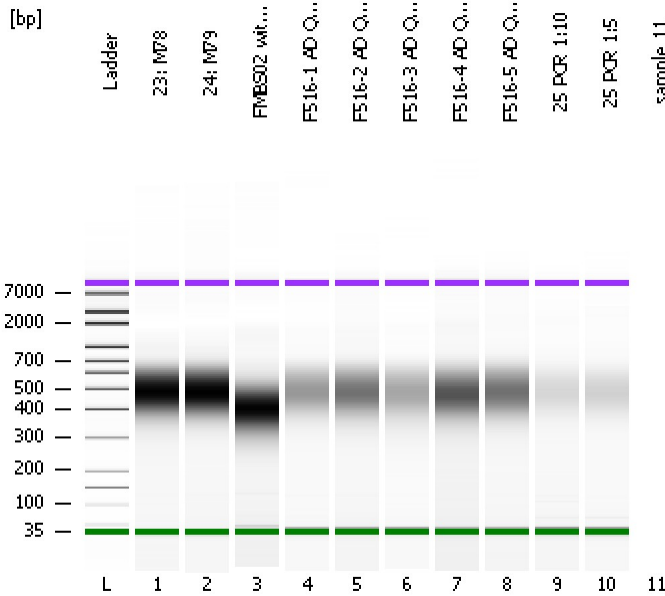


Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-22\2016-05-22_002.xad

Created: 5/22/2016 10:38:49 AM
 Modified: 5/22/2016 11:17:15 AM

Electrophoresis File Run Summary



Instrument Information:

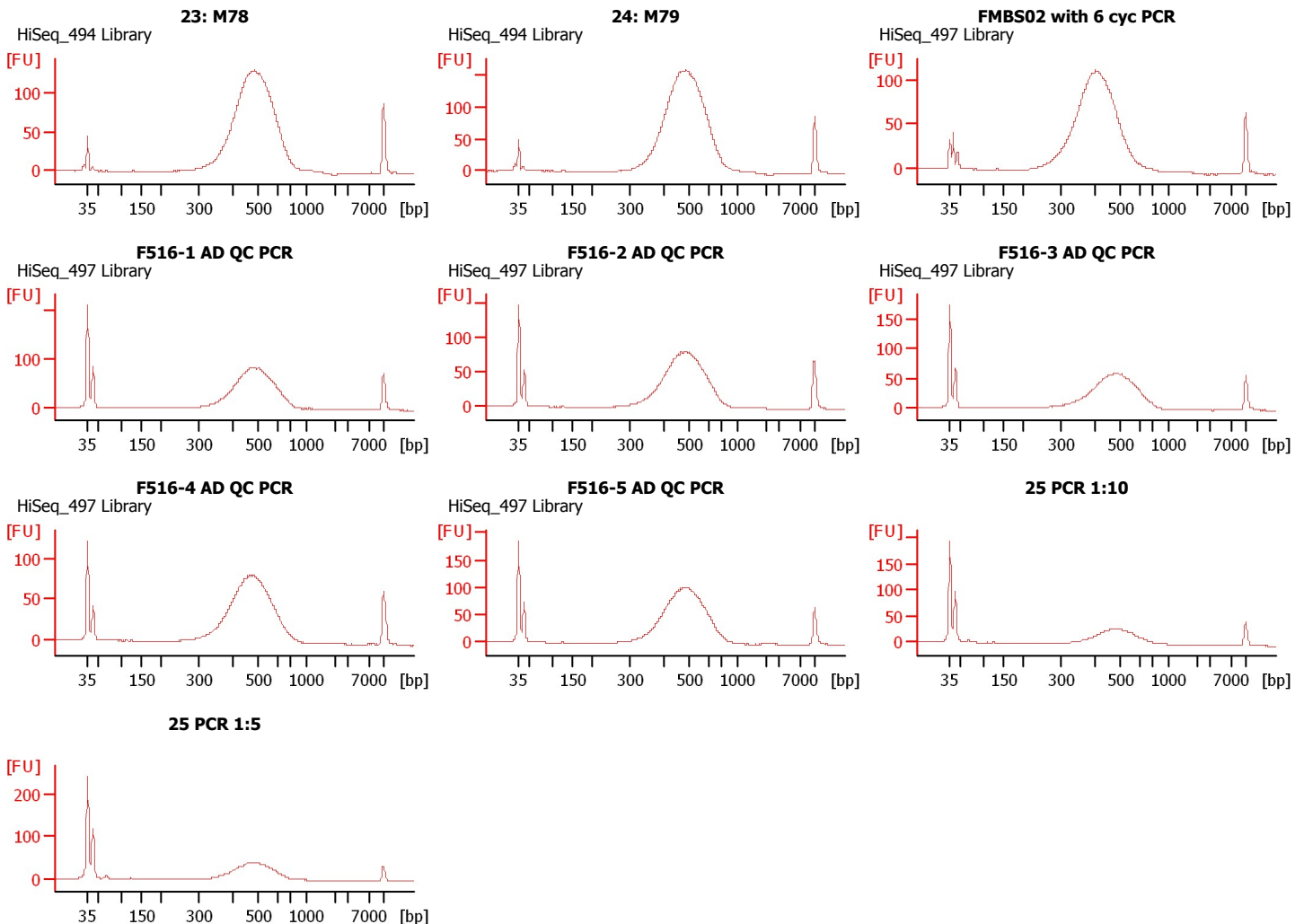
Instrument Name: DE13701086 Firmware: C.01.069
 Serial#: DE13701086 Type: G2938B

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:



Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-22\2016-05-22_002.xad

Created: 5/22/2016 10:38:49 AM
Modified: 5/22/2016 11:17:15 AM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
23: M78	HiSeq_494 Library	<input type="checkbox"/>	✓			
24: M79	HiSeq_494 Library	<input type="checkbox"/>	✓			
FMBS02 with 6 cyc PCR	HiSeq_497 Library	<input type="checkbox"/>	✓			
F516-1 AD QC PCR	HiSeq_497 Library	<input type="checkbox"/>	✓			
F516-2 AD QC PCR	HiSeq_497 Library	<input type="checkbox"/>	✓			
F516-3 AD QC PCR	HiSeq_497 Library	<input type="checkbox"/>	✓			
F516-4 AD QC PCR	HiSeq_497 Library	<input type="checkbox"/>	✓			
F516-5 AD QC PCR	HiSeq_497 Library	<input type="checkbox"/>	✓			
25 PCR 1:10		<input type="checkbox"/>	✓			
25 PCR 1:5		<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:\... bioanalyzer\2100 expert\data\2016-05-22\2016-05-22_002.xad

