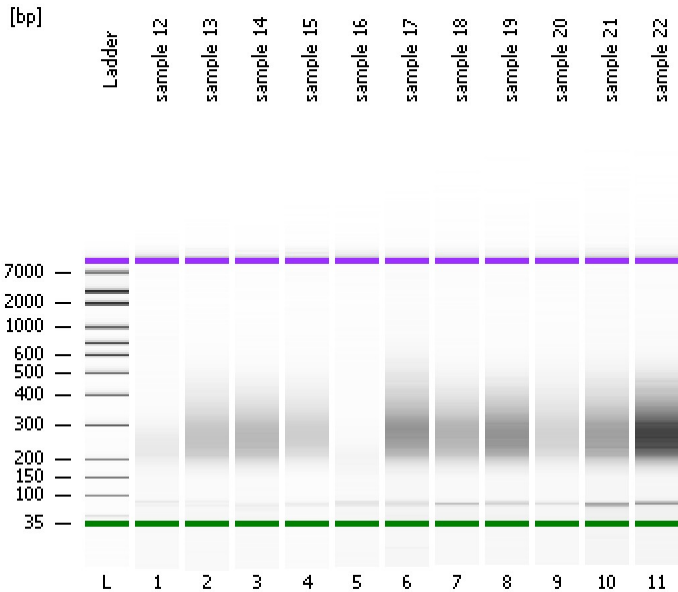


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2018-12-26\2018-12-26_002.xad

Created: 12/26/2018 2:52:04 PM
Modified: 12/26/2018 3:32:29 PM

Electrophoresis File Run Summary



Instrument Information:

Instrument Name: DE34903152 Firmware: C.01.069
Serial#: DE34903152 Type: G2938C

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

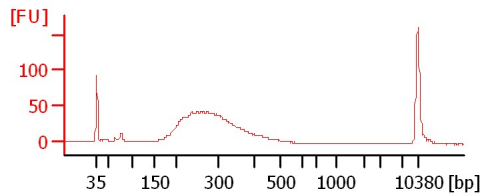
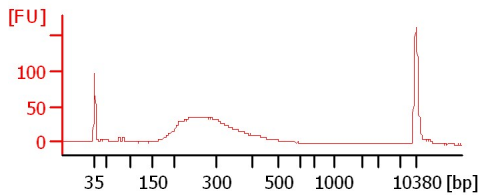
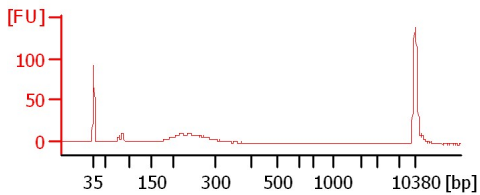
Chip Information:

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

sample 12

sample 13

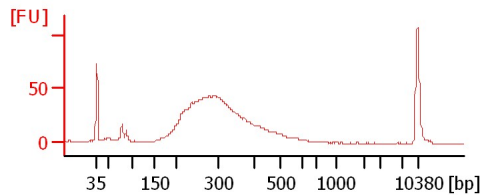
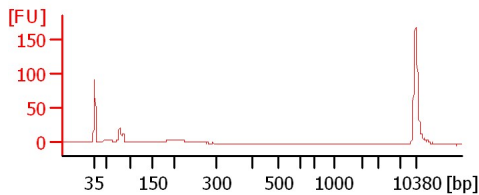
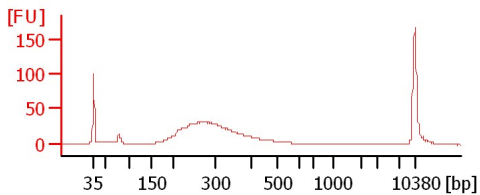
sample 14



