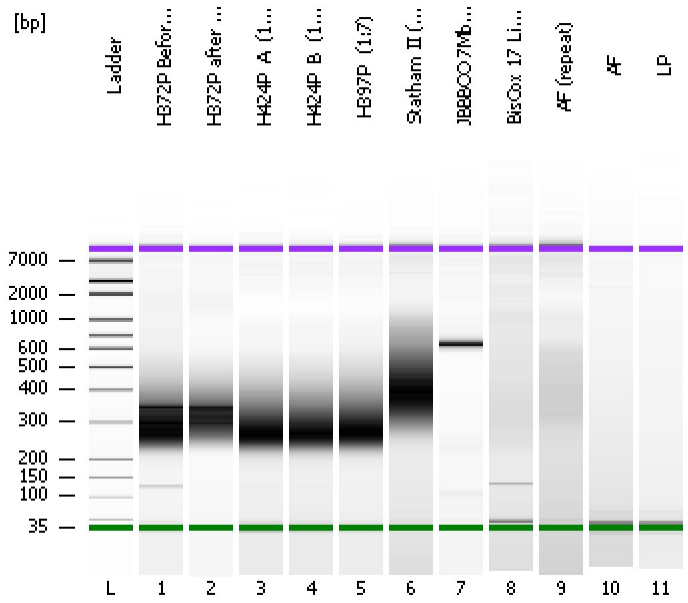
Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2016-03-04\2016-03-04_001.xad

Created: 3/4/2016 9:37:23 AM
Modified: 3/4/2016 10:46:12 AM

Electrophoresis File Run Summary



Instrument Information:

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

Assay Information:

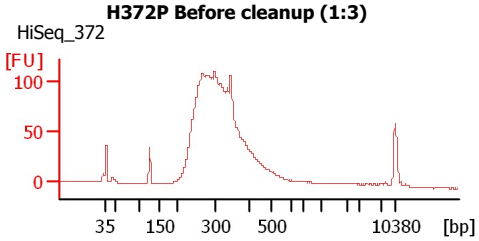
Assay Origin Path: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\assays\dsDNA\High Sensitivity DNA.xsy

Assay Class: High Sensitivity DNA Assay
Version: 1.03
Assay Comments: Copyright © 2003-2010 Agilent Technologies

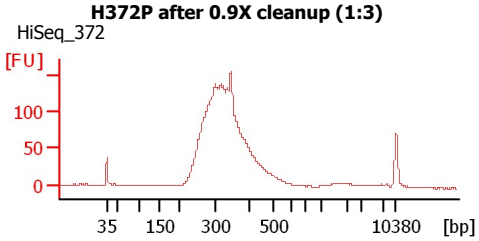
Chip Information:

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

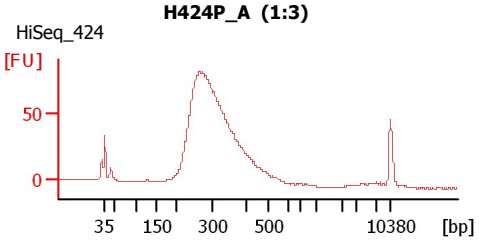
H372P Before cleanup (1:3)



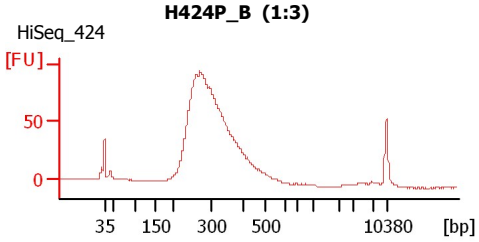
H372P after 0.9X cleanup (1:3)



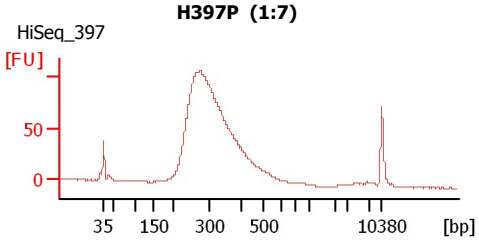
H424P_A (1:3)



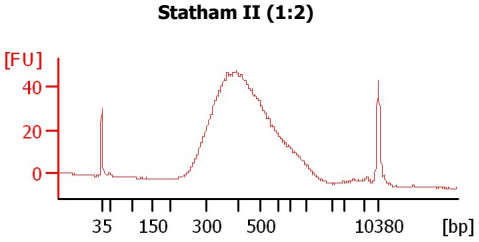
H424P_B (1:3)



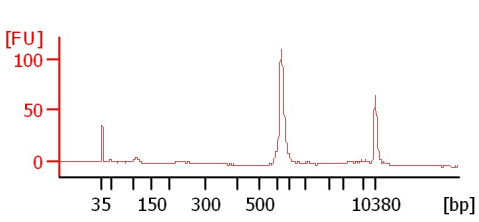
H397P (1:7)



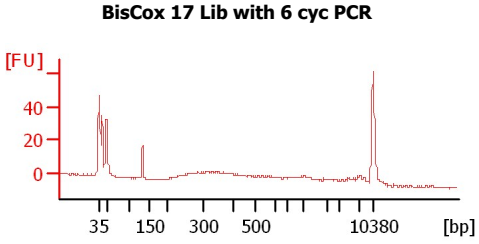
Statham II (1:2)



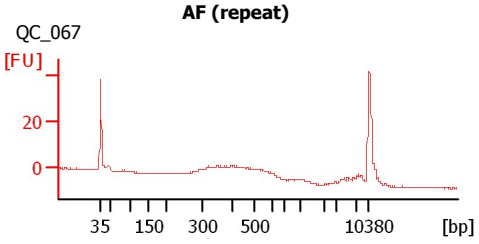
JBBBOO 7Mb BC



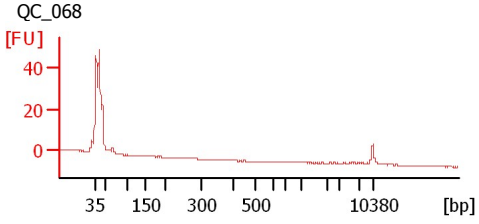
BisCox 17 Lib with 6 cyc PCR



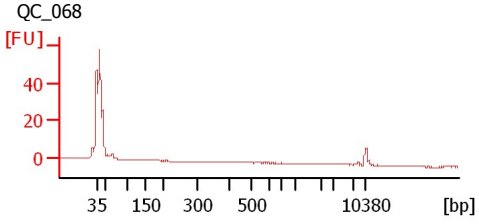
AF (repeat)



AF



LP



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2016-03-04\2016-03-04_001.xad