Created: 5/22/2016 10:38:49 AM
Modified: 5/22/2016 11:17:15 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

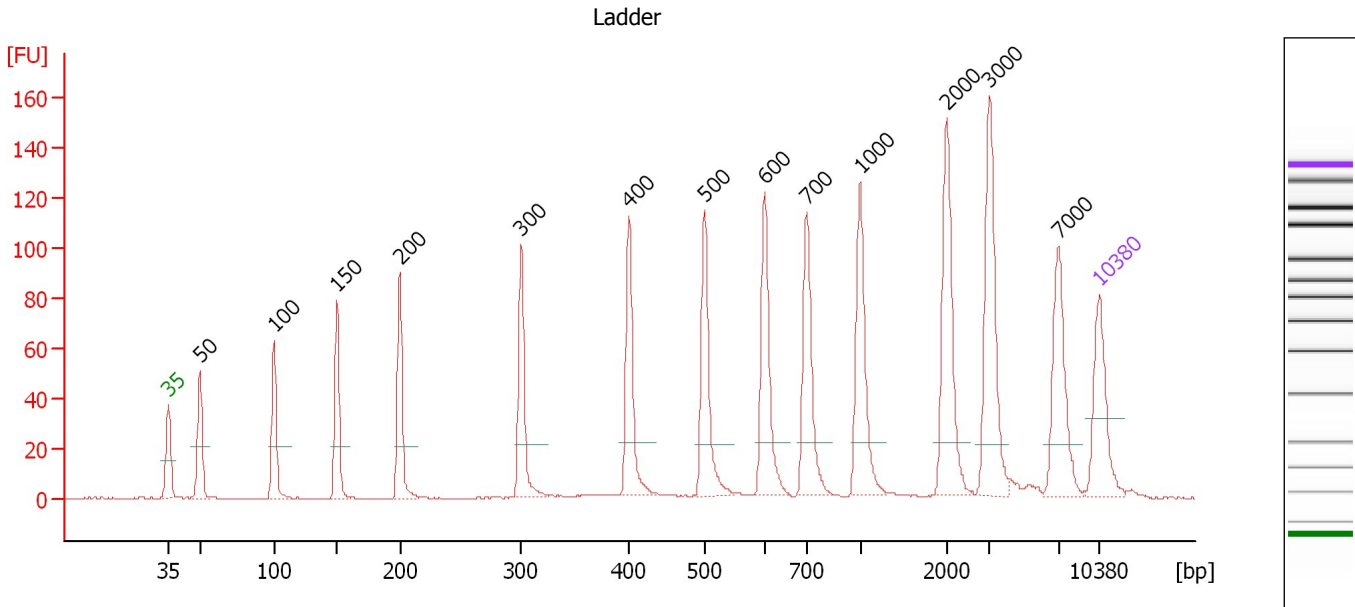
Ladder

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:\... bioanalyzer\2100 expert\data\2016-05-22\2016-05-22_002.xad

Created: 5/22/2016 10:38:49 AM
 Modified: 5/22/2016 11:17:15 AM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

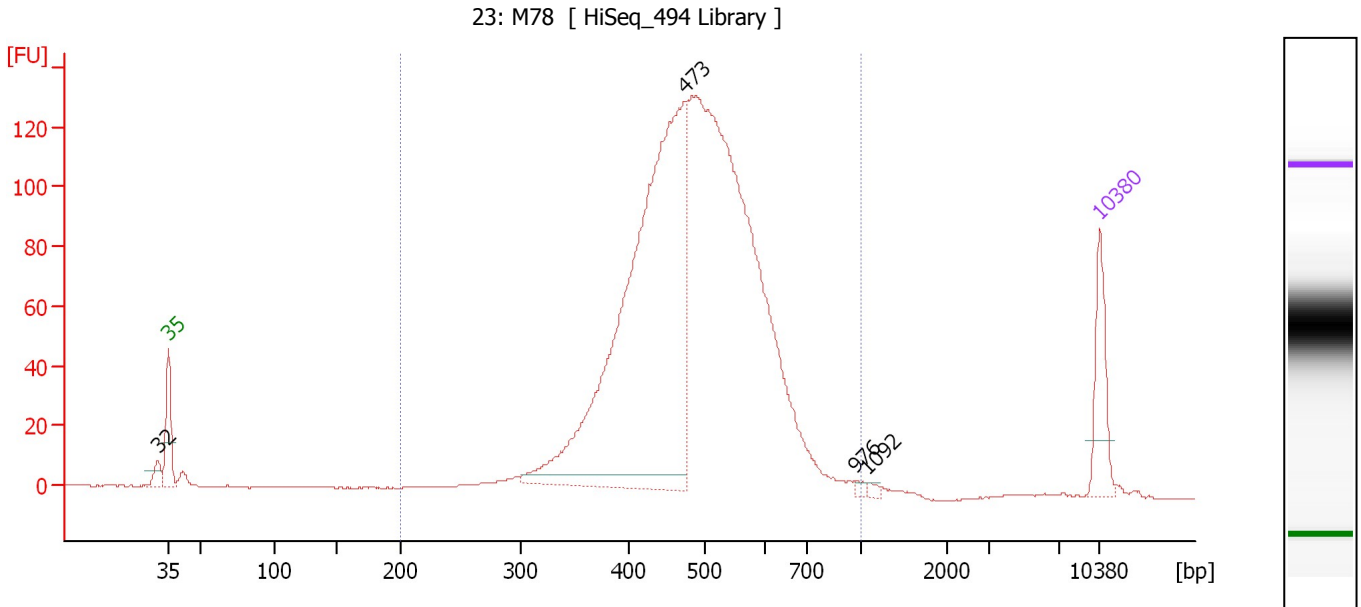
Peak table for Ladder

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	45.34
3	100	150.00	2,272.7	Ladder Peak	50.92
4	150	150.00	1,515.2	Ladder Peak	55.70
5	200	150.00	1,136.4	Ladder Peak	60.39
6	300	150.00	757.6	Ladder Peak	69.51
7	400	150.00	568.2	Ladder Peak	77.58
8	500	150.00	454.5	Ladder Peak	83.31
9	600	150.00	378.8	Ladder Peak	87.84
10	700	150.00	324.7	Ladder Peak	90.98
11	1,000	150.00	227.3	Ladder Peak	94.96
12	2,000	150.00	113.6	Ladder Peak	101.49
13	3,000	150.00	75.8	Ladder Peak	104.73
14	7,000	150.00	32.5	Ladder Peak	109.86
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-22\2016-05-22_002.xad

