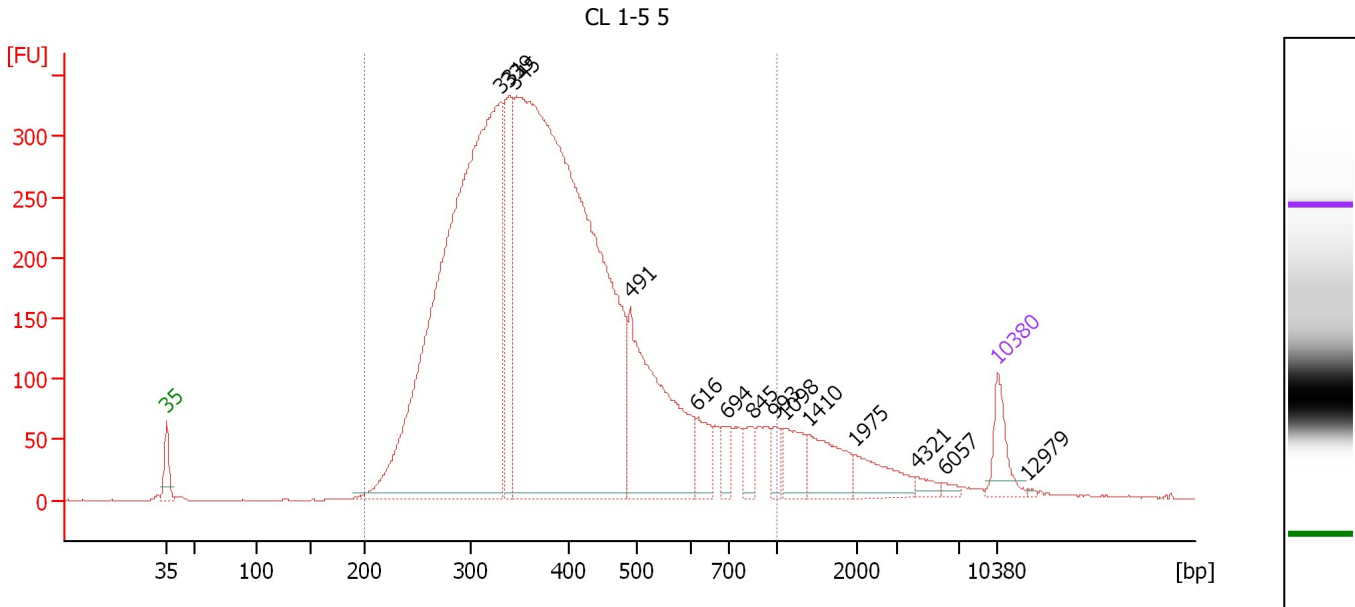
Region table for sample 4 : CL 1-5 4

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	391	43,590.2	10,134.71	7,889.8	97	29.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-30\2012-11-30_002.xad

Created: 11/30/2012 11:47:40 AM
 Modified: 11/30/2012 12:29:03 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : CL 1-5 5

Number of peaks found: 14 Corr. Area 1: 7,666.3
 Noise: 0.4

Peak table for sample 5 : CL 1-5 5

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	331	2,783.24	12,752.1	
3	339	352.35	1,576.4	
4	345	3,493.89	15,325.6	
5	491	643.17	1,983.0	
6	616	92.67	227.8	
7	694	55.48	121.1	
8	845	56.05	100.5	
9	993	41.57	63.4	
10	1,098	92.30	127.4	
11	1,410	130.00	139.7	
12	1,975	91.99	70.6	
13	4,321	21.68	7.6	
14	6,057	10.86	2.7	
15	10,380	75.00	10.9	Upper Marker
16	12,979	0.00	0.0	