Created: 3/4/2016 9:37:23 AM
Modified: 3/4/2016 10:46:12 AM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
H372P Before cleanup (1:3)	HiSeq_372	☐	✔			
H372P after 0.9X cleanup (1:3)	HiSeq_372	☐	✔			
H424P_A (1:3)	HiSeq_424	☐	✔			
H424P_B (1:3)	HiSeq_424	☐	✔			
H397P (1:7)	HiSeq_397	☐	✔			
Statham II (1:2)		☐	✔			
JBBBOO 7Mb BC		☐	✔			
BisCox 17 Lib with 6 cyc PCR		☐	✔			
AF (repeat)	QC_067	☐	✔			
AF	QC_068	☐	✔			
LP	QC_068	☐	✔			
Ladder		☐	✔			

Chip Lot # **Reagent Kit Lot #**

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2016-03-04\2016-03-04_001.xad

Created: 3/4/2016 9:37:23 AM
Modified: 3/4/2016 10:46:12 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

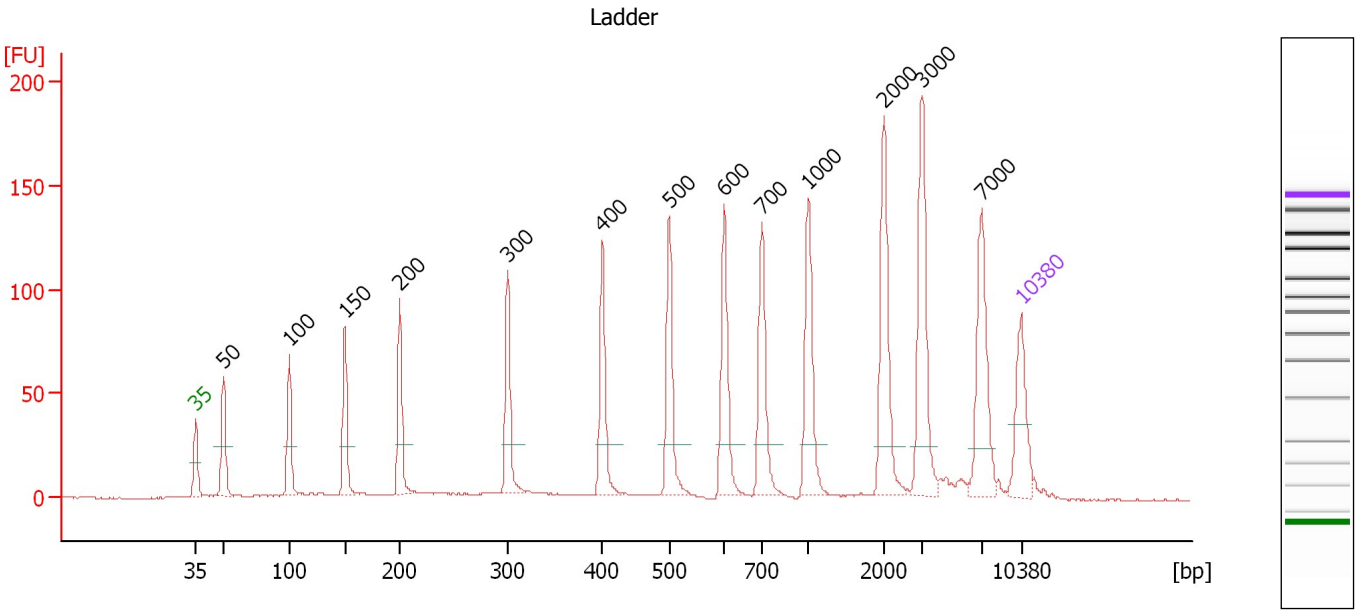
Ladder

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\2016-03-04\2016-03-04_001.xad

Created: 3/4/2016 9:37:23 AM
Modified: 3/4/2016 10:46:12 AM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

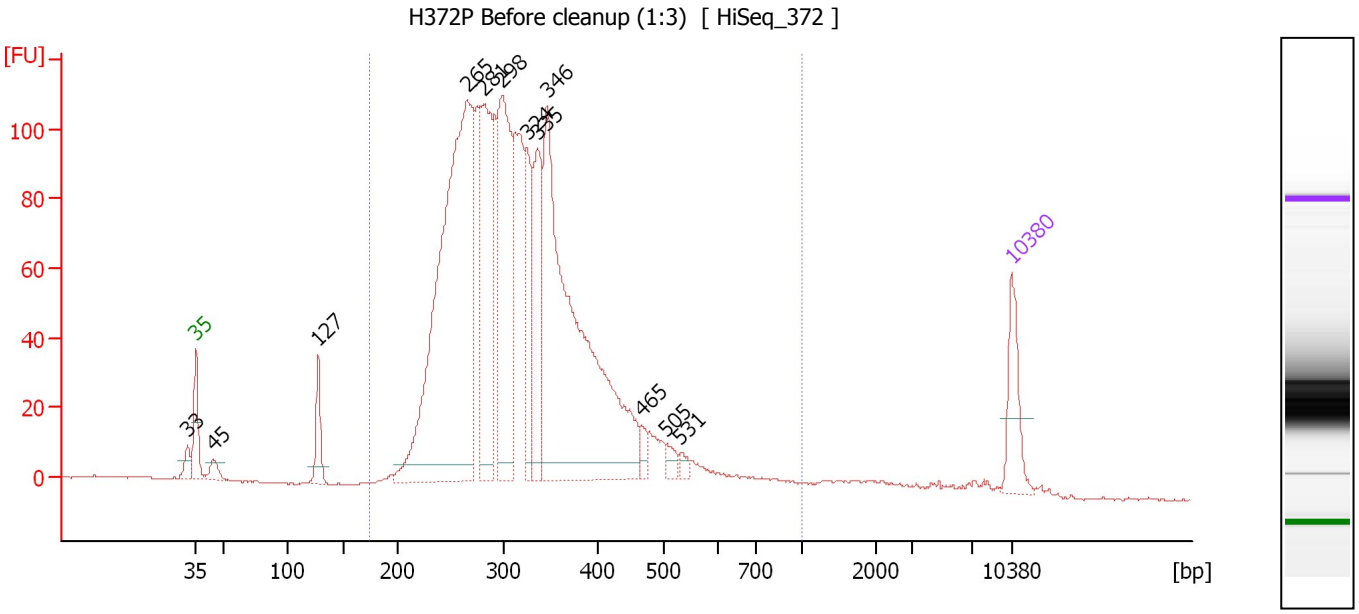
Peak table for Ladder

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	45.35
3		100	150.00	2,272.7	Ladder Peak	50.91
4		150	150.00	1,515.2	Ladder Peak	55.66
5		200	150.00	1,136.4	Ladder Peak	60.32
6		300	150.00	757.6	Ladder Peak	69.45
7		400	150.00	568.2	Ladder Peak	77.50
8		500	150.00	454.5	Ladder Peak	83.16
9		600	150.00	378.8	Ladder Peak	87.81
10		700	150.00	324.7	Ladder Peak	91.02
11		1,000	150.00	227.3	Ladder Peak	94.96
12		2,000	150.00	113.6	Ladder Peak	101.33
13		3,000	150.00	75.8	Ladder Peak	104.54
14		7,000	150.00	32.5	Ladder Peak	109.65
15		10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2016-03-04\2016-03-04_001.xad

Created: 3/4/2016 9:37:23 AM
Modified: 3/4/2016 10:46:12 AM

Electropherogram Summary Continued ...