Created: 5/22/2016 10:38:49 AM
 Modified: 5/22/2016 11:17:15 AM

Electropherogram Summary Continued ...



Overall Results for sample 1 : 23: M78

Number of peaks found: 4 Corr. Area 1: 1,796.2
 Noise: 0.2

Peak table for sample 1 : 23: M78

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	32	0.00	0.0		42.19
2	35	125.00	5,411.3	Lower Marker	43.00
3	473	1,204.32	3,855.3		81.78
4	976	6.28	9.8		94.65
5	1,092	5.99	8.3		95.56
6	10,380	75.00	10.9	Upper Marker	113.00

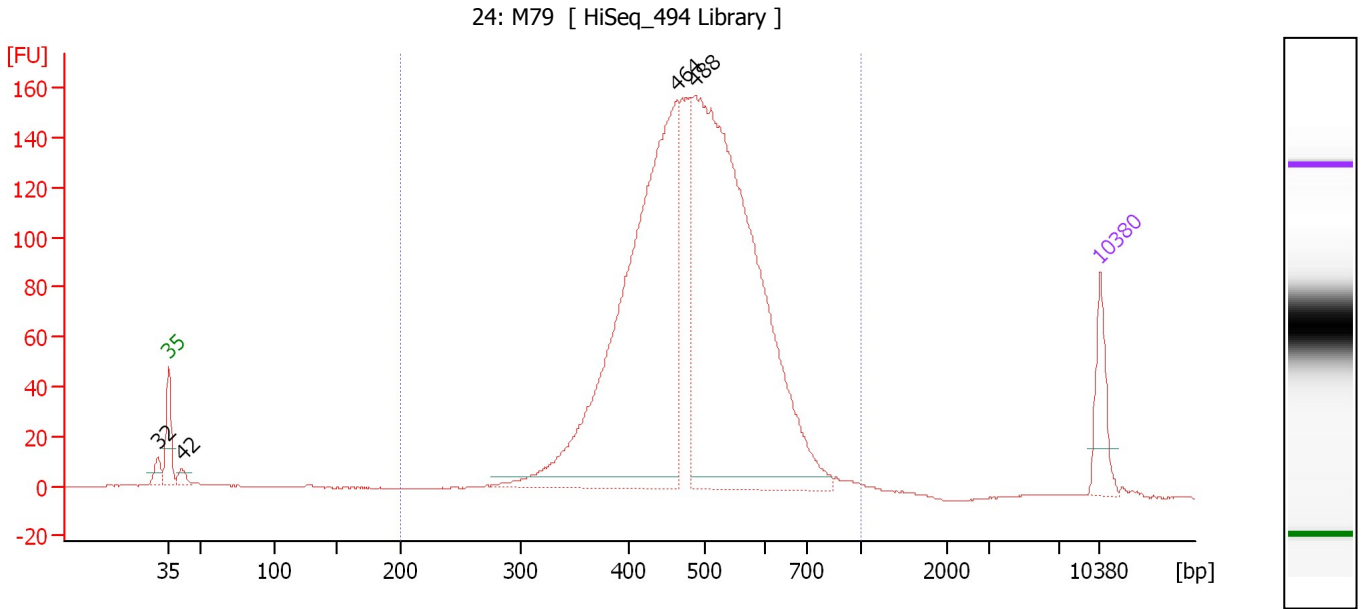
Region table for sample 1 : 23: M78

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	490	1,796.2	8,604.7	2,658.19	98	18.5

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-22\2016-05-22_002.xad

Created: 5/22/2016 10:38:49 AM
 Modified: 5/22/2016 11:17:15 AM

Electropherogram Summary Continued ...



Overall Results for sample 2 : 24: M79

Number of peaks found: 4 Corr. Area 1: 2,184.3
 Noise: 0.2

Peak table for sample 2 : 24: M79

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	32	0.00	0.0		42.18
2	35	125.00	5,411.3	Lower Marker	43.00
3	42	23.41	853.9		44.02
4	464	1,324.21	4,325.1		81.24
5	488	1,576.08	4,894.2		82.61
6	10,380	75.00	10.9	Upper Marker	113.00

