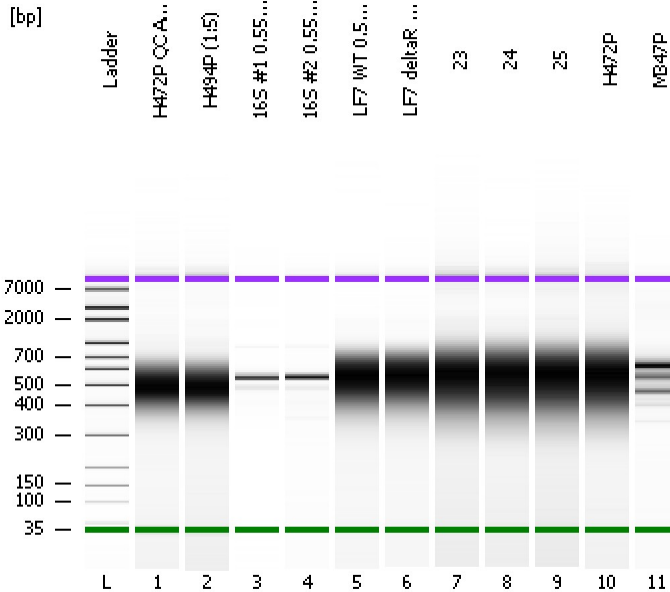


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-24\2016-05-24_002.xad

Created: 5/24/2016 12:58:46 PM
Modified: 5/24/2016 1:41:25 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

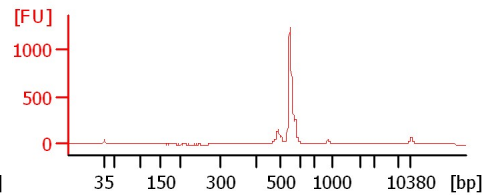
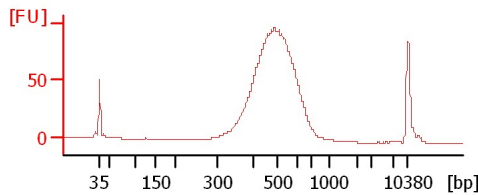
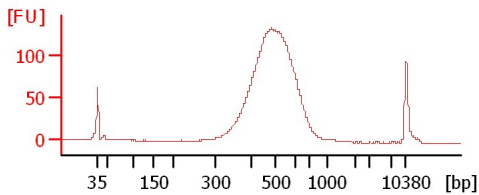
Chip Information:

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

H472P QC AD PCR

H494P (1:5)

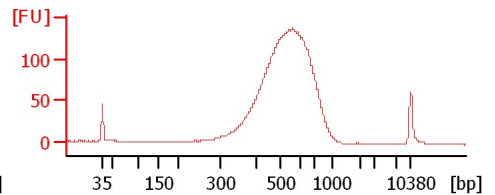
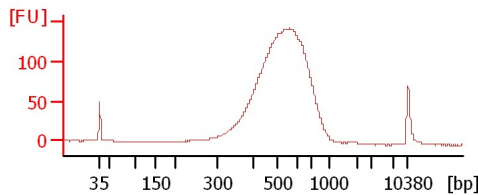
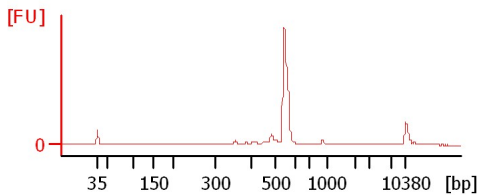
16S #1 0.55X R/1X L SS



16S #2 0.55X R/1X L SS

LF7 WT 0.55X R/ 0.65X L SS soni DNA

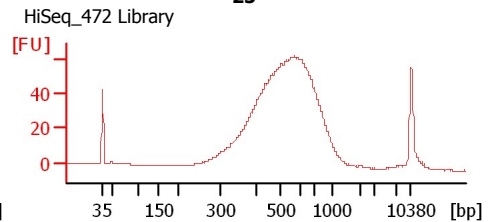
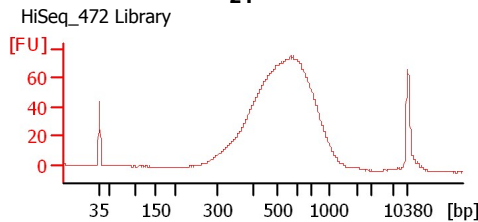
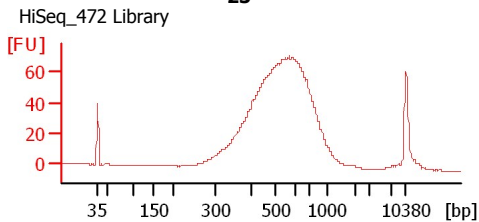
LF7 deltaR 0.55X R/ 0.65X L SS soni DNA



23

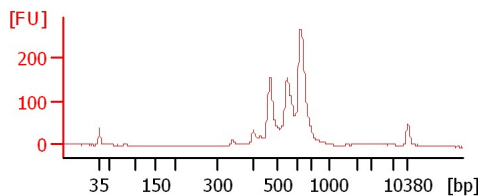
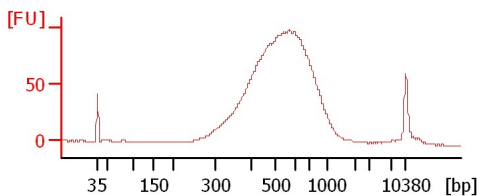
24

25



H472P

M347P



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-24\2016-05-24_002.xad

Created: 5/24/2016 12:58:46 PM
 Modified: 5/24/2016 1:41:25 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
H472P QC AD PCR		<input type="checkbox"/>	✓			
H494P (1:5)		<input type="checkbox"/>	✓			
16S #1 0.55X R/1X L SS		<input type="checkbox"/>	✓			
16S #2 0.55X R/1X L SS		<input type="checkbox"/>	✓			
LF7 WT 0.55X R/ 0.65X L SS soni DNA		<input type="checkbox"/>	✓			
LF7 deltaR 0.55X R/ 0.65X L SS soni DNA		<input type="checkbox"/>	✓			
23	HiSeq_472 Library	<input type="checkbox"/>	✓			
24	HiSeq_472 Library	<input type="checkbox"/>	✓			
25	HiSeq_472 Library	<input type="checkbox"/>	✓			
H472P		<input type="checkbox"/>	✓			
M347P		<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\2016-05-24\2016-05-24_002.xad

Created: 5/24/2016 12:58:46 PM
Modified: 5/24/2016 1:41:25 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