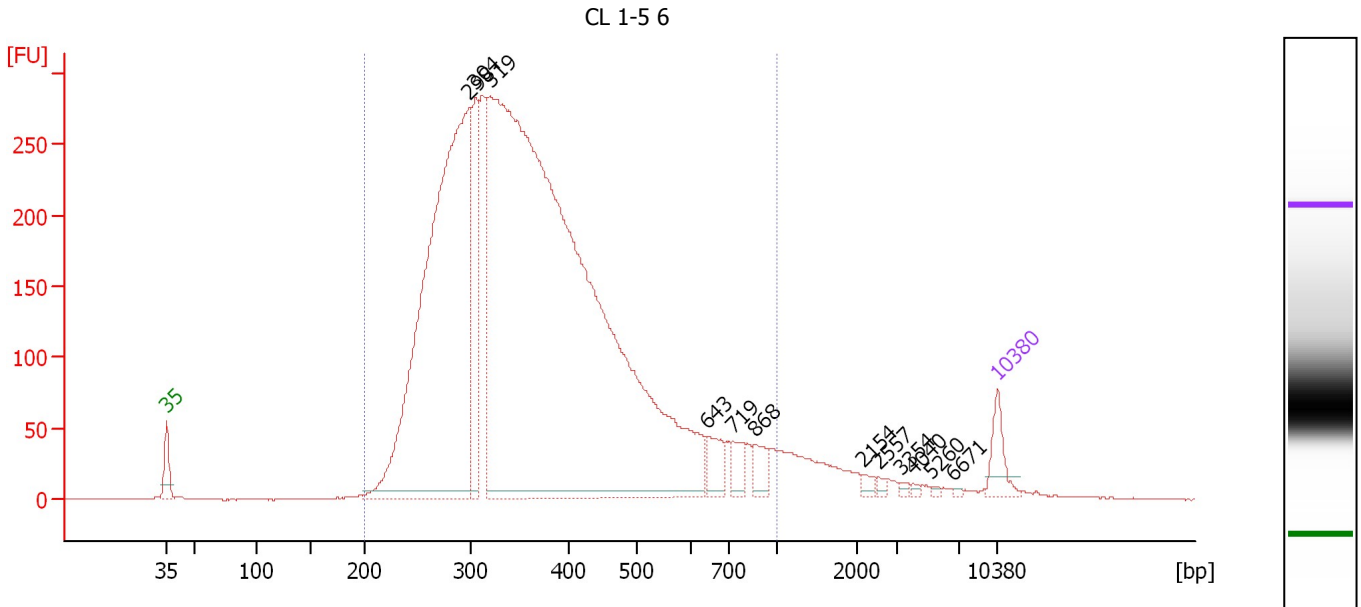
Region table for sample 5 : CL 1-5 5

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	400	32,415.4	7,634.55	7,666.3	93	33.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-30\2012-11-30_002.xad

Created: 11/30/2012 11:47:40 AM
 Modified: 11/30/2012 12:29:03 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : CL 1-5 6

Number of peaks found: 12 Corr. Area 1: 6,331.8
 Noise: 0.3

Peak table for sample 6 : CL 1-5 6

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	298	2,755.12	14,016.2	
3	304	458.81	2,283.5	
4	319	6,275.26	29,776.8	
5	643	95.93	226.0	
6	719	66.64	140.5	
7	868	63.92	111.6	
8	2,154	17.80	12.5	
9	2,557	10.07	6.0	
10	3,354	9.11	4.1	
11	4,040	7.53	2.8	
12	5,260	5.90	1.7	
13	6,671	4.29	1.0	
14	10,380	75.00	10.9	Upper Marker