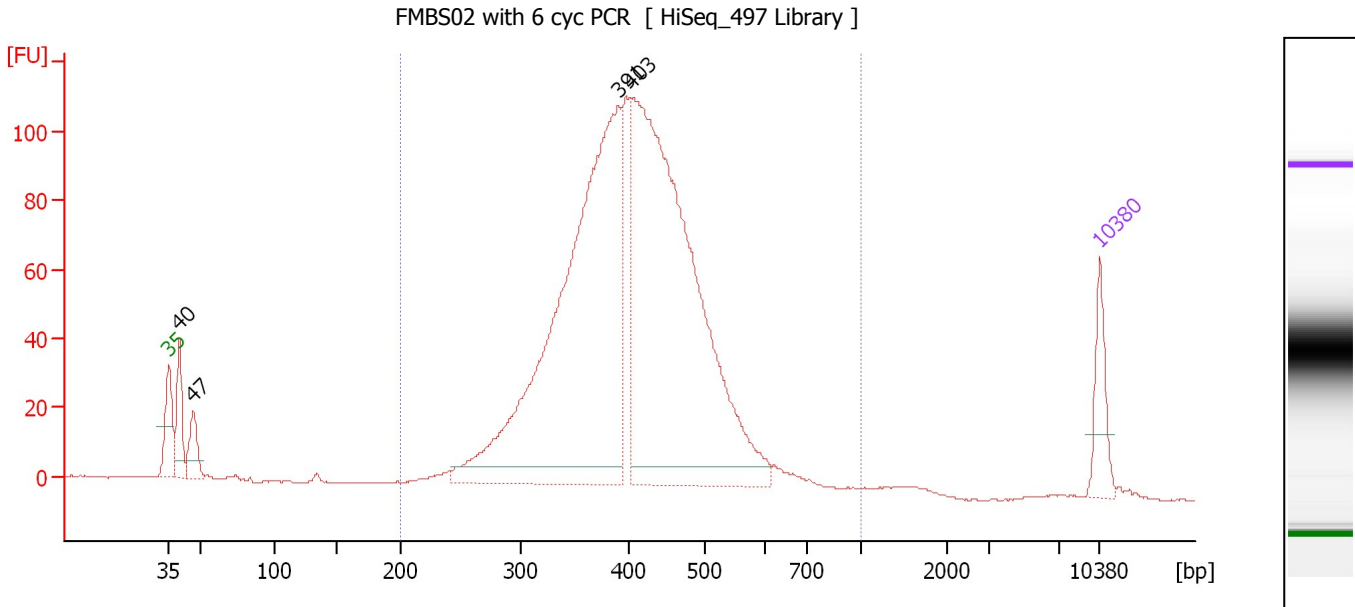
Region table for sample 2 : 24: M79

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	491	2,184.3	10,356.7	3,213.35	97	18.4

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-22\2016-05-22_002.xad

Created: 5/22/2016 10:38:49 AM
 Modified: 5/22/2016 11:17:15 AM

Electropherogram Summary Continued ...



Overall Results for sample 3 : FMBS02 with 6 cyc PCR

Number of peaks found: 4 Corr. Area 1: 1,658.4
 Noise: 0.2

Peak table for sample 3 : FMBS02 with 6 cyc 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	40	131.50	4,953.5		43.82
3	47	87.84	2,847.1		44.83
4	391	1,475.36	5,721.1		76.83
5	403	1,546.94	5,816.8		77.75
6	10,380	75.00	10.9	Upper Marker	113.00

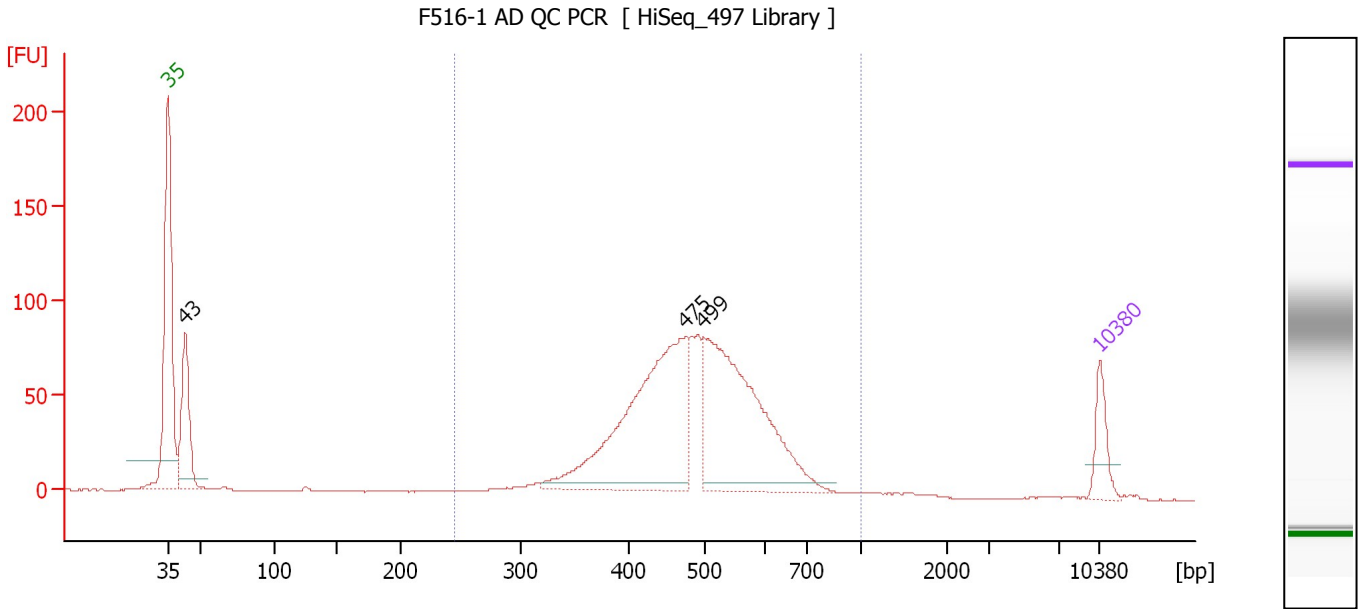
Region table for sample 3 : FMBS02 with 6 cyc PCR

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	410	1,658.4	12,814.7	3,320.25	95	17.8

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-22\2016-05-22_002.xad

Created: 5/22/2016 10:38:49 AM
 Modified: 5/22/2016 11:17:15 AM

Electropherogram Summary Continued ...