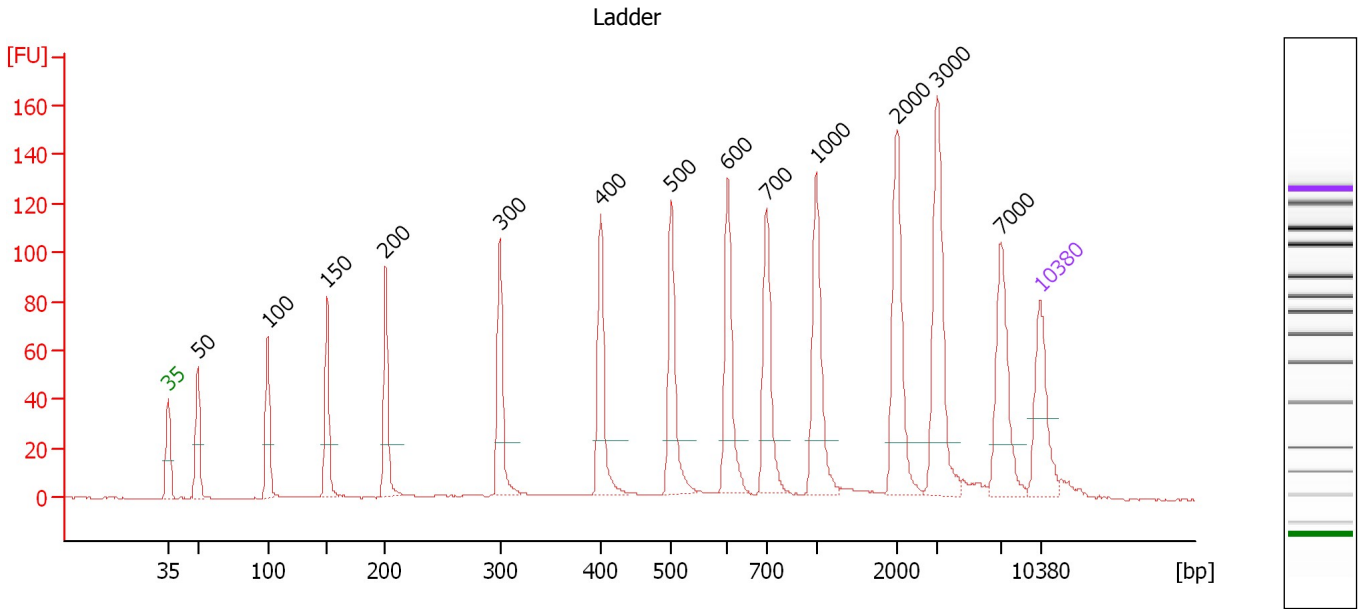
Ladder

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:\... bioanalyzer\2100 expert\data\2016-05-24\2016-05-24_002.xad

Created: 5/24/2016 12:58:46 PM
 Modified: 5/24/2016 1:41:25 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

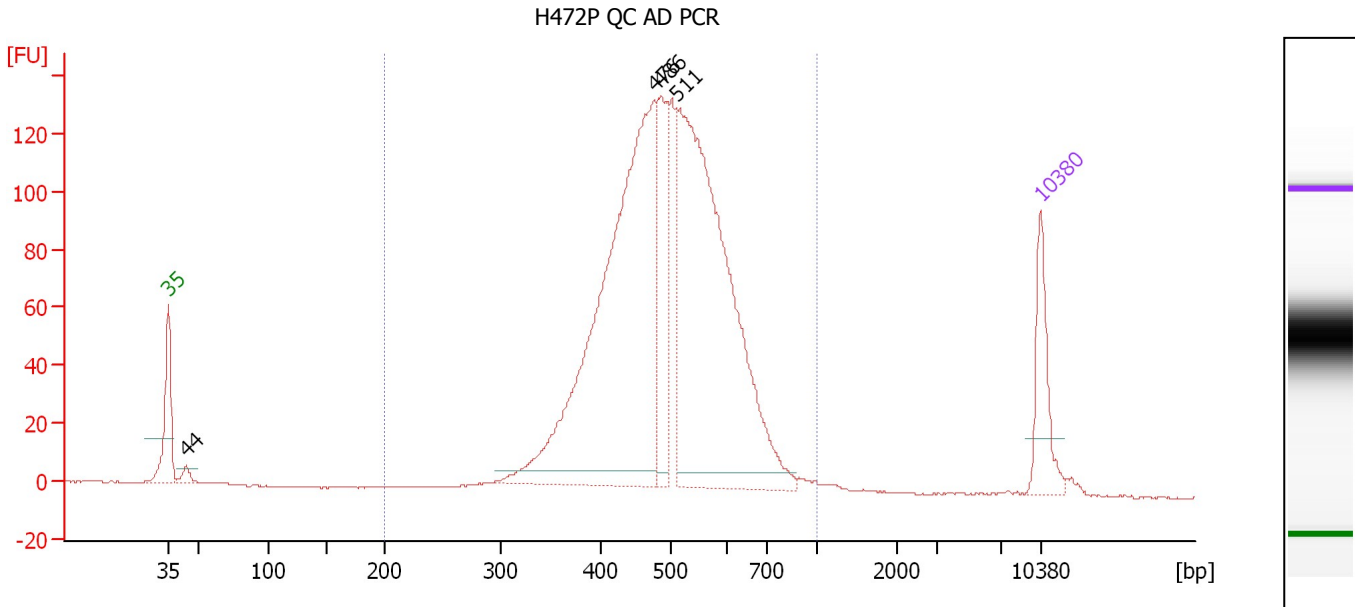
Peak table for Ladder

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	45.35
3	100	150.00	2,272.7	Ladder Peak	50.99
4	150	150.00	1,515.2	Ladder Peak	55.73
5	200	150.00	1,136.4	Ladder Peak	60.43
6	300	150.00	757.6	Ladder Peak	69.61
7	400	150.00	568.2	Ladder Peak	77.70
8	500	150.00	454.5	Ladder Peak	83.34
9	600	150.00	378.8	Ladder Peak	87.89
10	700	150.00	324.7	Ladder Peak	91.03
11	1,000	150.00	227.3	Ladder Peak	94.98
12	2,000	150.00	113.6	Ladder Peak	101.47
13	3,000	150.00	75.8	Ladder Peak	104.71
14	7,000	150.00	32.5	Ladder Peak	109.85
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-24\2016-05-24_002.xad

Created: 5/24/2016 12:58:46 PM
 Modified: 5/24/2016 1:41:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : H472P QC AD PCR