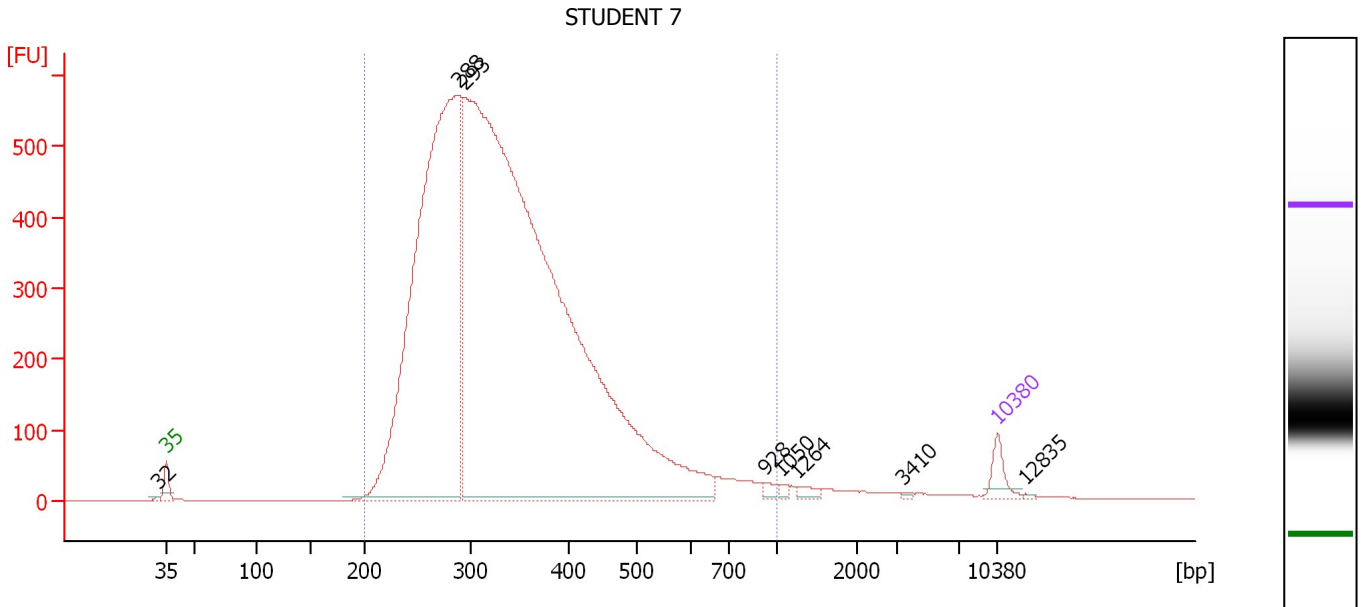
Region table for sample 6 : CL 1-5 6

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	382	42,671.8	9,634.03	6,331.8	95	33.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-30\2012-11-30_002.xad

Created: 11/30/2012 11:47:40 AM
 Modified: 11/30/2012 12:29:03 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : STUDENT 7

Number of peaks found: 8 Corr. Area 1: 11,171.6
 Noise: 0.3

Peak table for sample 7 : STUDENT 7

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	32	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	288	4,687.20	24,701.2	
4	293	9,718.12	50,212.5	
5	928	26.90	43.9	
6	1,050	18.43	26.6	
7	1,264	32.29	38.7	
8	3,410	7.62	3.4	
9	10,380	75.00	10.9	Upper Marker
10	12,835	0.00	0.0	