Overall Results for sample 4 : F516-1 AD QC PCR

Number of peaks found: 3 Corr. Area 1: 1,134.5
 Noise: 0.1

Peak table for sample 4 : F516-1 AD QC 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	43	331.22	11,651.1		44.26
3	475	875.11	2,792.9		81.86
4	499	808.57	2,457.1		83.23
5	10,380	75.00	10.9	Upper Marker	113.00

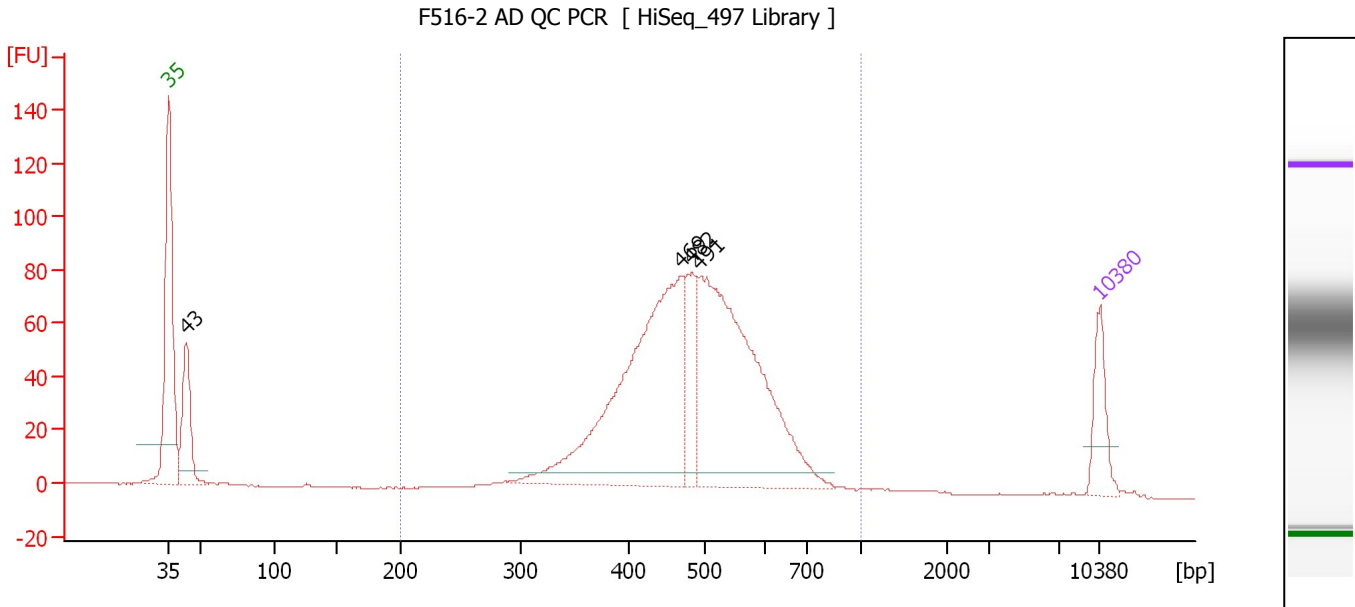
Region table for sample 4 : F516-1 AD QC PCR

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
246	1,000	490	1,134.5	6,275.6	1,941.71	88	18.1

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-22\2016-05-22_002.xad

Created: 5/22/2016 10:38:49 AM
 Modified: 5/22/2016 11:17:15 AM

Electropherogram Summary Continued ...



Overall Results for sample 5 : F516-2 AD QC PCR

Number of peaks found: 4 Corr. Area 1: 1,132.6
 Noise: 0.2

Peak table for sample 5 : F516-2 AD QC 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	43	202.70	7,063.5		44.32
3	469	816.36	2,635.6		81.55
4	482	148.39	466.2		82.29
5	491	789.25	2,433.1		82.82
6	10,380	75.00	10.9	Upper Marker	113.00

Region table for sample 5 : F516-2 AD QC PCR

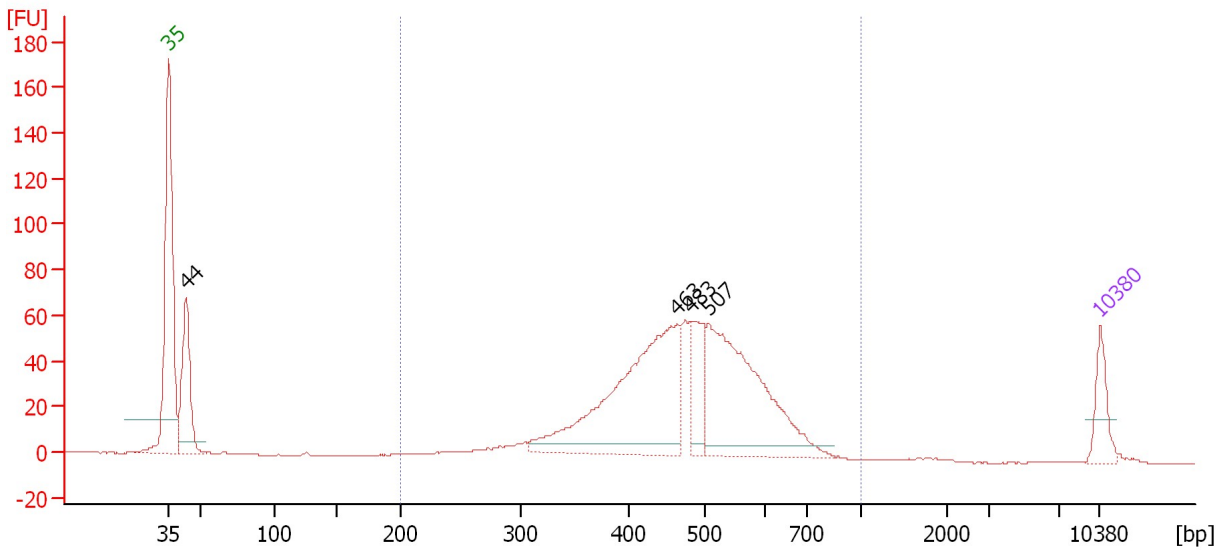
From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	488	1,132.6	5,971.9	1,835.82	92	18.6

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-22\2016-05-22_002.xad

Created: 5/22/2016 10:38:49 AM
 Modified: 5/22/2016 11:17:15 AM

Electropherogram Summary Continued ...