Number of peaks found: 4 Corr. Area 1: 1,831.4
 Noise: 0.2

Peak table for sample 1 : H472P QC AD 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	17.38	597.2		44.42
3	476	912.79	2,905.9		81.98
4	486	170.73	532.5		82.54
5	511	852.54	2,525.6		83.86
6	10,380	75.00	10.9	Upper Marker	113.00

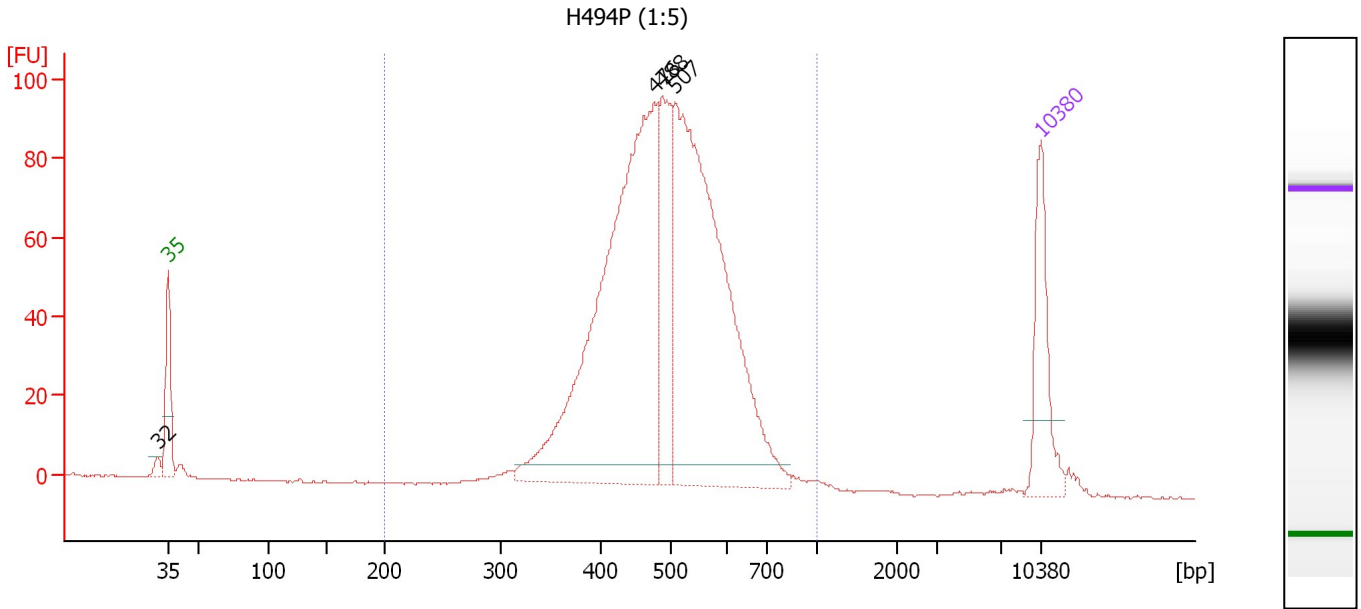
Region table for sample 1 : H472P QC AD PCR

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	500	1,831.4	6,577.1	2,083.85	99	18.1

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-24\2016-05-24_002.xad

Created: 5/24/2016 12:58:46 PM
 Modified: 5/24/2016 1:41:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : H494P (1:5)

Number of peaks found: 4 Corr. Area 1: 1,297.7
 Noise: 0.2

Peak table for sample 2 : H494P (1:5)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	32	0.00	0.0		42.13
2	35	125.00	5,411.3	Lower Marker	43.00
3	476	681.11	2,169.2		81.97
4	488	143.63	446.3		82.64
5	507	615.96	1,840.3		83.67
6	10,380	75.00	10.9	Upper Marker	113.00

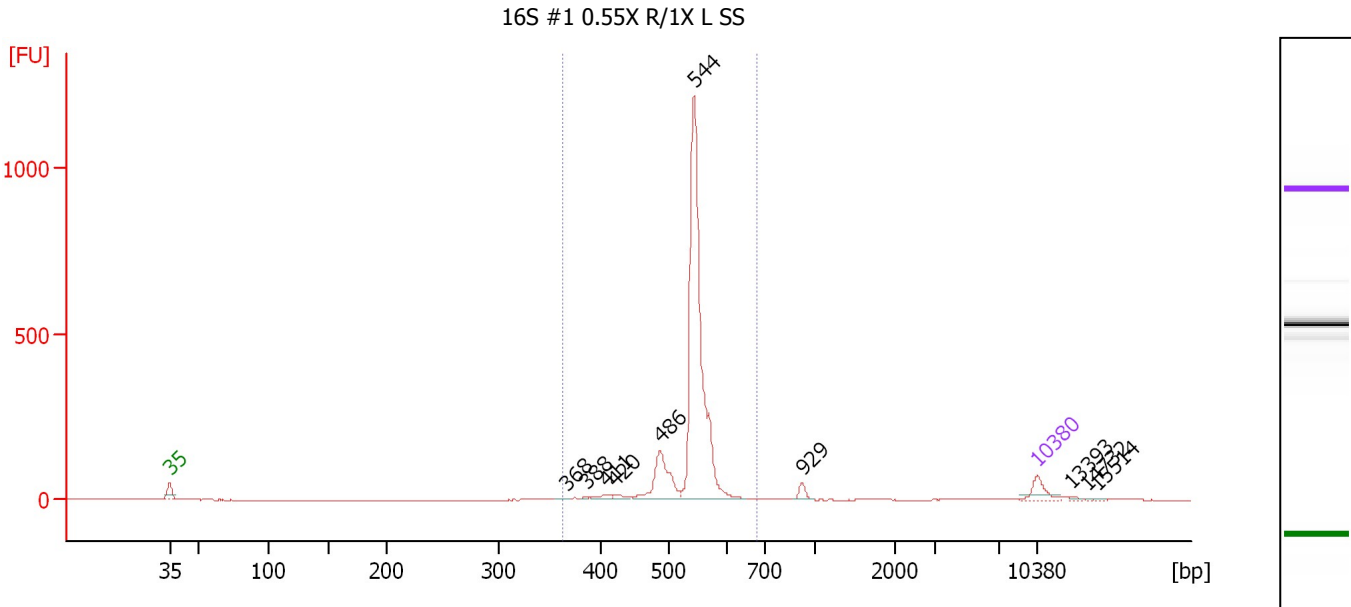
Region table for sample 2 : H494P (1:5)

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	496	1,297.7	4,651.8	1,463.51	98	17.7