Overall Results for sample 1 : H372P Before cleanup (1:3)

Number of peaks found:	12	Corr. Area 1:	2,126.7
Noise:	0.2		

Peak table for sample 1 : H372P Before cleanup (1:3)

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	33	0.00	0.0		42.31
2	35	125.00	5,411.3	Lower Marker	43.00
3	45	30.12	1,022.7		44.51
4	127	83.76	995.5		53.52
5	265	1,219.90	6,965.9		66.29
6	281	375.69	2,026.7		67.71
7	298	446.02	2,268.5		69.26
8	324	159.61	745.6		71.41
9	335	226.01	1,021.8		72.28
10	346	982.41	4,302.9		73.15
11	465	21.49	70.0		81.20
12	505	20.02	60.0		83.40
13	531	13.09	37.4		84.59
14	10,380	75.00	10.9	Upper Marker	113.00

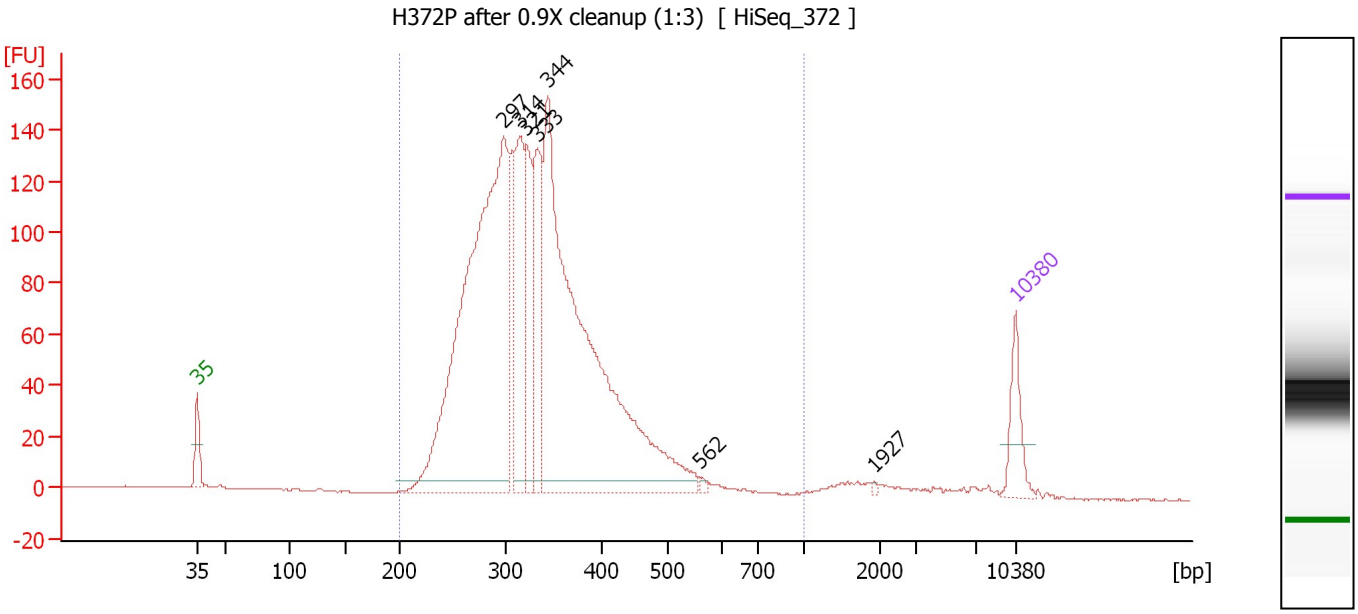
Region table for sample 1 : H372P Before cleanup (1:3)

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
175	1,000	329	2,126.7	21,376.2	4,308.10	94	27.7

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2016-03-04\2016-03-04_001.xad

Created: 3/4/2016 9:37:23 AM
Modified: 3/4/2016 10:46:12 AM

Electropherogram Summary Continued ...



Overall Results for sample 2 : H372P after 0.9X cleanup (1:3)

Number of peaks found:	7	Corr. Area 1:	2,302.5
Noise:	0.2		

Peak table for sample 2 : H372P after 0.9X cleanup (1:3)

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	297	1,600.49	8,152.3		69.22
3	314	313.44	1,511.9		70.59
4	321	236.76	1,117.8		71.14
5	333	274.22	1,248.4		72.09
6	344	1,533.61	6,763.2		72.96
7	562	5.79	15.6		86.05
8	1,927	3.86	3.0		100.87
9	10,380	75.00	10.9	Upper Marker	113.00

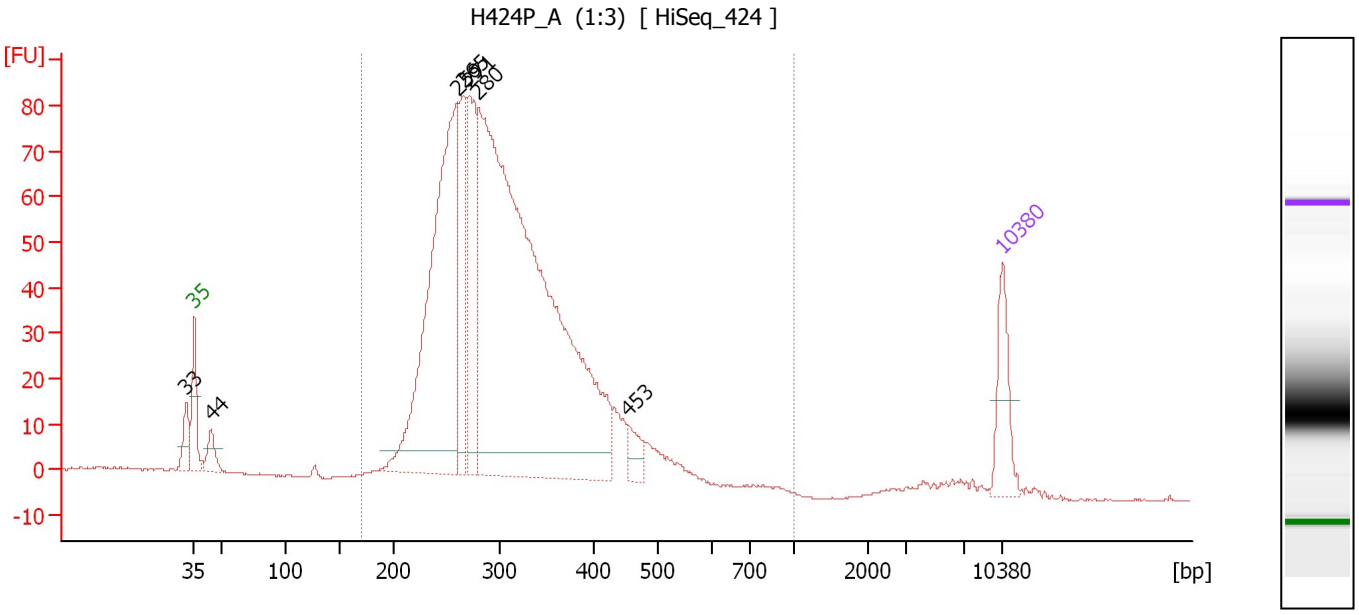
Region table for sample 2 : H372P after 0.9X cleanup (1:3)