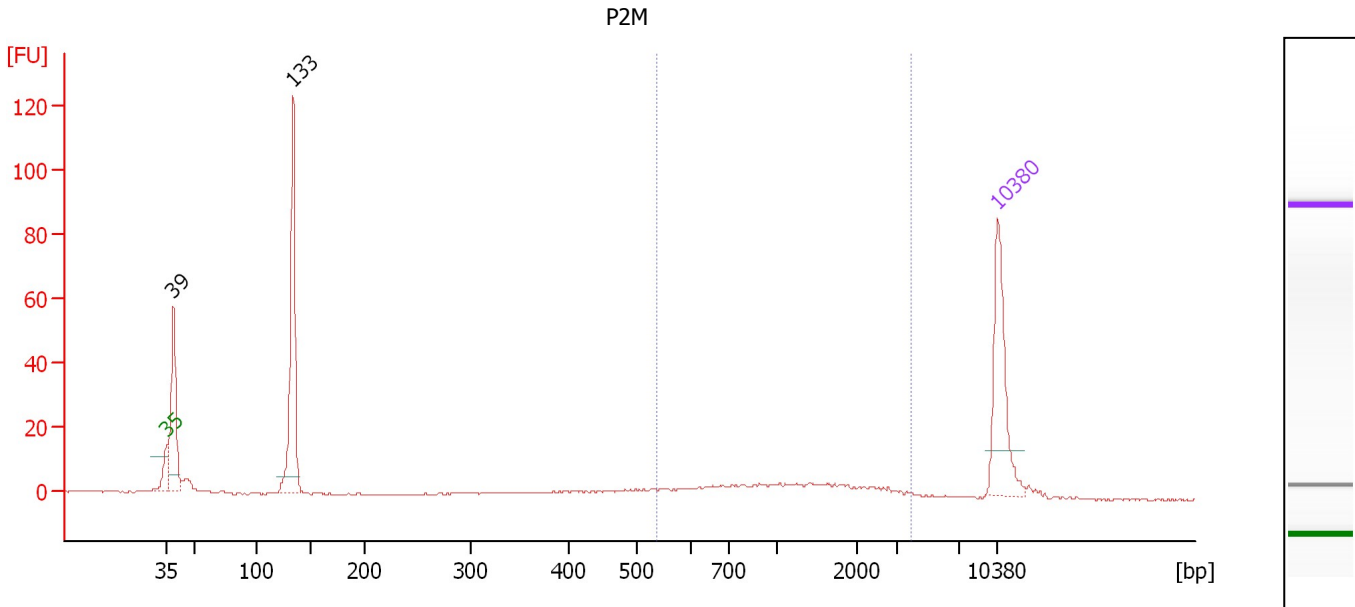
Region table for sample 7 : STUDENT 7

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	346	64,207.2	13,504.42	11,171.6	97	29.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-30\2012-11-30_002.xad

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Electropherogram Summary Continued ...



Overall Results for sample 8 : P2M

Number of peaks found: 2 Corr. Area 1: 67.2
 Noise: 0.2

Peak table for sample 8 : P2M

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	39	128.00	5,011.7	
3	133	188.46	2,140.7	
4	10,380	75.00	10.9	Upper Marker

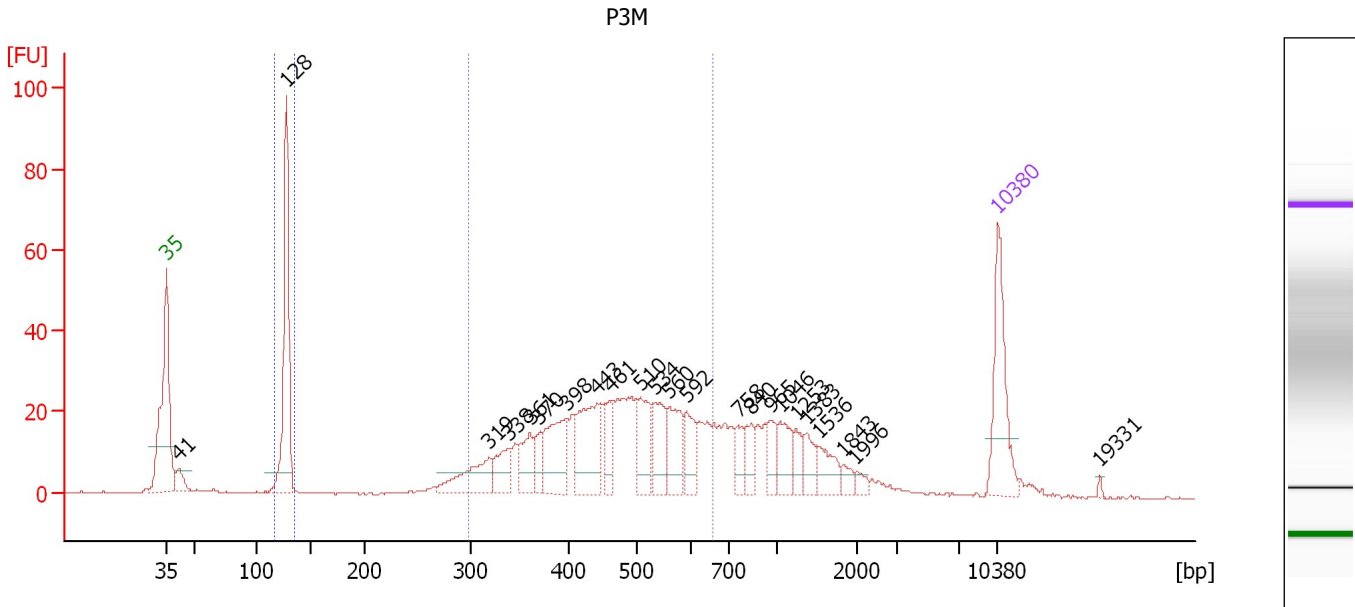
Region table for sample 8 : P2M

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
537	3,996	1,360	106.5	69.74	67.2	24	54.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-30\2012-11-30_002.xad

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Electropherogram Summary Continued ...