F516-3 AD QC PCR [HiSeq_497 Library]



Overall Results for sample 6 : **F516-3 AD QC PCR**

Number of peaks found: 4
 Noise: 0.1
 Corr. Area 1: 884.2

Peak table for sample 6 : **F516-3 AD QC 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	44	333.32	11,582.5		44.34
3	463	798.24	2,611.2		81.20
4	483	165.29	518.6		82.32
5	507	676.10	2,021.3		83.61
6	10,380	75.00	10.9	Upper Marker	113.00

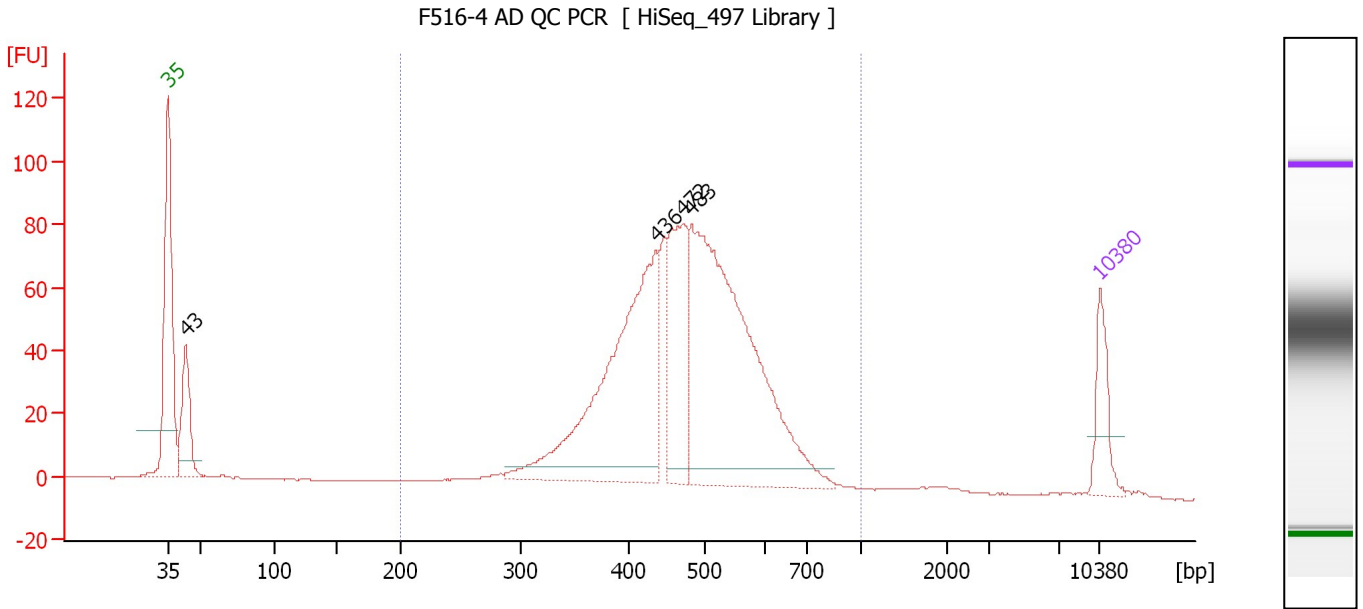
Region table for sample 6 : **F516-3 AD QC PCR**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	478	884.2	6,211.6	1,851.31	89	19.4

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-22\2016-05-22_002.xad

Created: 5/22/2016 10:38:49 AM
 Modified: 5/22/2016 11:17:15 AM

Electropherogram Summary Continued ...



Overall Results for sample 7 : F516-4 AD QC PCR

Number of peaks found: 4 Corr. Area 1: 1,158.7
 Noise: 0.2

Peak table for sample 7 : F516-4 AD QC 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	43	177.05	6,183.7		44.31
3	436	698.20	2,426.7		79.64
4	472	263.40	845.4		81.71
5	483	927.56	2,912.4		82.31
6	10,380	75.00	10.9	Upper Marker	113.00

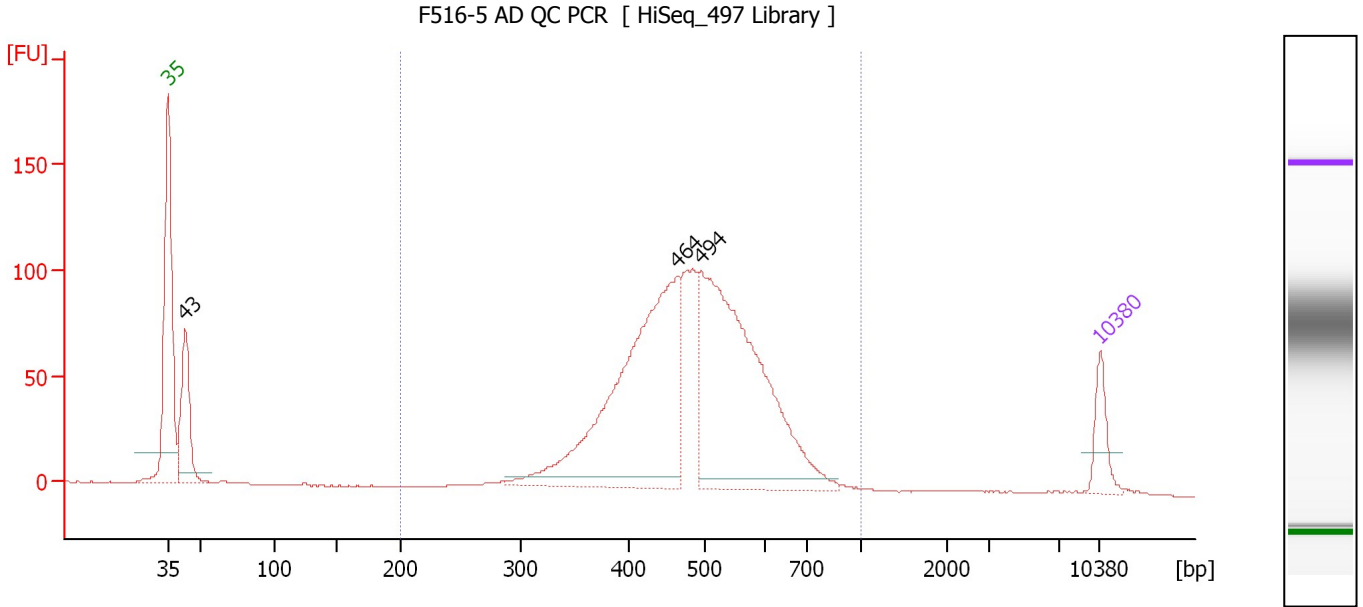
Region table for sample 7 : F516-4 AD QC PCR

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	476	1,158.7	6,901.6	2,063.13	93	18.8

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-22\2016-05-22_002.xad

Created: 5/22/2016 10:38:49 AM
 Modified: 5/22/2016 11:17:15 AM

Electropherogram Summary Continued ...