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color Conc. [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	336	2,302.5	19,508.1	4,112.92	96	21.4

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2016-03-04\2016-03-04_001.xad

Created: 3/4/2016 9:37:23 AM
Modified: 3/4/2016 10:46:12 AM

Electropherogram Summary Continued ...



Overall Results for sample 3 : H424P_A (1:3)

Number of peaks found:	7	Corr. Area 1:	1,442.6
Noise:	0.2		

Peak table for sample 3 : H424P_A (1:3)

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	33	0.00	0.0		42.31
2	35	125.00	5,411.3	Lower Marker	43.00
3	44	50.98	1,739.1		44.48
4	259	836.24	4,883.7		65.75
5	265	198.94	1,137.4		66.26
6	271	263.98	1,475.6		66.81
7	280	1,900.38	10,296.3		67.59
8	453	41.79	139.7		80.51
9	10,380	75.00	10.9	Upper Marker	113.00

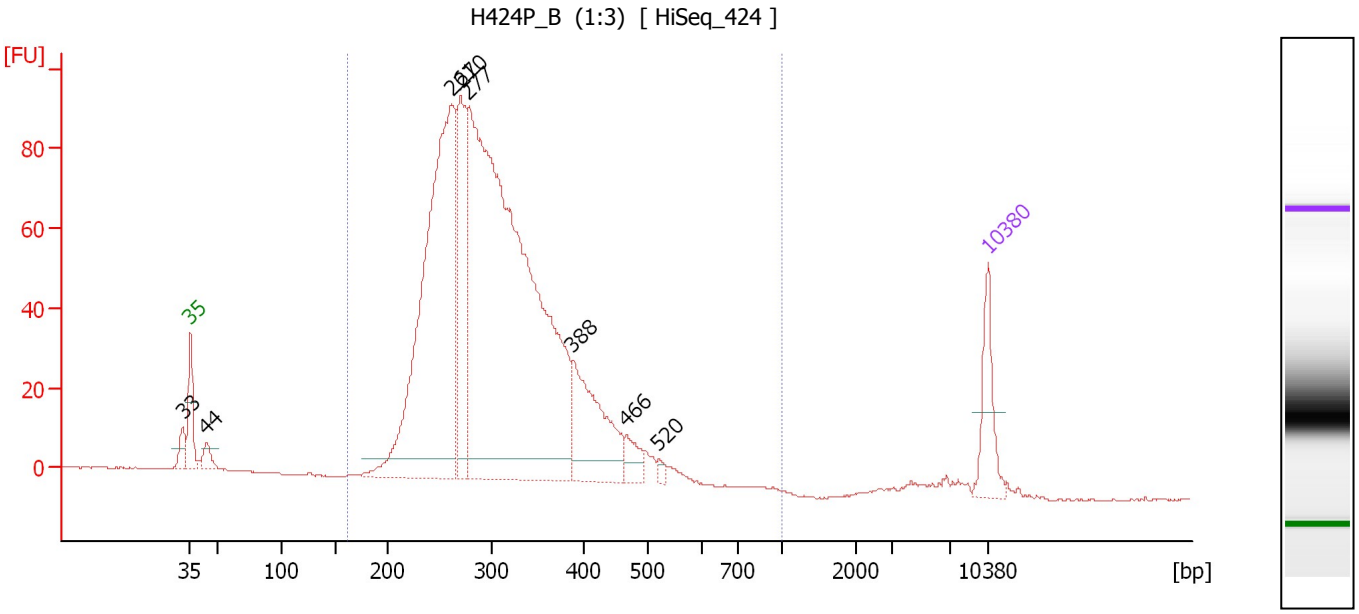
Region table for sample 3 : H424P_A (1:3)

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/µl]	% of Total	Size distribution in CV [%]
170	1,000	311	1,442.6	17,055.7	3,311.79	96	22.5

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2016-03-04\2016-03-04_001.xad

Created: 3/4/2016 9:37:23 AM
Modified: 3/4/2016 10:46:12 AM

Electropherogram Summary Continued ...



Overall Results for sample 4 : H424P_B (1:3)

Number of peaks found:	8	Corr. Area 1:	1,586.4
Noise:	0.1		

Peak table for sample 4 : H424P_B (1:3)

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	33	0.00	0.0		42.30
2	35	125.00	5,411.3	Lower Marker	43.00
3	44	36.77	1,267.4		44.40
4	261	1,086.48	6,297.5		65.93
5	270	292.70	1,641.8		66.72
6	277	1,905.04	10,409.7		67.38
7	388	242.93	949.7		76.50
8	466	40.37	131.3		81.23
9	520	10.33	30.1		84.08
10	10,380	75.00	10.9	Upper Marker	113.00

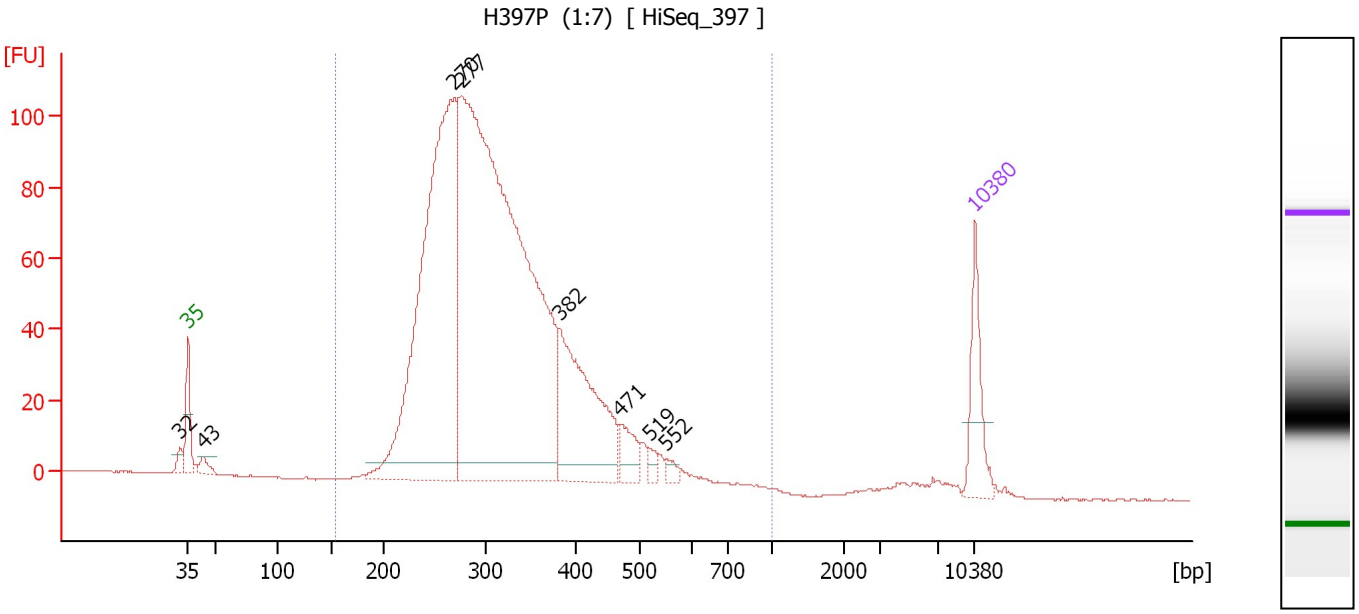
Region table for sample 4 : H424P_B (1:3)