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-24\2016-05-24_002.xad

Created: 5/24/2016 12:58:46 PM
 Modified: 5/24/2016 1:41:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : 16S #1 0.55X R/1X L SS

Number of peaks found: 10 Corr. Area 1: 1,840.5
 Noise: 0.2

Peak table for sample 3 : 16S #1 0.55X R/1X L SS

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	368	9.39	38.7		75.09
3	388	8.05	31.5		76.70
4	411	33.06	121.9		78.31
5	420	31.61	114.0		78.83
6	486	335.94	1,046.7		82.57
7	544	1,847.06	5,148.5		85.32
8	929	36.95	60.2		94.05
9	10,380	75.00	10.9	Upper Marker	113.00
10	13,393	0.00	0.0		115.80
11	14,732	0.00	0.0		117.05
12	15,514	0.00	0.0		117.78

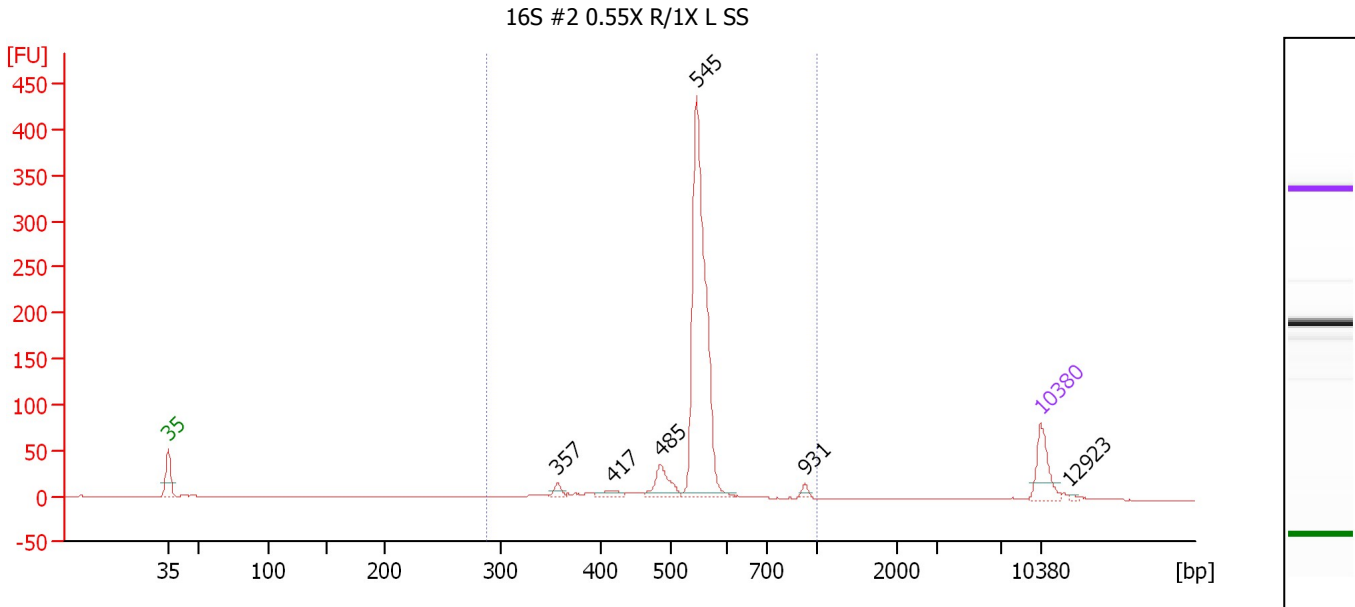
Region table for sample 3 : 16S #1 0.55X R/1X L SS

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
363	679	536	1,840.5	6,568.1	2,306.51	91	7.1

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-24\2016-05-24_002.xad

Created: 5/24/2016 12:58:46 PM
 Modified: 5/24/2016 1:41:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : 16S #2 0.55X R/1X L SS

Number of peaks found: 6 Corr. Area 1: 781.5
 Noise: 0.2

Peak table for sample 4 : 16S #2 0.55X R/1X L SS

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	357	17.92	76.0		74.24
3	417	19.19	69.7		78.66
4	485	78.68	245.8		82.50
5	545	817.29	2,271.9		85.39
6	931	11.70	19.0		94.07
7	10,380	75.00	10.9	Upper Marker	113.00
8	12,923	0.00	0.0		115.37

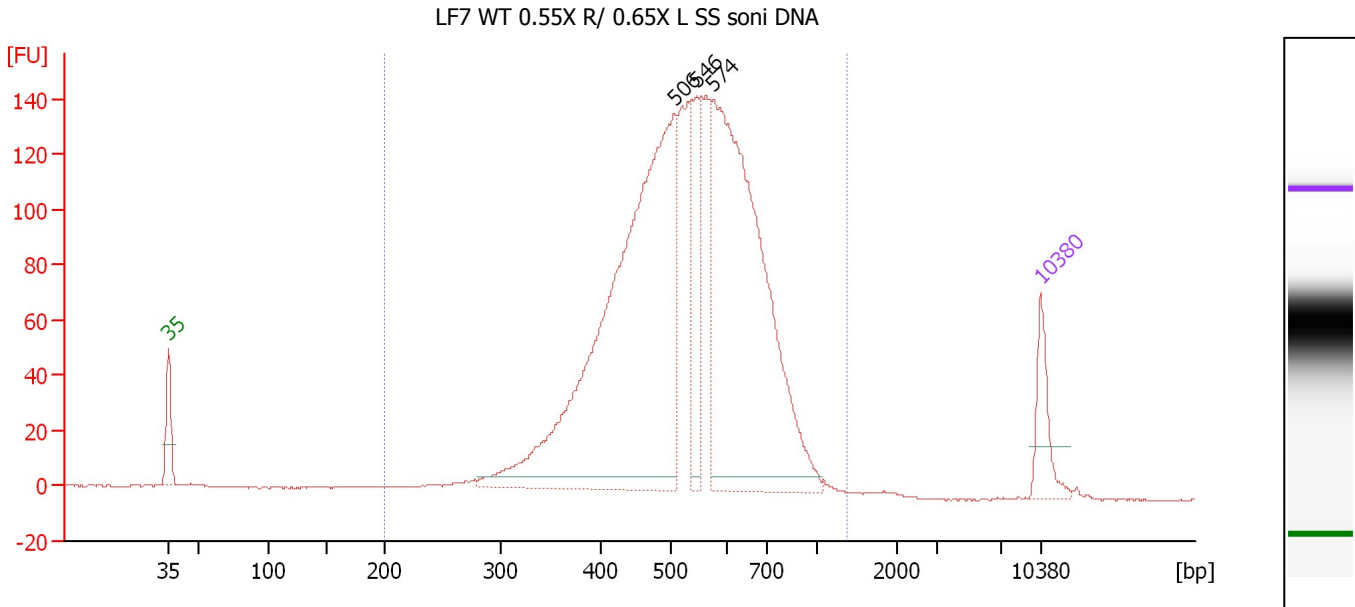
Region table for sample 4 : 16S #2 0.55X R/1X L SS