sample 15

sample 16

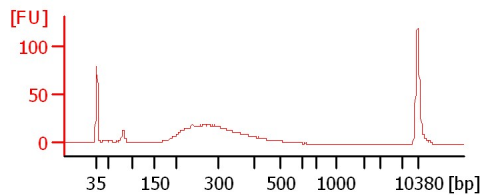
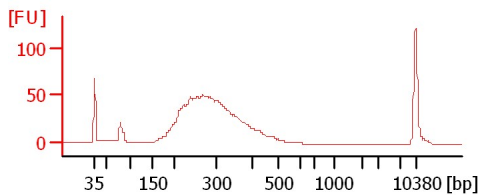
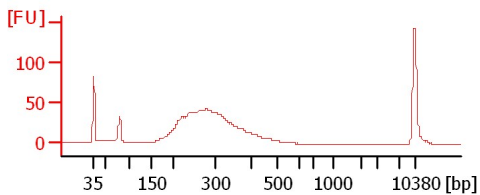
sample 17



sample 18

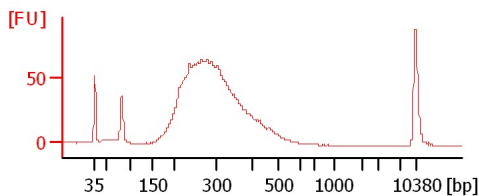
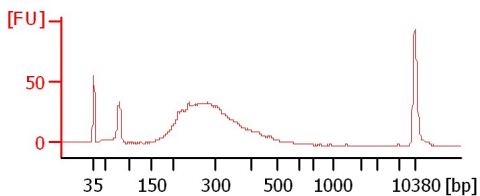
sample 19

sample 20



sample 21

sample 22



Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2018-12-26\2018-12-26_002.xad

Created: 12/26/2018 2:52:04 PM
Modified: 12/26/2018 3:32:29 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
sample 12		<input type="checkbox"/>	✓			
sample 13		<input type="checkbox"/>	✓			
sample 14		<input type="checkbox"/>	✓			
sample 15		<input type="checkbox"/>	✓			
sample 16		<input type="checkbox"/>	✓			
sample 17		<input type="checkbox"/>	✓			
sample 18		<input type="checkbox"/>	✓			
sample 19		<input type="checkbox"/>	✓			
sample 20		<input type="checkbox"/>	✓			
sample 21		<input type="checkbox"/>	✓			
sample 22		<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\2018-12-26\2018-12-26_002.xad

Created: 12/26/2018 2:52:04 PM
Modified: 12/26/2018 3:32:29 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