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
161	1,000	310	1,586.4	17,986.4	3,487.35	97	21.4

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2016-03-04\2016-03-04_001.xad

Created: 3/4/2016 9:37:23 AM
Modified: 3/4/2016 10:46:12 AM

Electropherogram Summary Continued ...



Overall Results for sample 5 : H397P (1:7)

Number of peaks found:	8	Corr. Area 1:	1,913.4
Noise:	0.2		

Peak table for sample 5 : H397P (1:7)

Peak		Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1		32	0.00	0.0		42.24
2	◀	35	125.00	5,411.3	Lower Marker	43.00
3		43	23.98	835.7		44.33
4		270	1,058.62	5,948.3		66.68
5		277	1,889.81	10,320.4		67.39
6		382	324.10	1,284.5		76.08
7		471	49.70	160.1		81.49
8		519	14.37	41.9		84.05
9		552	12.56	34.5		85.57
10	▶	10,380	75.00	10.9	Upper Marker	113.00

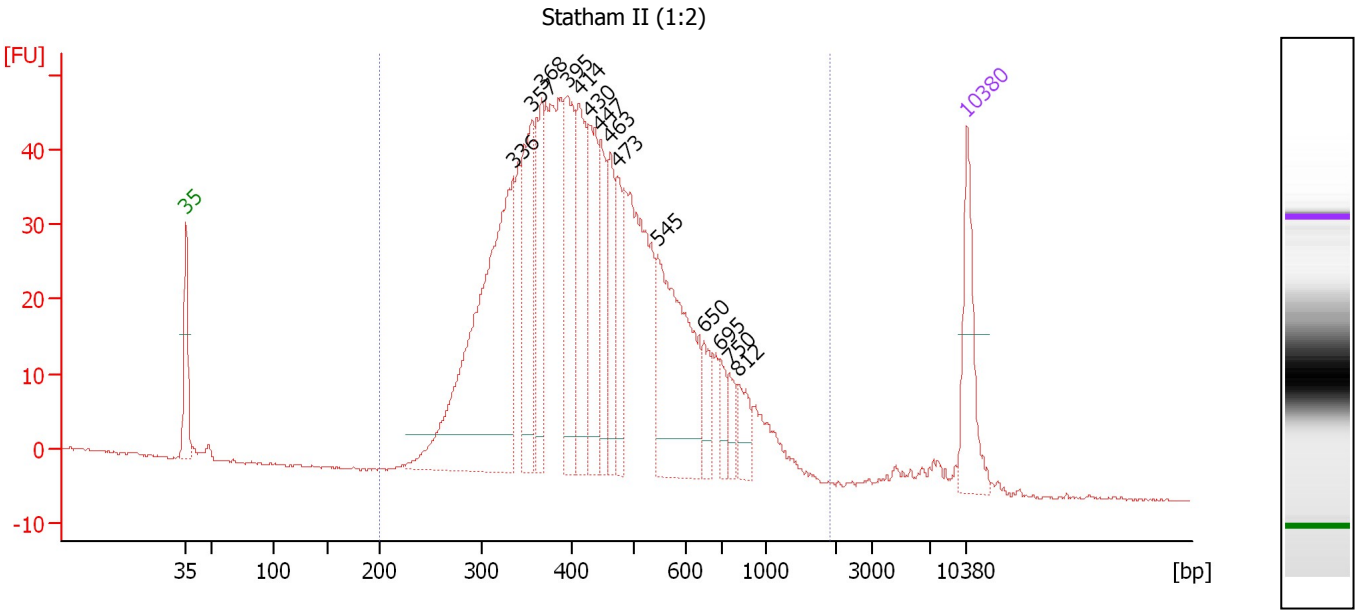
Region table for sample 5 : H397P (1:7)

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
155	1,000	322	1,913.4	16,788.1	3,333.52	98	25.0

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2016-03-04\2016-03-04_001.xad

Created: 3/4/2016 9:37:23 AM
Modified: 3/4/2016 10:46:12 AM

Electropherogram Summary Continued ...



Overall Results for sample 6 : Statham II (1:2)

Number of peaks found:	14	Corr. Area 1:	1,137.8
Noise:	0.2		

Peak table for sample 6 : Statham II (1:2)

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	336	533.46	2,405.0		72.36
3	357	174.32	740.1		74.03
4	368	132.01	544.1		74.89
5	395	149.38	572.3		77.14
6	414	155.07	567.7		78.29
7	430	120.61	425.0		79.20
8	447	89.13	302.2		80.15
9	463	89.54	293.0		81.06
10	473	68.38	219.0		81.63
11	545	245.79	682.9		85.27
12	650	37.12	86.5		89.43
13	695	25.75	56.1		90.86
14	750	23.85	48.2		91.67
15	812	34.33	64.1		92.49
16	10,380	75.00	10.9	Upper Marker	113.00