Overall Results for sample 8 : F516-5 AD QC PCR

Number of peaks found: 3 Corr. Area 1: 1,434.8
 Noise: 0.2

Peak table for sample 8 : F516-5 AD QC 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	43	323.13	11,359.0		44.26
3	464	1,136.74	3,708.0		81.27
4	494	1,165.07	3,571.6		82.98
5	10,380	75.00	10.9	Upper Marker	113.00

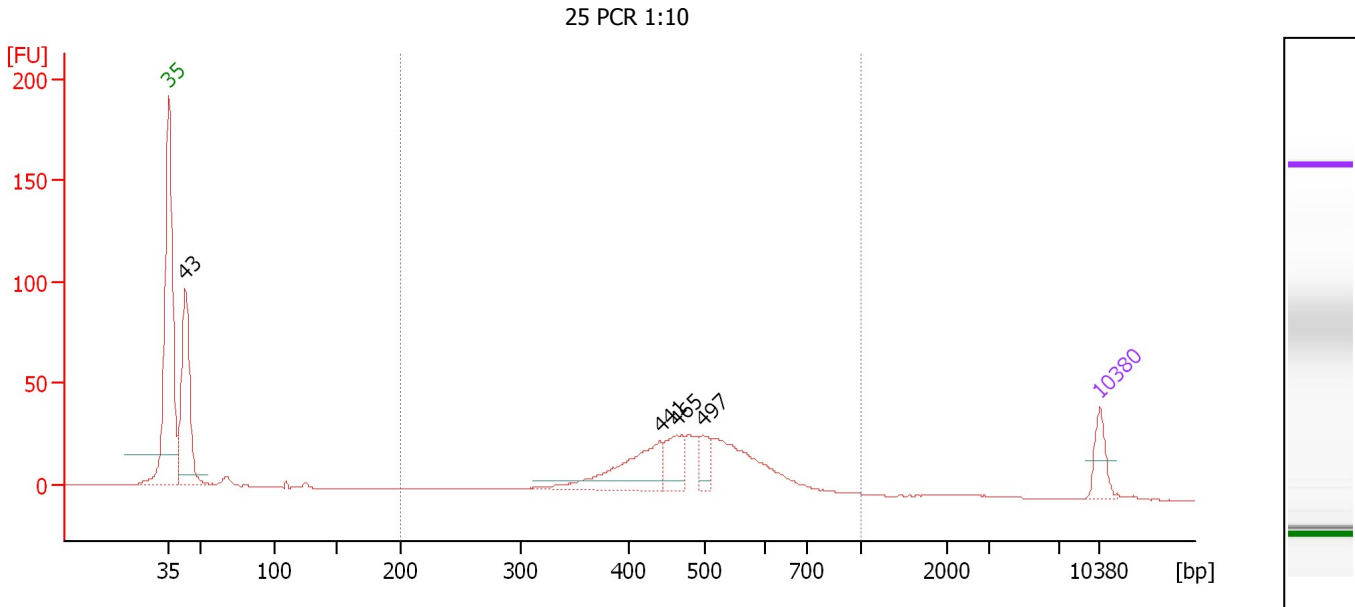
Region table for sample 8 : F516-5 AD QC PCR

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	489	1,434.8	8,486.0	2,616.34	92	18.8

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-22\2016-05-22_002.xad

Created: 5/22/2016 10:38:49 AM
 Modified: 5/22/2016 11:17:15 AM

Electropherogram Summary Continued ...



Overall Results for sample 9 : 25 PCR 1:10

Number of peaks found: 4 Corr. Area 1: 352.9
 Noise: 0.2

Peak table for sample 9 : 25 PCR 1:10

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	43	643.00	22,566.5		44.28
3	441	296.84	1,019.2		79.94
4	465	142.37	464.4		81.27
5	497	88.02	268.1		83.16
6	10,380	75.00	10.9	Upper Marker	113.00

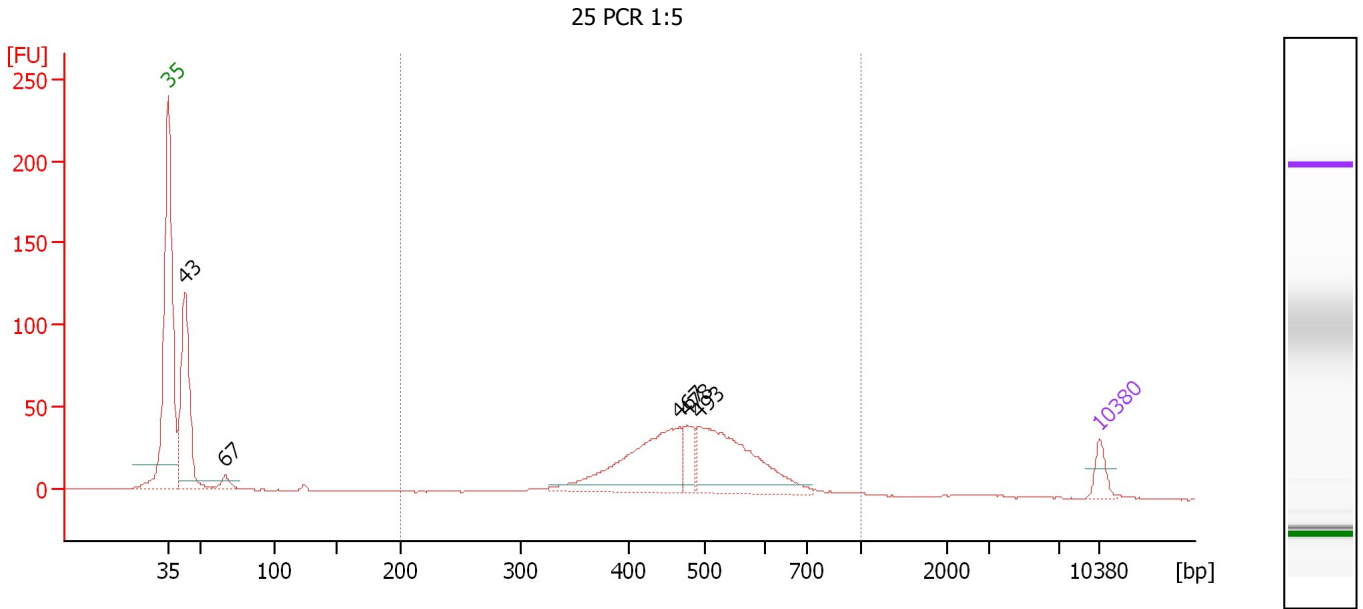
Region table for sample 9 : 25 PCR 1:10

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	490	352.9	3,182.6	991.18	68	16.9

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-22\2016-05-22_002.xad

Created: 5/22/2016 10:38:49 AM
 Modified: 5/22/2016 11:17:15 AM

Electropherogram Summary Continued ...