Overall Results for sample 9 : P3M

Number of peaks found: 23 Corr. Area 1: 462.1
 Noise: 0.2 Corr. Area 2: 91.7



Peak table for sample 9 : P3M

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	41	24.20	884.0	
3	128	212.47	2,522.6	
4	319	62.52	297.3	
5	338	35.95	161.1	
6	361	40.51	170.0	
7	370	24.35	99.6	
8	398	76.59	291.3	
9	443	94.91	324.3	
10	461	33.69	110.7	
11	510	56.07	166.6	
12	534	49.54	140.5	
13	560	50.46	136.5	
14	592	35.90	91.8	
15	758	21.69	43.4	
16	840	22.37	40.4	
17	965	20.60	32.4	
18	1,046	31.70	45.9	
19	1,253	17.48	21.1	
20	1,383	20.96	23.0	
21	1,536	25.40	25.1	
22	1,843	8.51	7.0	
23	1,996	7.21	5.5	
24	10,380	75.00	10.9	Upper Marker
25	19,331	0.00	0.0	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-30\2012-11-30_002.xad

Created: 11/30/2012 11:47:40 AM
Modified: 11/30/2012 12:29:03 PM

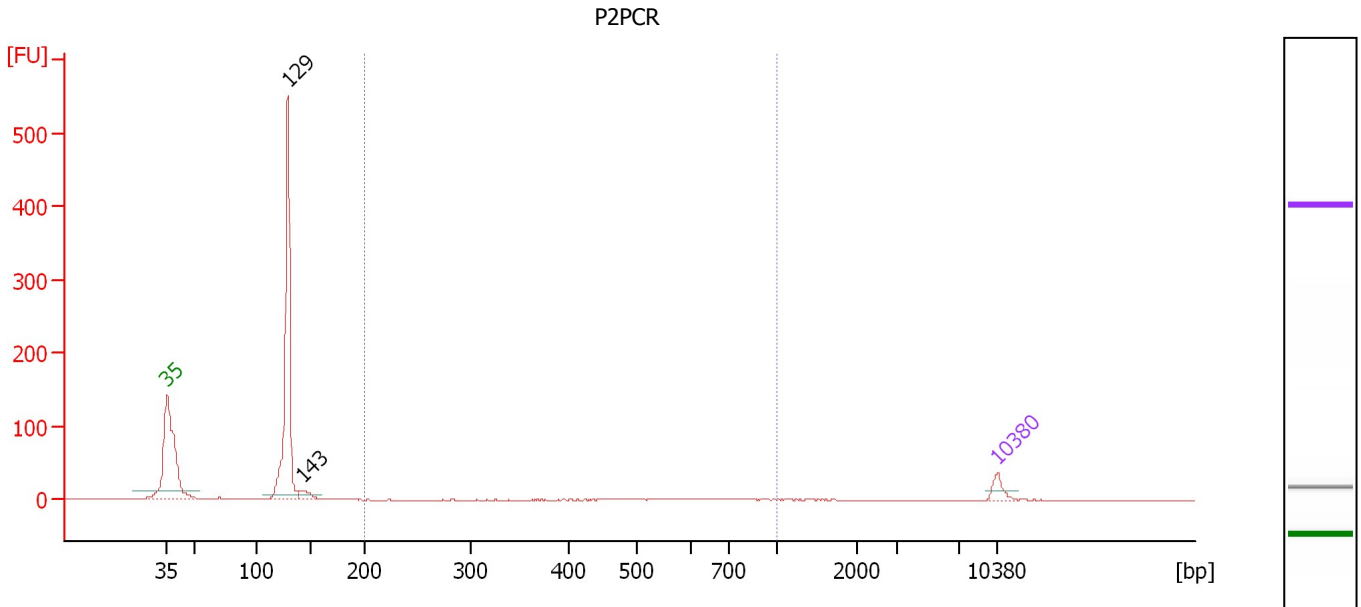
Electropherogram Summary Continued ...**... Region table for sample 9 : P3M**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
116	135	127	2,562.1	214.56	91.7	11	2.2	
298	655	466	2,612.0	760.78	462.1	56	19.6	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-30\2012-11-30_002.xad

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Electropherogram Summary Continued ...