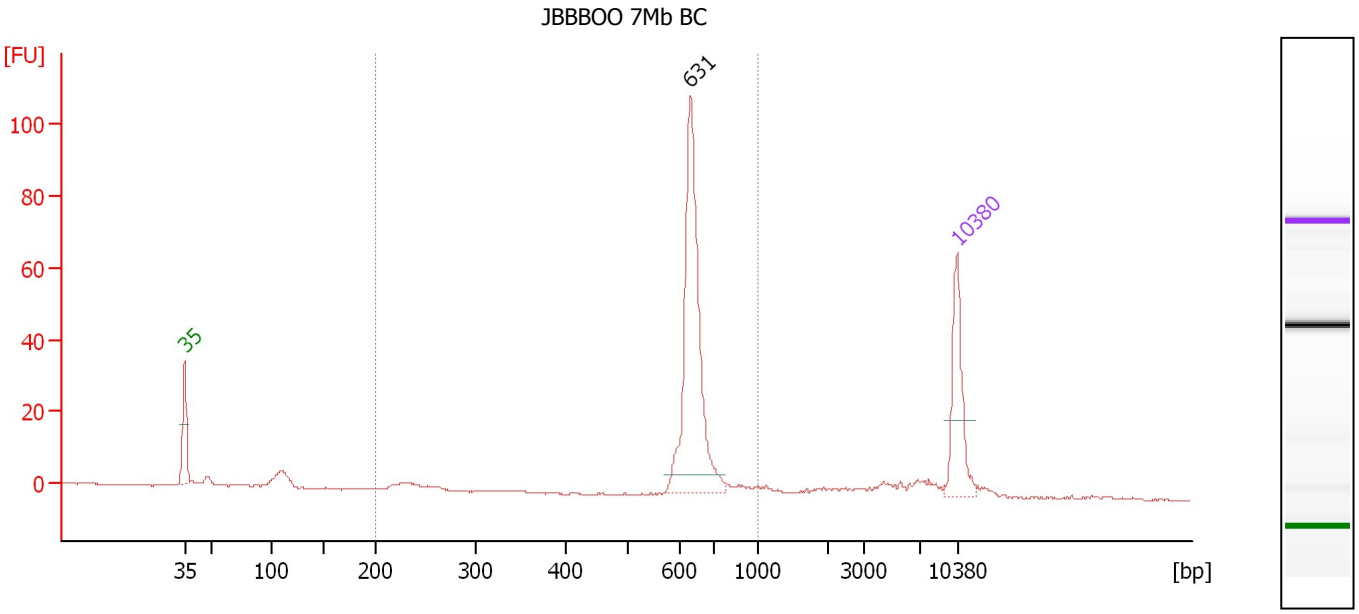
Region table for sample 6 : Statham II (1:2)

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
200	1,906	465	1,137.8	9,622.0	2,602.37	98	37.3

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2016-03-04\2016-03-04_001.xad

Created: 3/4/2016 9:37:23 AM
Modified: 3/4/2016 10:46:12 AM

Electropherogram Summary Continued ...



Overall Results for sample 7 : JBBBOO 7Mb BC

Number of peaks found:	1	Corr. Area 1:	202.7
Noise:	0.2		

Peak table for sample 7 : JBBBOO 7Mb BC

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	631	296.18	711.6		88.80
3	10,380	75.00	10.9	Upper Marker	113.00

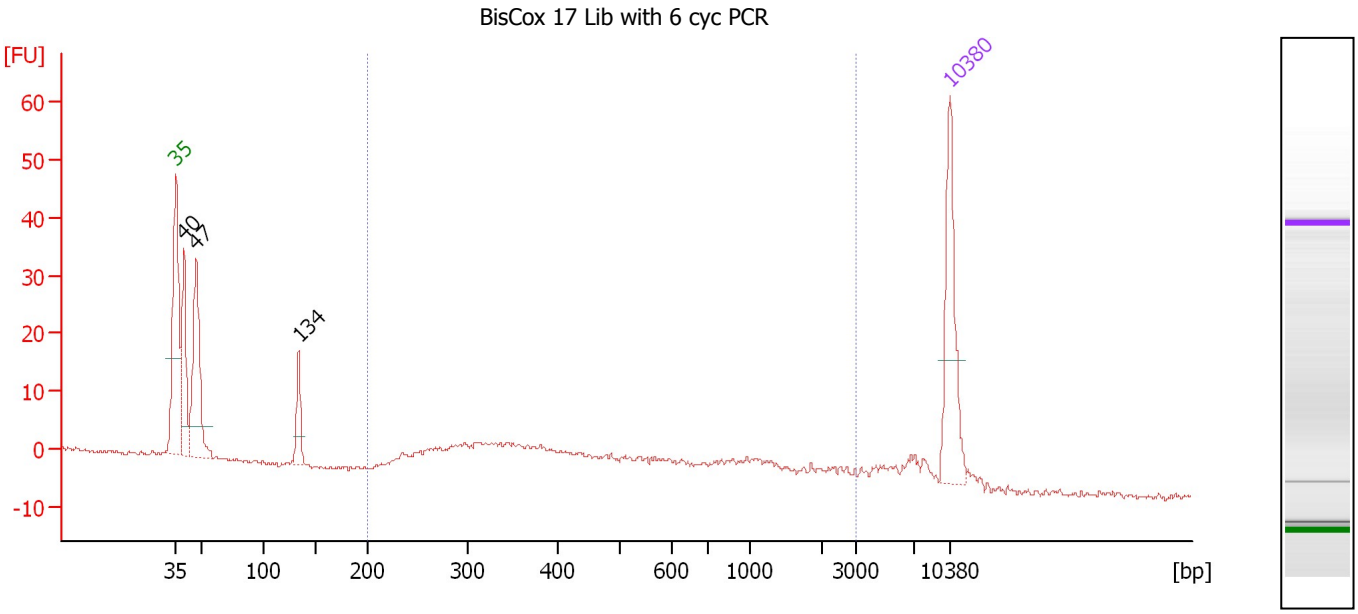
Region table for sample 7 : JBBBOO 7Mb BC

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	636	202.7	820.9	321.40	77	13.3

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2016-03-04\2016-03-04_001.xad

Created: 3/4/2016 9:37:23 AM
Modified: 3/4/2016 10:46:12 AM

Electropherogram Summary Continued ...



Overall Results for sample 8 : BisCox 17 Lib with 6 cyc PCR

Number of peaks found:	3	Corr. Area 1:	138.8
Noise:	0.4		

Peak table for sample 8 : BisCox 17 Lib 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	106.40	4,038.9		43.77
3	47	153.66	4,955.2		44.88
4	134	41.24	466.7		54.13
5	10,380	75.00	10.9	Upper Marker	113.00