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
288	1,000	541	781.5	2,970.8	1,032.27	95	13.7

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-24\2016-05-24_002.xad

Created: 5/24/2016 12:58:46 PM
 Modified: 5/24/2016 1:41:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : LF7 WT 0.55X R/ 0.65X L SS soni DNA

Number of peaks found: 3 Corr. Area 1: 2,265.0
 Noise: 0.2

Peak table for sample 5 : LF7 WT 0.55X R/ 0.65X L SS soni DNA

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	506	1,503.77	4,502.6		83.62
3	546	194.74	540.5		85.43
4	574	1,128.86	2,979.9		86.70
5	10,380	75.00	10.9	Upper Marker	113.00

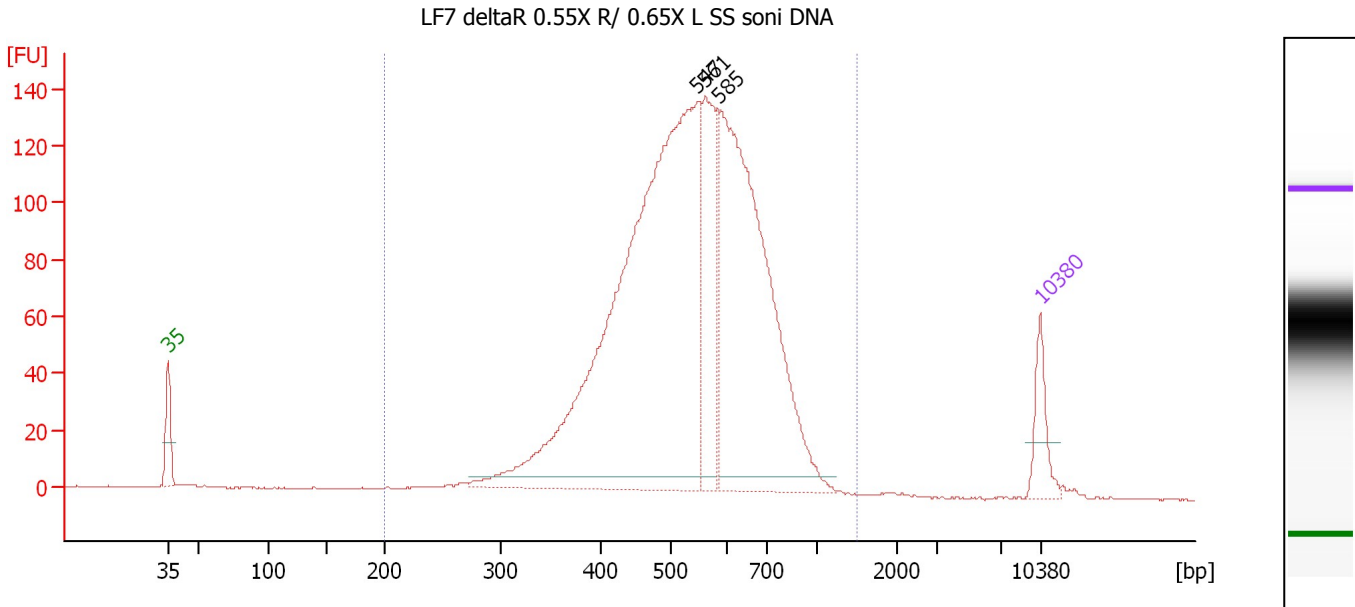
Region table for sample 5 : LF7 WT 0.55X R/ 0.65X L SS soni DNA

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,391	539	2,265.0	10,392.5	3,433.32	99	23.2

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-24\2016-05-24_002.xad

Created: 5/24/2016 12:58:46 PM
 Modified: 5/24/2016 1:41:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : LF7 deltaR 0.55X R/ 0.65X L SS soni DNA

Number of peaks found: 3 Corr. Area 1: 2,153.1
 Noise: 0.2

Peak table for sample 6 : LF7 deltaR 0.55X R/ 0.65X L SS soni DNA

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	547	2,078.24	5,758.1		85.47
3	561	336.78	909.6		86.11
4	585	1,175.45	3,046.6		87.19
5	10,380	75.00	10.9	Upper Marker	113.00

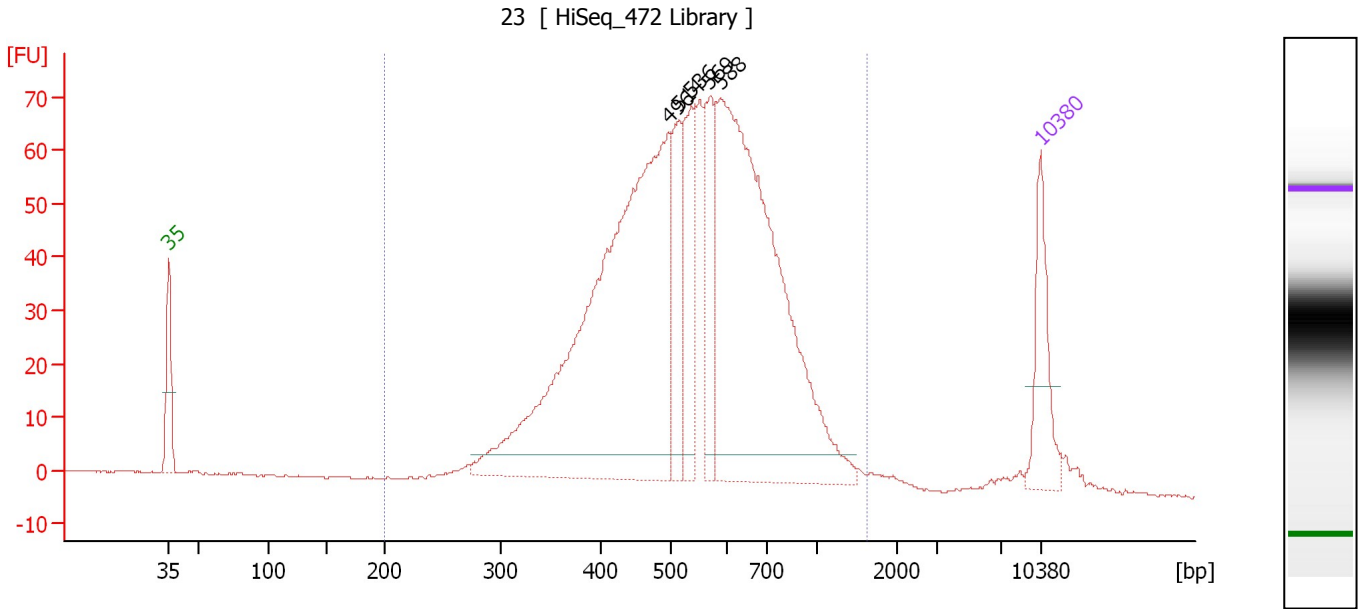
Region table for sample 6 : LF7 deltaR 0.55X R/ 0.65X L SS soni DNA