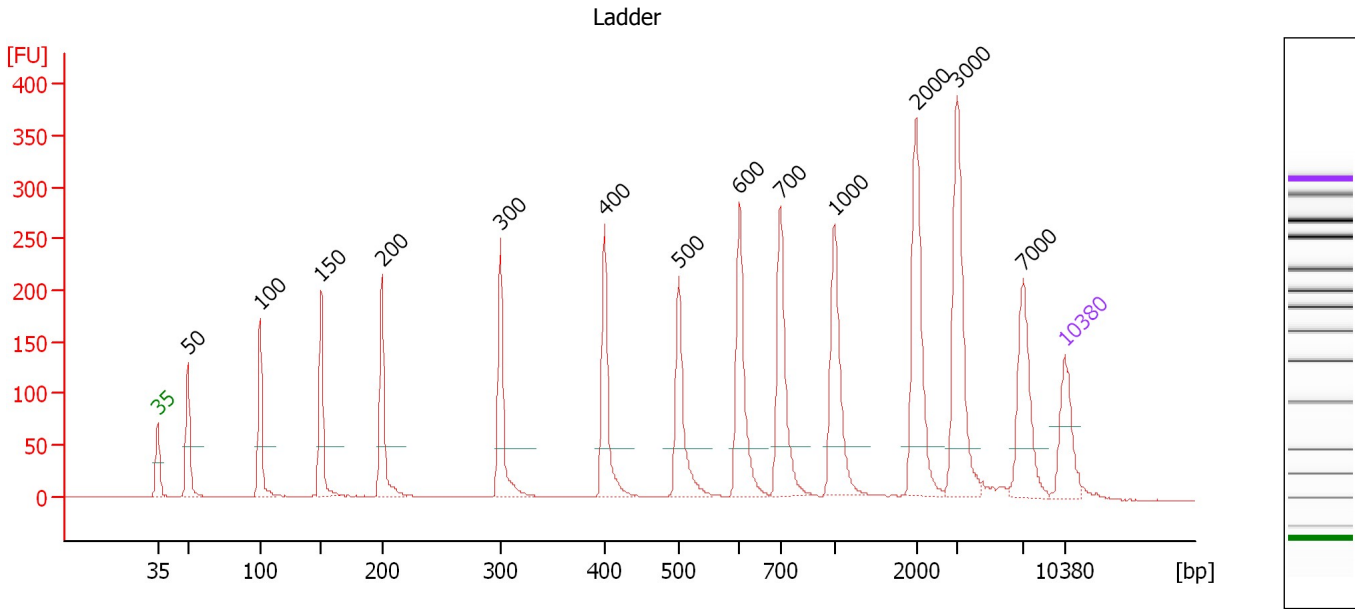
Ladder

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\2018-12-26\2018-12-26_002.xad

Created: 12/26/2018 2:52:04 PM
 Modified: 12/26/2018 3:32:29 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.3