Overall Results for sample 10 : 25 PCR 1:5

Number of peaks found: 5 Corr. Area 1: 538.1
 Noise: 0.2

Peak table for sample 10 : 25 PCR 1:5

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	43	1,074.85	37,980.1		44.23
3	67	77.74	1,755.6		47.25
4	467	853.01	2,768.0		81.41
5	478	156.86	497.6		82.03
6	493	869.97	2,672.3		82.92
7	10,380	75.00	10.9	Upper Marker	113.00

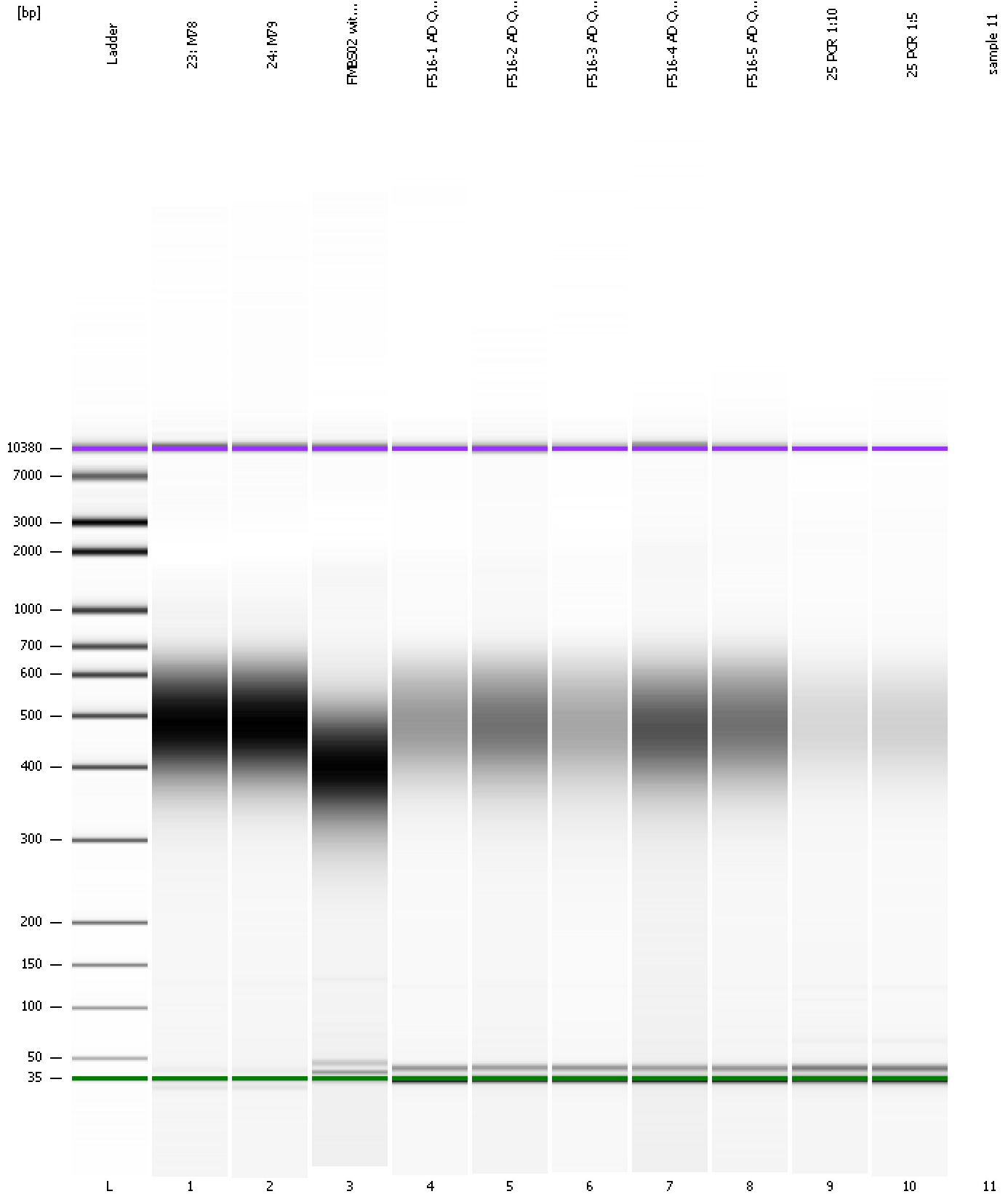
Region table for sample 10 : 25 PCR 1:5

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	488	538.0	6,327.5	1,955.12	71	18.4

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-22\2016-05-22_002.xad

Created: 5/22/2016 10:38:49 AM
Modified: 5/22/2016 11:17:15 AM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-22\2016-05-22_002.xad

Created: 5/22/2016 10:38:49 AM
Modified: 5/22/2016 11:17:15 AM

Invalid Samples

Sample 11 has not been run, no results available.

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-22\2016-05-22_002.xad

Created: 5/22/2016 10:38:49 AM
 Modified: 5/22/2016 11:17:15 AM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 11)		Instrument	Run		5/22/2016 11:17:14 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\data\2016-05-22\2016-05-22_002.xad)		Instrument	Run		5/22/2016 10:38:54 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		5/22/2016 10:38:54 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		5/22/2016 10:38:54 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		5/22/2016 10:38:54 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		5/22/2016 10:38:54 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		5/22/2016 10:38:54 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		5/22/2016 10:38:54 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1