Overall Results for sample 10 : P2PCR

Number of peaks found: 2 Corr. Area 1: 21.8
 Noise: 0.1

Peak table for sample 10 : P2PCR

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	129	2,154.90	25,361.1	
3	143	112.43	1,192.0	
4	10,380	75.00	10.9	Upper Marker

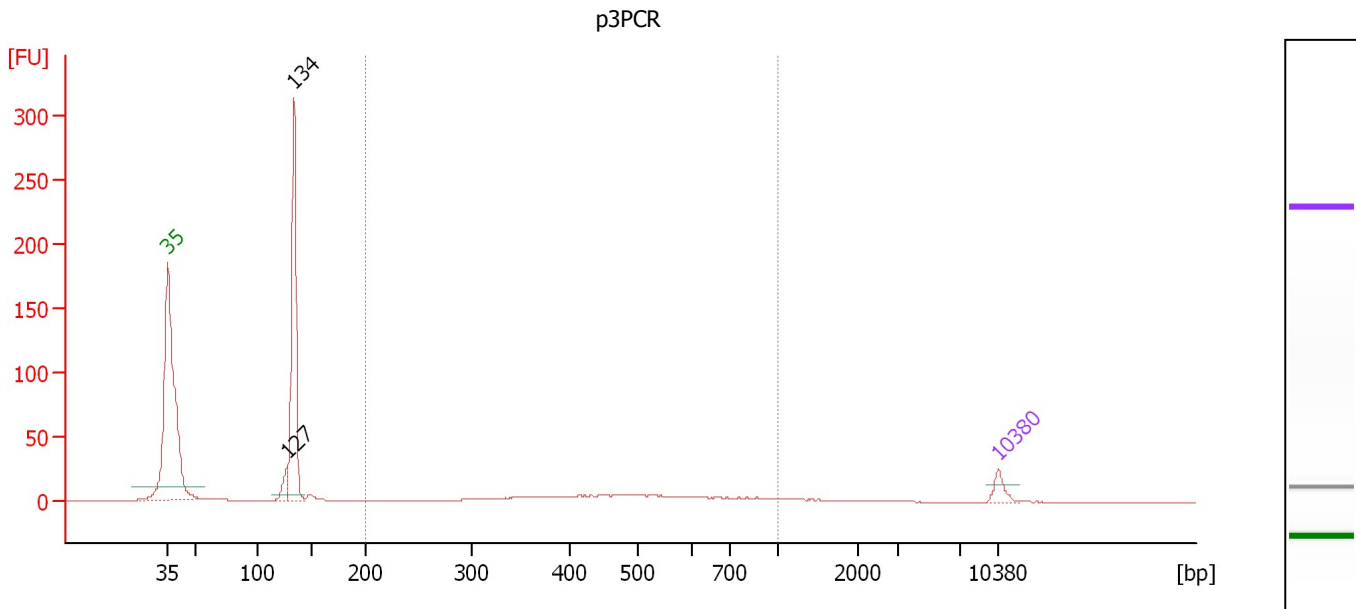
Region table for sample 10 : P2PCR

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	592	179.0	61.66	21.8	4	29.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-30\2012-11-30_002.xad

Created: 11/30/2012 11:47:40 AM
 Modified: 11/30/2012 12:29:03 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : p3PCR

Number of peaks found: 2 Corr. Area 1: 125.0
 Noise: 0.1

Peak table for sample 11 : p3PCR

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	127	159.01	1,901.0	
3	134	1,643.21	18,635.4	
4	10,380	75.00	10.9	Upper Marker