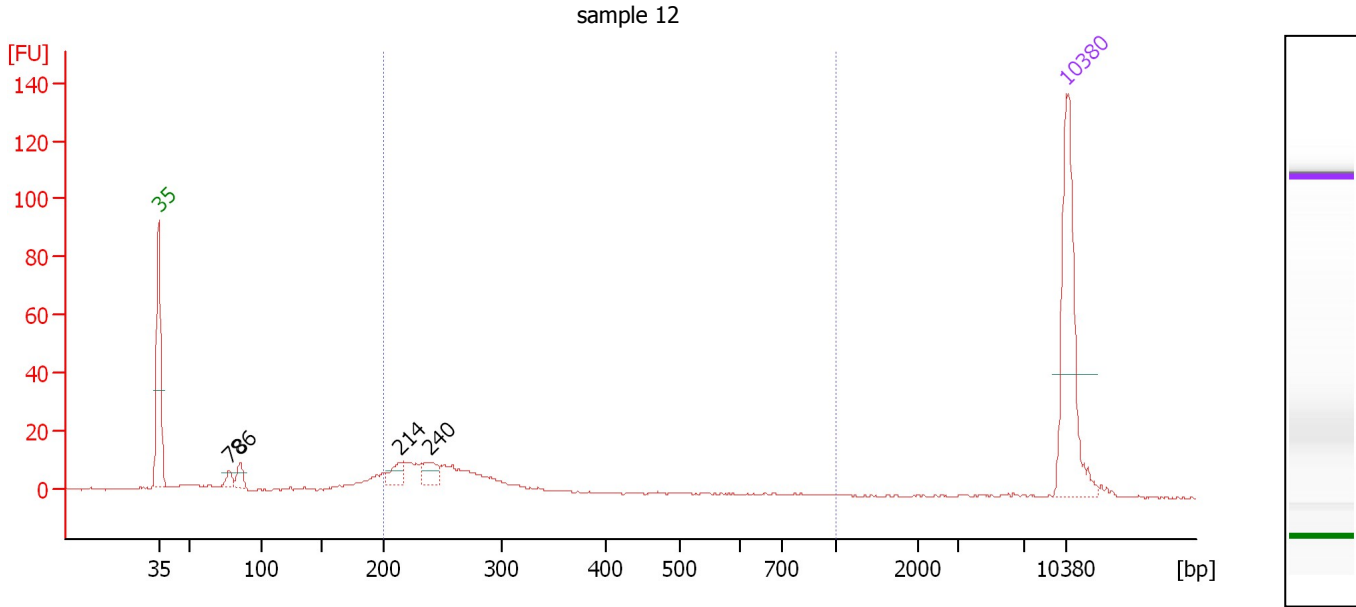
Peak table for Ladder

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	45.36
3	100	150.00	2,272.7	Ladder Peak	50.89
4	150	150.00	1,515.2	Ladder Peak	55.61
5	200	150.00	1,136.4	Ladder Peak	60.28
6	300	150.00	757.6	Ladder Peak	69.45
7	400	150.00	568.2	Ladder Peak	77.48
8	500	150.00	454.5	Ladder Peak	83.19
9	600	150.00	378.8	Ladder Peak	87.91
10	700	150.00	324.7	Ladder Peak	91.04
11	1,000	150.00	227.3	Ladder Peak	95.22
12	2,000	150.00	113.6	Ladder Peak	101.52
13	3,000	150.00	75.8	Ladder Peak	104.70
14	7,000	150.00	32.5	Ladder Peak	109.78
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-12-26\2018-12-26_002.xad

Created: 12/26/2018 2:52:04 PM
 Modified: 12/26/2018 3:32:29 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : sample 12

Number of peaks found: 4 Corr. Area 1: 130.8
 Noise: 0.3

Peak table for sample 1 : sample 12

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	78	7.60	147.3		48.48
3	86	11.38	201.5		49.29
4	214	12.71	89.8		61.61
5	240	14.96	94.6		63.92
6	10,380	75.00	10.9	Upper Marker	113.00

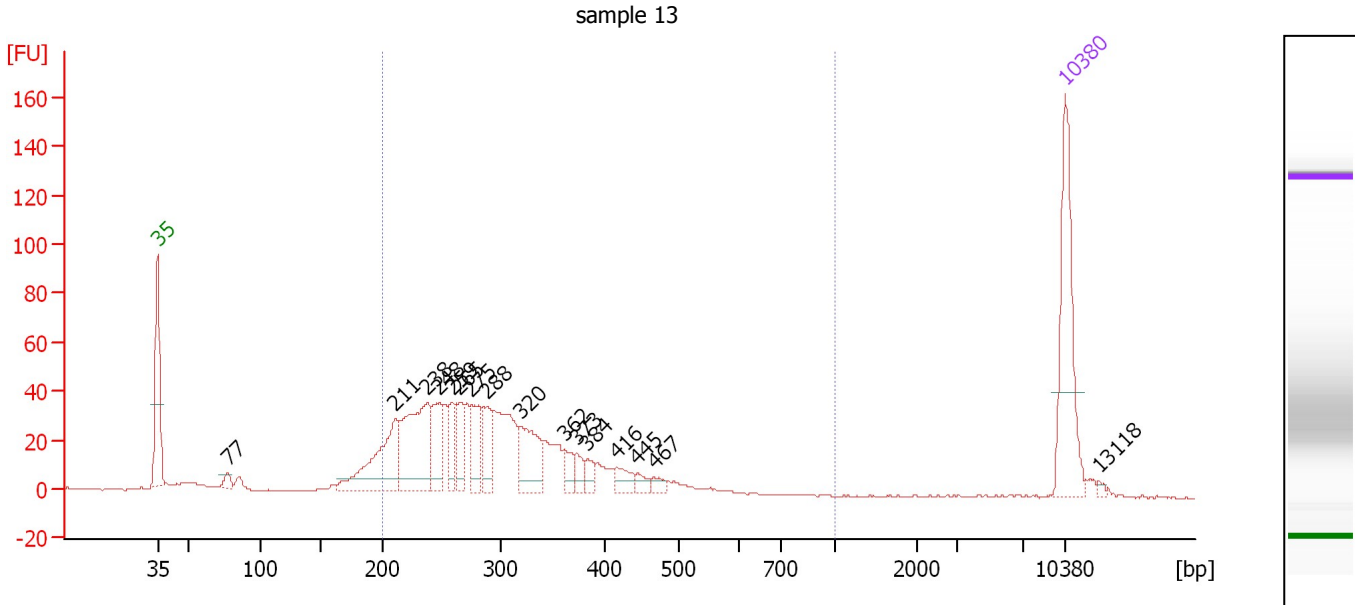
Region table for sample 1 : sample 12

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
200	1,000	260	116.54	130.8	700.7	66	23.7