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,506	545	2,153.1	11,626.2	3,884.62	99	23.5

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-24\2016-05-24_002.xad

Created: 5/24/2016 12:58:46 PM
 Modified: 5/24/2016 1:41:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : 23

Number of peaks found: 5 Corr. Area 1: 1,347.6
 Noise: 0.2

Peak table for sample 7 : 23

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	496	905.23	2,766.1		83.11
3	514	109.07	321.6		83.97
4	536	115.84	327.1		85.00
5	569	100.84	268.7		86.46
6	588	706.76	1,822.3		87.32
7	10,380	75.00	10.9	Upper Marker	113.00

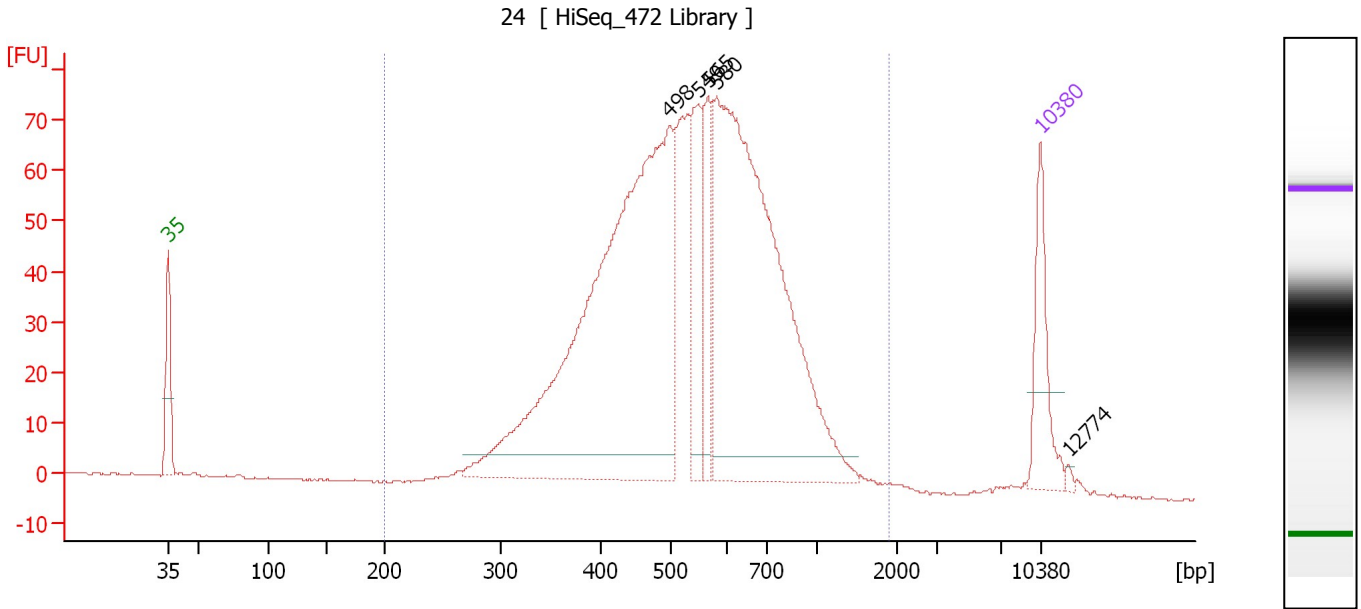
Region table for sample 7 : 23

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,640	559	1,347.6	6,516.2	2,151.08	98	31.8

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-24\2016-05-24_002.xad

Created: 5/24/2016 12:58:46 PM
 Modified: 5/24/2016 1:41:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : 24

Number of peaks found: 5 Corr. Area 1: 1,451.1
 Noise: 0.2

Peak table for sample 8 : 24

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	498	986.07	3,001.4		83.22
3	549	119.81	330.8		85.55
4	565	90.82	243.4		86.32
5	580	766.41	2,002.8		86.97
6	10,380	75.00	10.9	Upper Marker	113.00
7	12,774	0.00	0.0		115.23