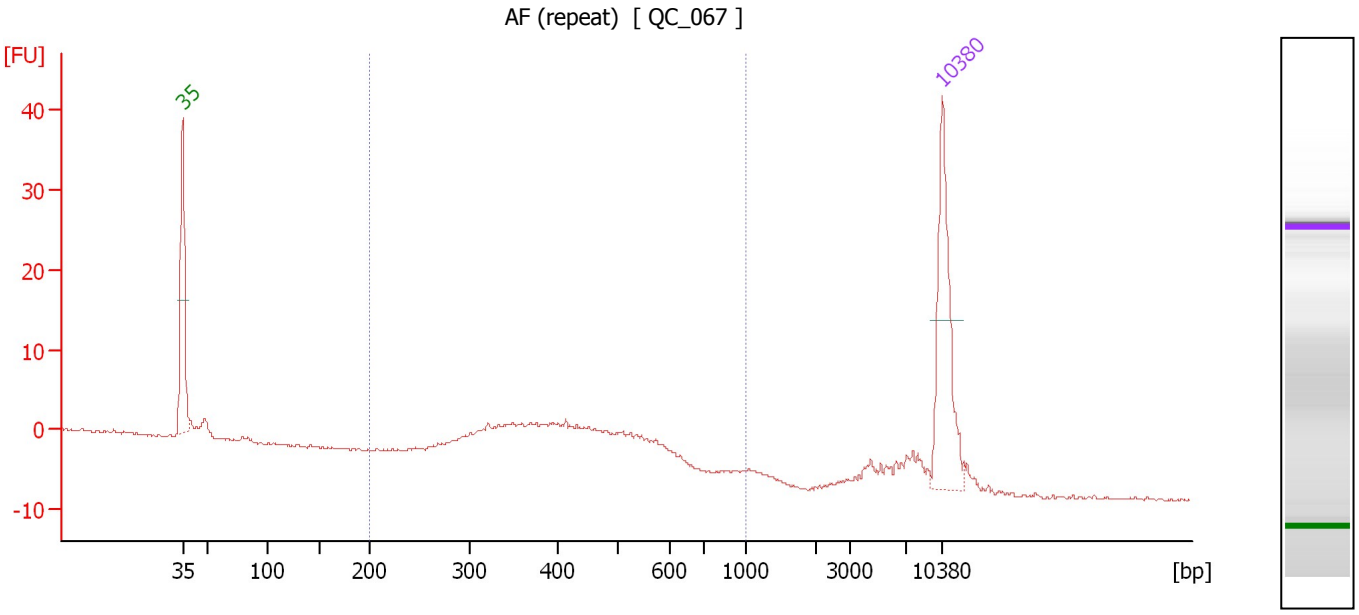
Region table for sample 8 : BisCox 17 Lib with 6 cyc PCR

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
200	2,959	692	138.8	910.4	249.70	51	83.0

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2016-03-04\2016-03-04_001.xad

Created: 3/4/2016 9:37:23 AM
Modified: 3/4/2016 10:46:12 AM

Electropherogram Summary Continued ...



Overall Results for sample 9 : AF (repeat)

Number of peaks found:	0	Corr. Area 1:	104.2
Noise:	0.2		

Peak table for sample 9 : AF (repeat)

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	10,380	75.00	10.9	Upper Marker	113.00

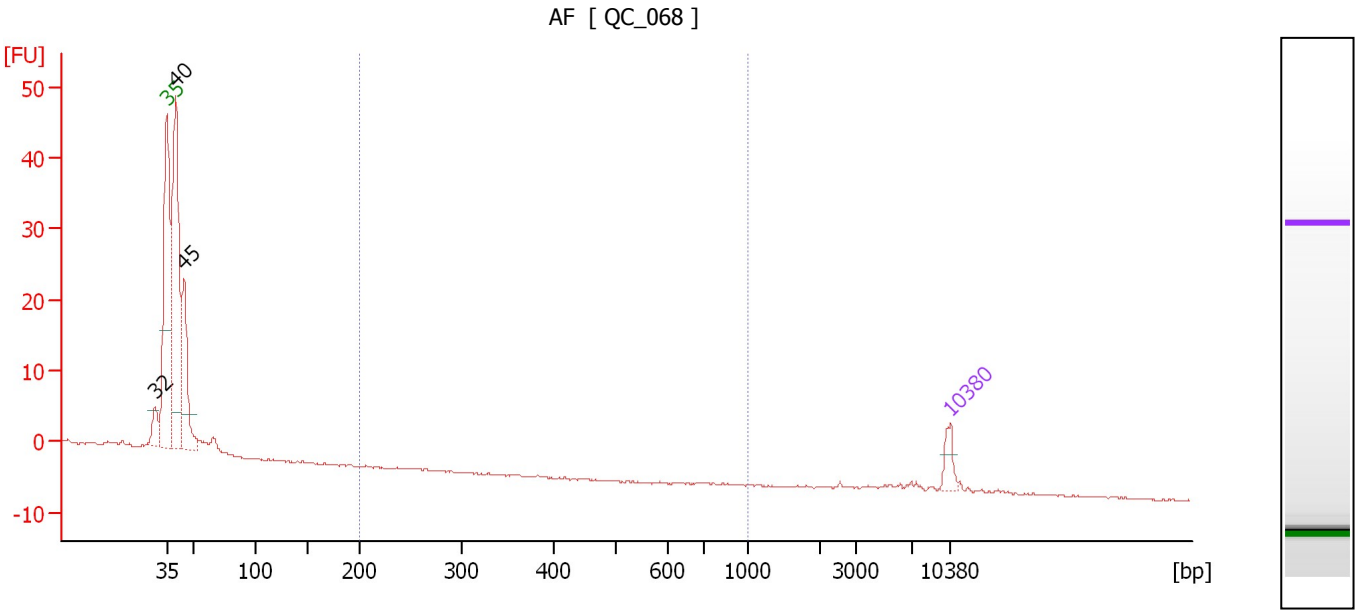
Region table for sample 9 : AF (repeat)

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	424	104.2	797.6	207.23	81	22.8

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2016-03-04\2016-03-04_001.xad

Created: 3/4/2016 9:37:23 AM
Modified: 3/4/2016 10:46:12 AM

Electropherogram Summary Continued ...



Overall Results for sample 10 : AF

Number of peaks found:	3	Corr. Area 1:	0.0
Noise:	0.1		

Peak table for sample 10 : AF

Peak		Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1		32	0.00	0.0		42.00
2	◀	35	125.00	5,411.3	Lower Marker	43.00
3		40	1,785.33	67,349.7		43.81
4		45	721.89	24,293.1		44.57
5	▶	10,380	75.00	10.9	Upper Marker	113.00