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-12-26\2018-12-26_002.xad

Created: 12/26/2018 2:52:04 PM
 Modified: 12/26/2018 3:32:29 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : sample 13

Number of peaks found: 16 Corr. Area 1: 790.2
 Noise: 0.3

Peak table for sample 2 : sample 13

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	77	7.52	147.0		48.40
3	211	92.64	664.6		61.31
4	238	107.20	681.9		63.78
5	248	42.67	260.2		64.73
6	259	27.17	158.8		65.72
7	265	28.98	165.6		66.26
8	275	35.26	193.9		67.20
9	288	29.62	155.7		68.37
10	320	48.74	230.6		71.07
11	362	13.40	56.1		74.40
12	373	11.66	47.3		75.35
13	384	8.84	34.9		76.16
14	416	13.13	47.8		78.40
15	445	6.79	23.2		80.02
16	467	5.88	19.1		81.33
17	10,380	75.00	10.9	Upper Marker	113.00
18	13,118	0.00	0.0		115.61

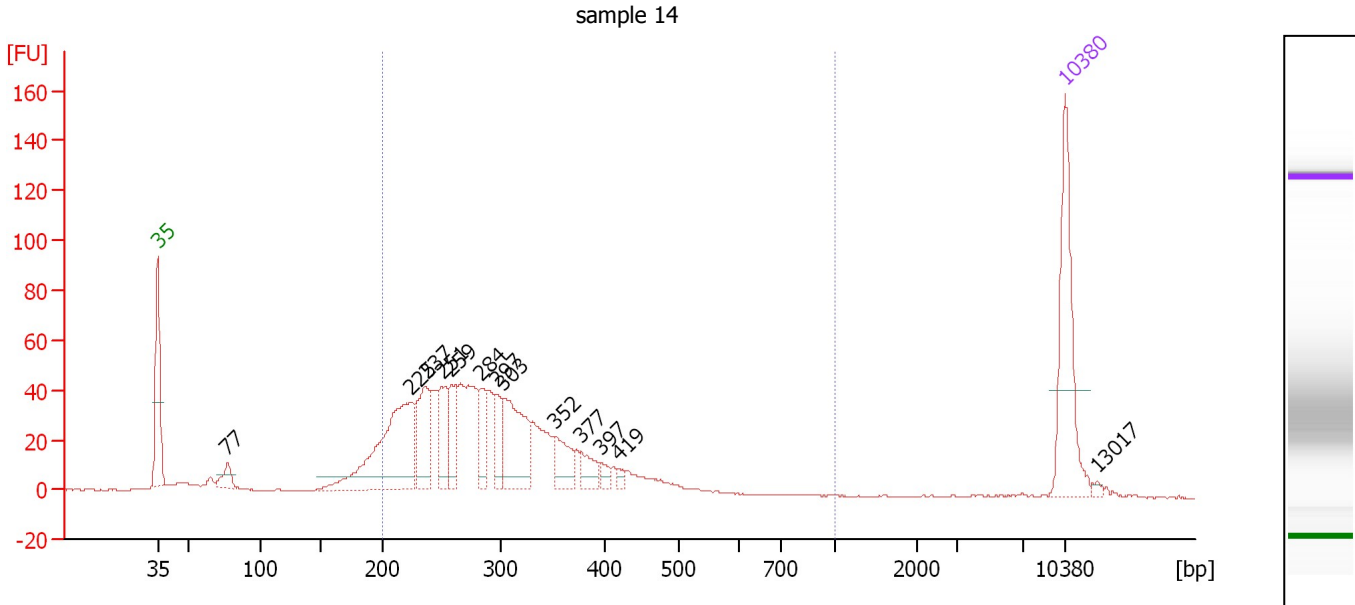
Region table for sample 2 : sample 13

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
200	1,000	302	622.19	790.2	3,332.3	87	24.8