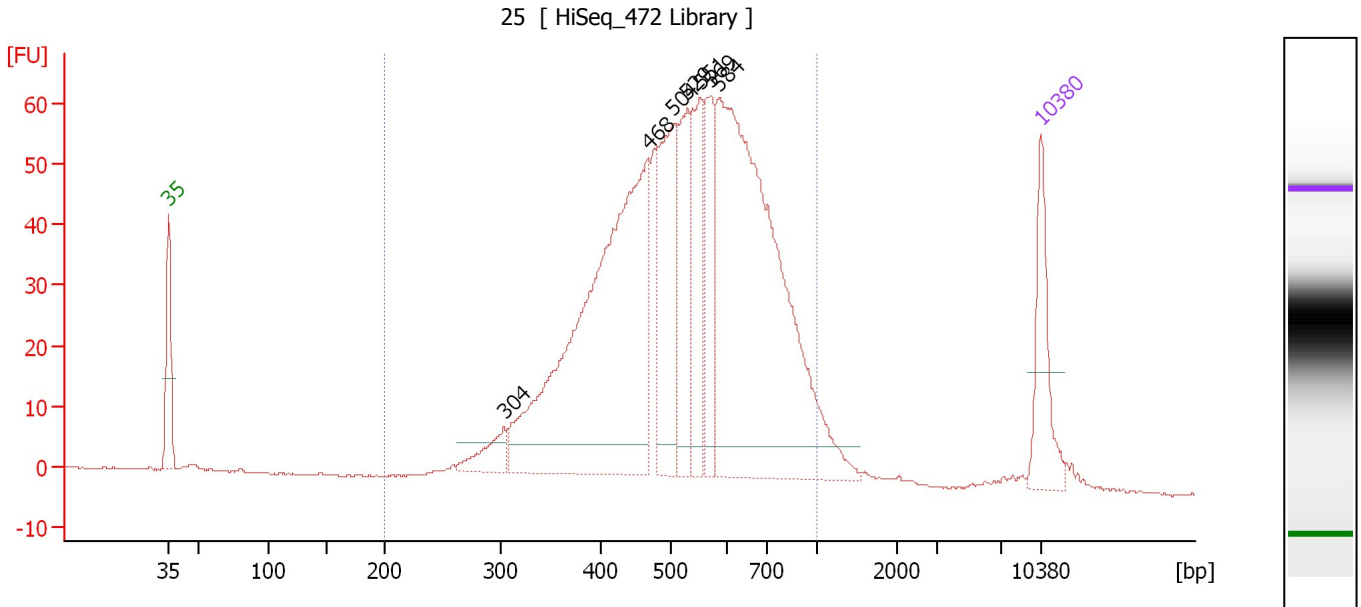
Region table for sample 8 : 24

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,900	561	1,451.1	6,872.8	2,267.25	99	32.8

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-24\2016-05-24_002.xad

Created: 5/24/2016 12:58:46 PM
 Modified: 5/24/2016 1:41:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : 25

Number of peaks found: 7 Corr. Area 1: 1,174.3
 Noise: 0.2

Peak table for sample 9 : 25

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	304	44.82	223.3		69.94
3	468	690.92	2,237.9		81.52
4	504	199.29	598.5		83.55
5	529	128.35	367.9		84.64
6	551	121.65	334.3		85.68
7	569	107.11	285.0		86.50
8	584	695.26	1,804.2		87.15
9	10,380	75.00	10.9	Upper Marker	113.00

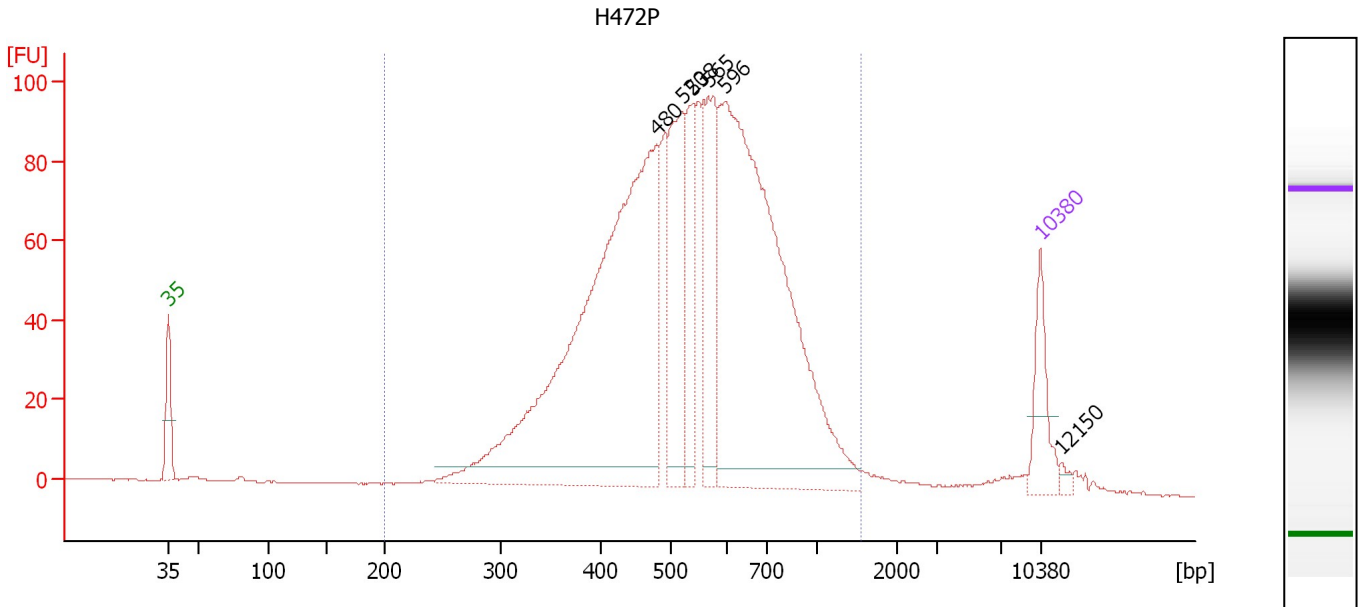
Region table for sample 9 : 25

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	540	1,174.3	6,569.5	2,131.37	96	26.4

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-24\2016-05-24_002.xad

Created: 5/24/2016 12:58:46 PM
 Modified: 5/24/2016 1:41:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : H472P

Number of peaks found: 6 Corr. Area 1: 1,902.3
 Noise: 0.2

Peak table for sample 10 : H472P

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	480	1,240.24	3,916.9		82.20
3	520	266.70	777.8		84.23
4	538	134.49	379.0		85.05
5	565	222.61	596.5		86.32
6	596	1,056.46	2,687.1		87.69
7	10,380	75.00	10.9	Upper Marker	113.00
8	12,150	0.00	0.0		114.65