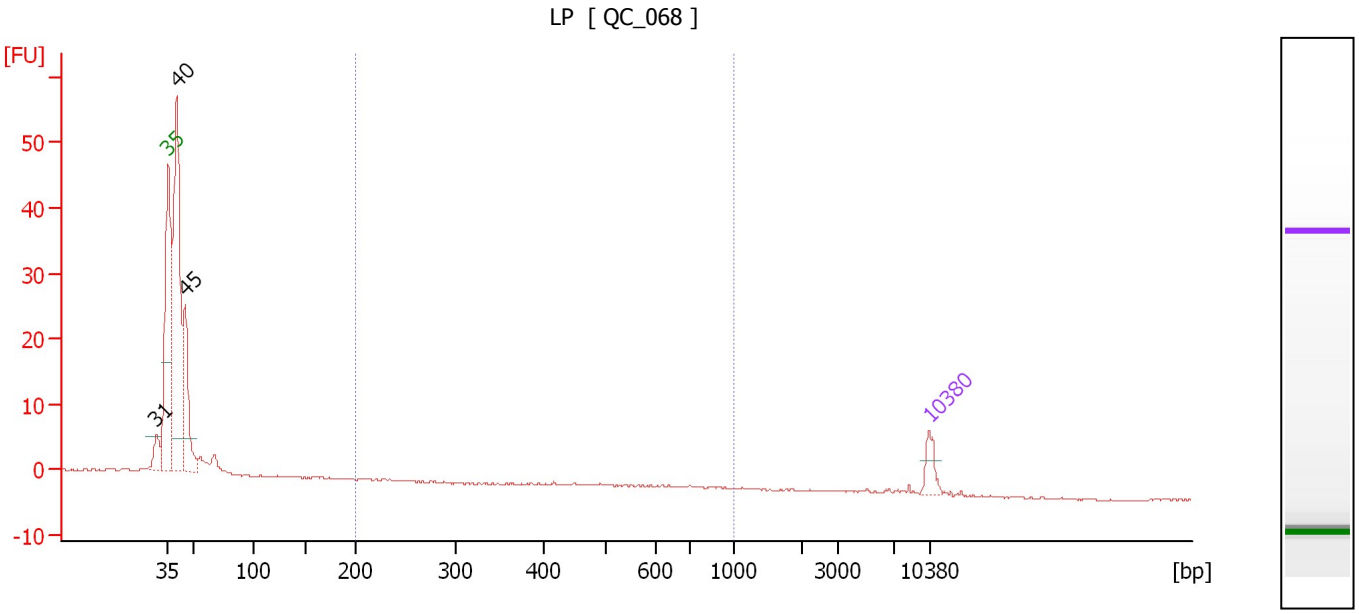
Region table for sample 10 : AF

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	0	0.0	0.0	0.00	0	0.0

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2016-03-04\2016-03-04_001.xad

Created: 3/4/2016 9:37:23 AM
Modified: 3/4/2016 10:46:12 AM

Electropherogram Summary Continued ...



Overall Results for sample 11 : LP

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

Peak table for sample 11 : LP

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	31	0.00	0.0		41.92
2	35	125.00	5,411.3	Lower Marker	43.00
3	40	1,849.46	70,049.5		43.78
4	45	649.00	21,848.7		44.57
5	10,380	75.00	10.9	Upper Marker	113.00

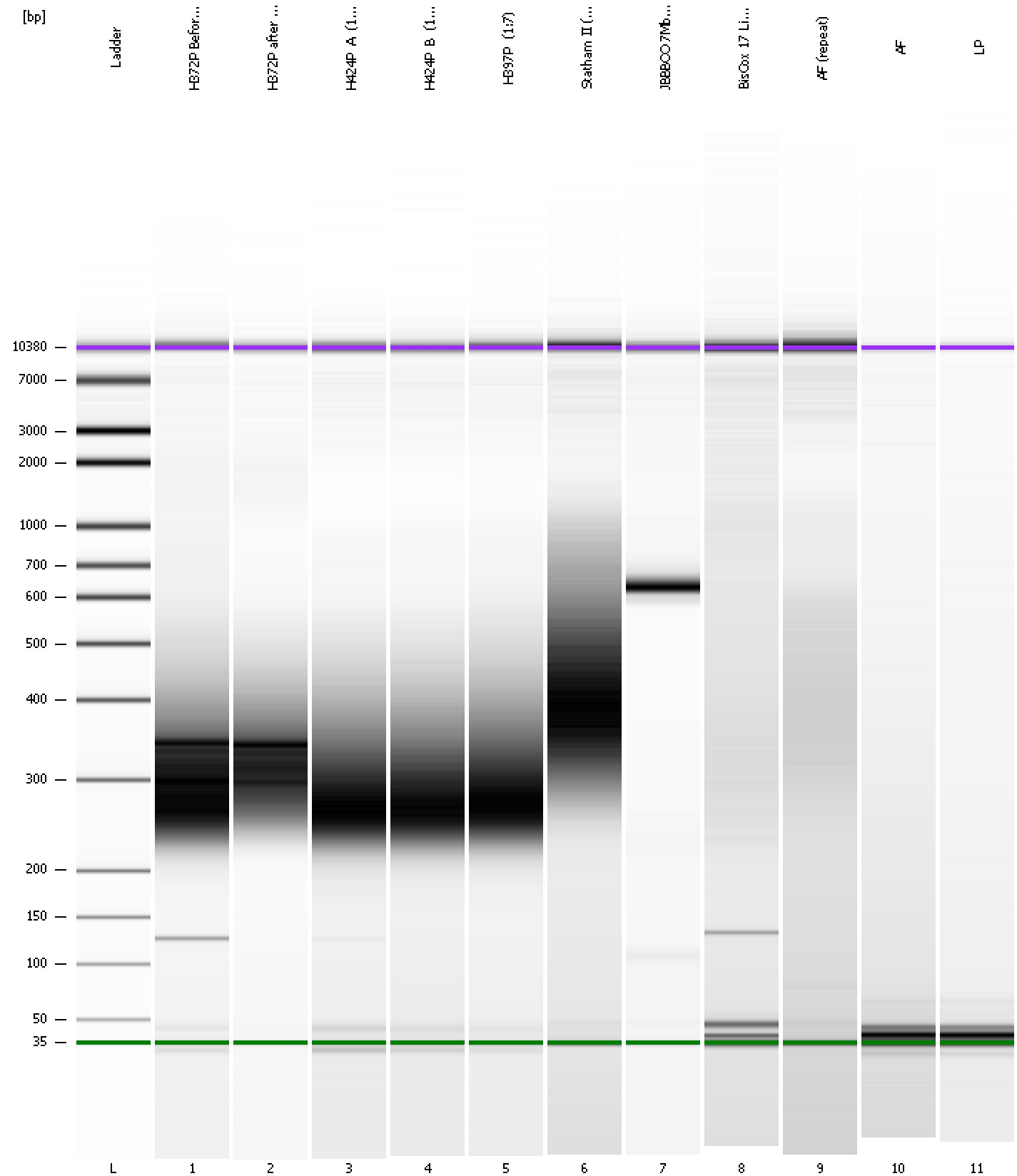
Region table for sample 11 : LP

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	616	0.1	1.7	0.64	0	19.1

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2016-03-04\2016-03-04_001.xad

Created: 3/4/2016 9:37:23 AM
Modified: 3/4/2016 10:46:12 AM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2016-03-04\2016-03-04_001.xad

Created: 3/4/2016 9:37:23 AM
Modified: 3/4/2016 10:46:12 AM

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		3/4/2016 10:18:41 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2016-03-04\2016-03-04_001.xad)		Instrument	Run		3/4/2016 9:37:28 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		3/4/2016 9:37:28 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		3/4/2016 9:37:28 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		3/4/2016 9:37:28 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		3/4/2016 9:37:28 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		3/4/2016 9:37:28 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		3/4/2016 9:37:28 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1