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-12-26\2018-12-26_002.xad

Created: 12/26/2018 2:52:04 PM
 Modified: 12/26/2018 3:32:29 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : sample 14

Number of peaks found: 13 Corr. Area 1: 896.4
 Noise: 0.2

Peak table for sample 3 : sample 14

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	77	17.42	340.9		48.39
3	225	162.07	1,092.4		62.56
4	237	63.59	406.1		63.70
5	251	39.66	239.7		64.93
6	259	37.08	217.2		65.66
7	284	29.30	156.2		67.99
8	297	26.48	135.3		69.14
9	303	80.11	400.7		69.68
10	352	31.19	134.3		73.61
11	377	18.59	74.6		75.67
12	397	6.60	25.2		77.27
13	419	4.25	15.4		78.55
14	10,380	75.00	10.9	Upper Marker	113.00
15	13,017	0.00	0.0		115.51

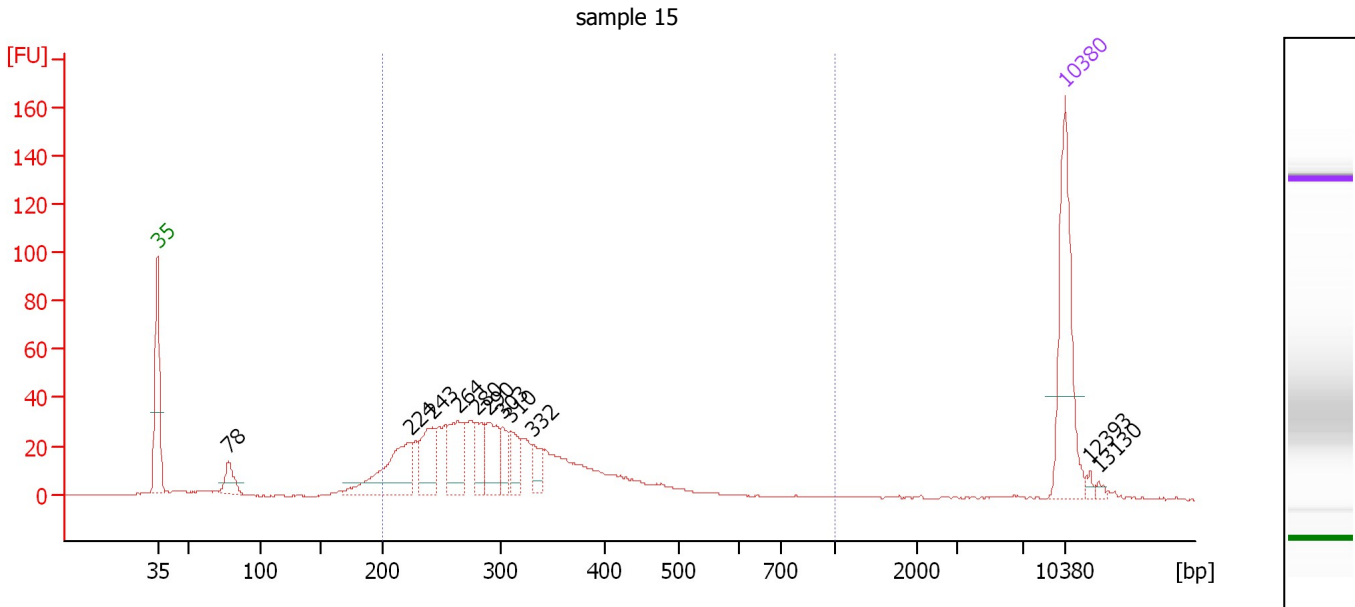
Region table for sample 3 : sample 14

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	298	716.14	896.4	3,863.6	87	23.2