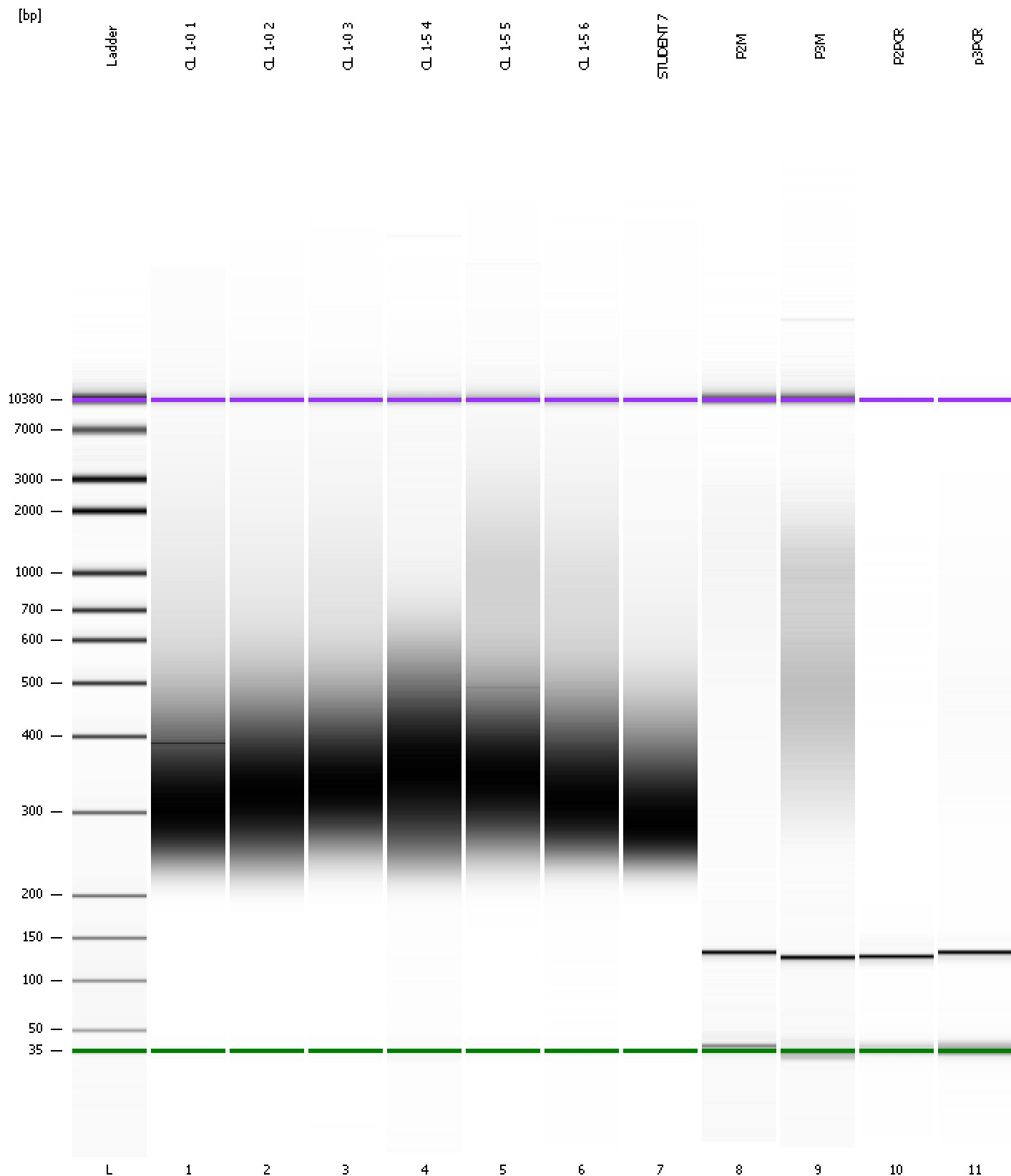
Region table for sample 11 : p3PCR

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	510	1,944.9	577.99	125.0	28	31.7	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-30\2012-11-30_002.xad

Created: 11/30/2012 11:47:40 AM
Modified: 11/30/2012 12:29:03 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-30\2012-11-30_002.xad

Created: 11/30/2012 11:47:40 AM
 Modified: 11/30/2012 12:29:03 PM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 12)		Instrument	Run		11/30/2012 12:28:59 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2012-11-30\2012-11-30_002.xad)		Instrument	Run		11/30/2012 11:47:46 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		11/30/2012 11:47:46 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		11/30/2012 11:47:46 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		11/30/2012 11:47:46 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		11/30/2012 11:47:46 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		11/30/2012 11:47:46 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		11/30/2012 11:47:46 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1