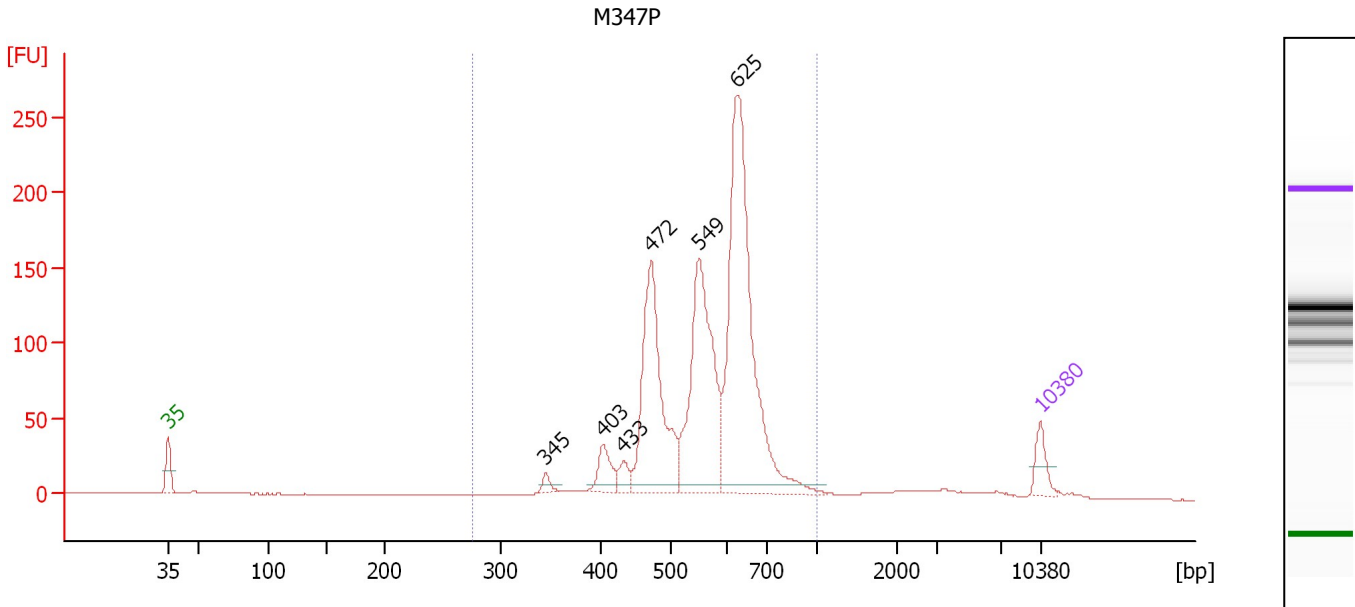
Region table for sample 10 : H472P

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,549	561	1,902.3	10,042.7	3,297.29	97	32.5

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-24\2016-05-24_002.xad

Created: 5/24/2016 12:58:46 PM
 Modified: 5/24/2016 1:41:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : M347P

Number of peaks found: 6 Corr. Area 1: 1,450.0
 Noise: 0.2

Peak table for sample 11 : M347P

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	345	33.27	146.2		73.24
3	403	119.36	448.4		77.89
4	433	55.83	195.5		79.55
5	472	805.11	2,584.7		81.76
6	549	882.70	2,435.5		85.58
7	625	1,428.51	3,463.2		88.67
8	10,380	75.00	10.9	Upper Marker	113.00

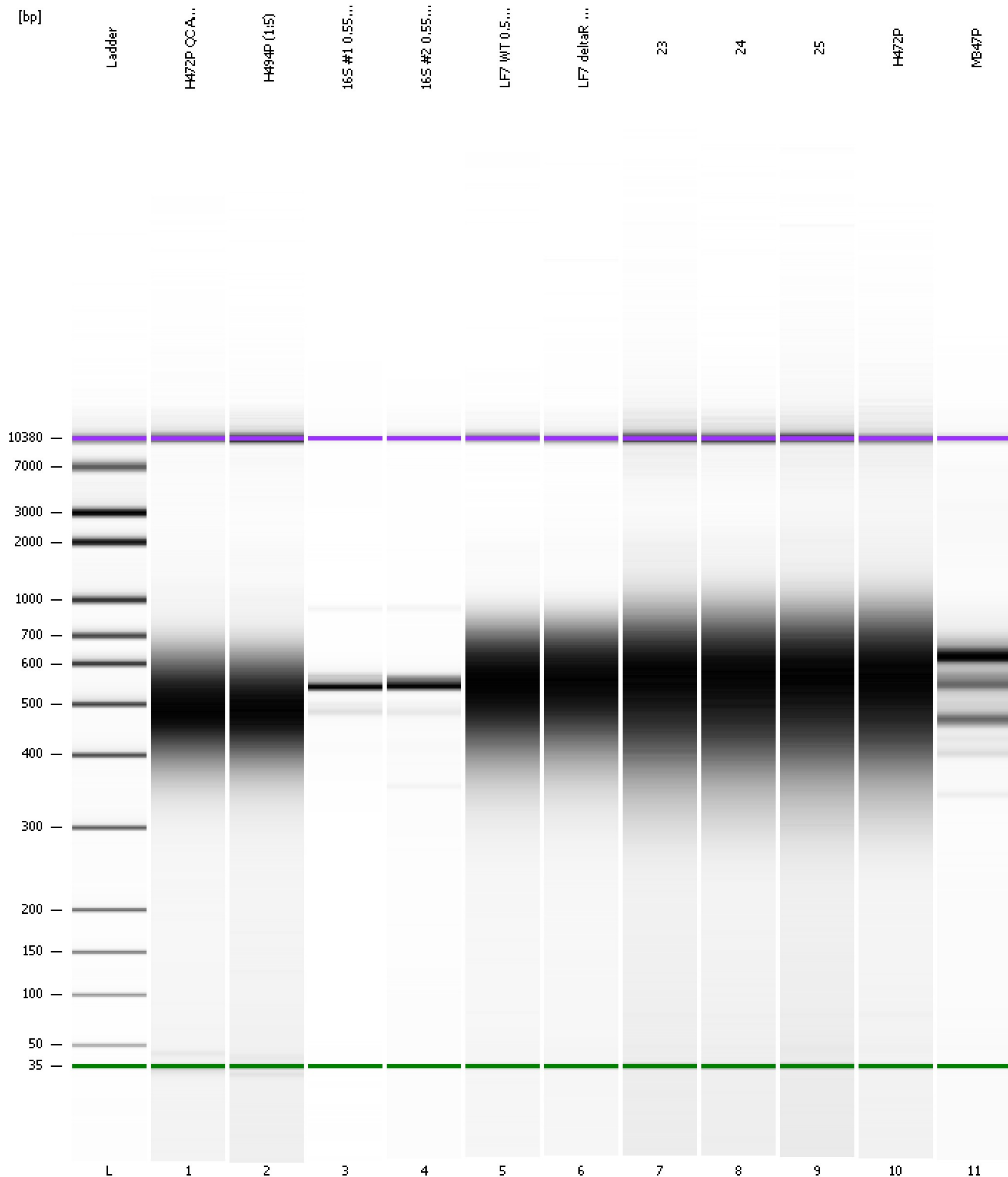
Region table for sample 11 : M347P

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
276	1,000	570	1,450.0	9,620.5	3,483.26	95	16.4

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-24\2016-05-24_002.xad

Created: 5/24/2016 12:58:46 PM
Modified: 5/24/2016 1:41:25 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-24\2016-05-24_002.xad

Created: 5/24/2016 12:58:46 PM
 Modified: 5/24/2016 1:41:25 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		5/24/2016 1:40:06 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\data\2016-05-24\2016-05-24_002.xad)		Instrument	Run		5/24/2016 12:58:51 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		5/24/2016 12:58:51 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		5/24/2016 12:58:51 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		5/24/2016 12:58:51 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		5/24/2016 12:58:51 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		5/24/2016 12:58:51 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		5/24/2016 12:58:51 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1