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-12-26\2018-12-26_002.xad

Created: 12/26/2018 2:52:04 PM
 Modified: 12/26/2018 3:32:29 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : sample 15

Number of peaks found: 11 Corr. Area 1: 654.8
 Noise: 0.3

Peak table for sample 4 : sample 15

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	78	23.34	452.6		48.47
3	224	77.95	527.7		62.47
4	243	45.01	280.4		64.24
5	264	48.92	280.6		66.16
6	280	25.83	139.8		67.61
7	290	36.83	192.3		68.55
8	303	18.15	90.8		69.67
9	310	21.39	104.6		70.23
10	332	15.01	68.5		72.01
11	10,380	75.00	10.9	Upper Marker	113.00
12	12,393	0.00	0.0		114.92
13	13,130	0.00	0.0		115.62

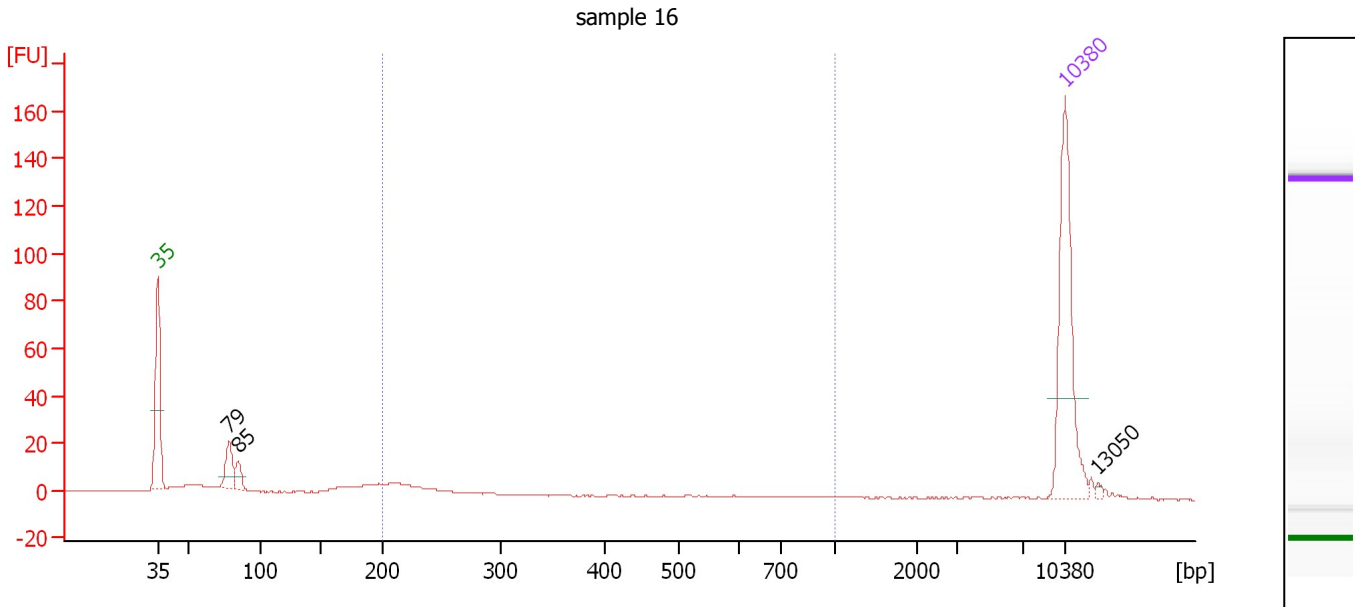
Region table for sample 4 : sample 15

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
200	1,000	314	495.47	654.8	2,591.6	85	29.4

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-12-26\2018-12-26_002.xad

Created: 12/26/2018 2:52:04 PM
 Modified: 12/26/2018 3:32:29 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : sample 16

Number of peaks found: 3 Corr. Area 1: 27.5
 Noise: 0.2

Peak table for sample 5 : sample 16

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	79	23.74	457.8		48.52
3	85	11.91	212.2		49.24
4	10,380	75.00	10.9	Upper Marker	113.00
5	13,050	0.00	0.0		115.54

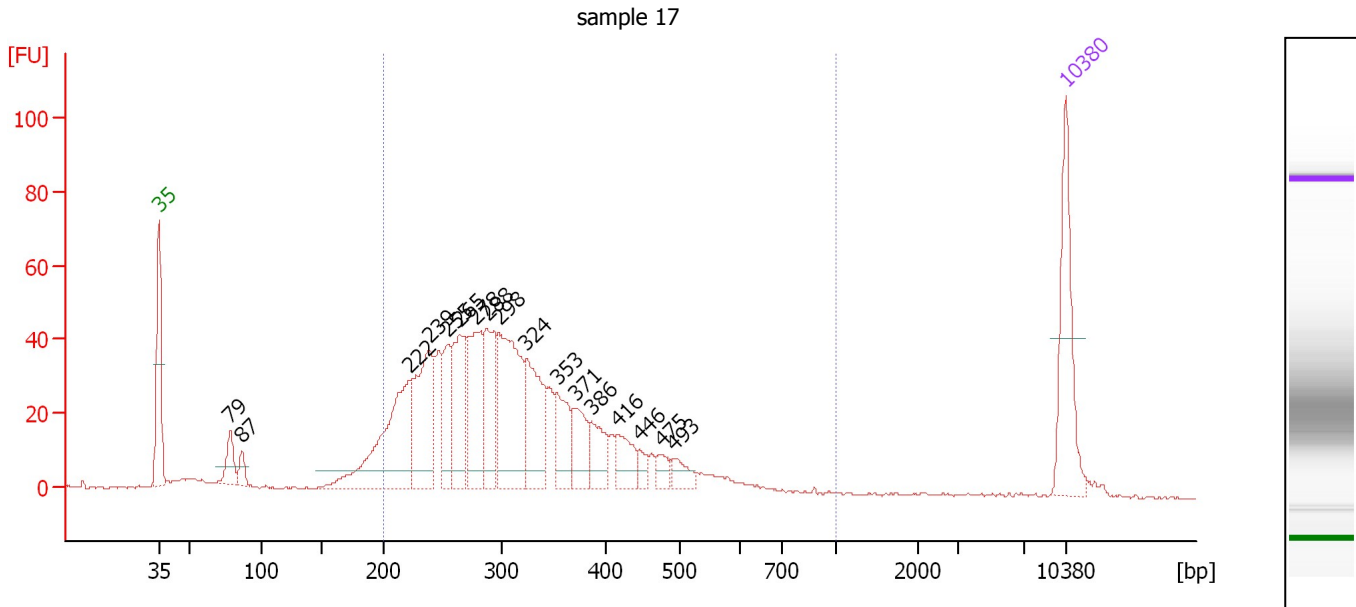
Region table for sample 5 : sample 16

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
200	1,000	233	21.47	27.5	142.8	21	25.2

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-12-26\2018-12-26_002.xad

Created: 12/26/2018 2:52:04 PM
 Modified: 12/26/2018 3:32:29 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : sample 17

Number of peaks found: 17 Corr. Area 1: 953.3
 Noise: 0.3

Peak table for sample 6 : sample 17

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	79	31.50	607.3		48.53
3	87	15.98	278.2		49.46
4	222	175.40	1,194.9		62.34
5	239	120.45	763.3		63.87
6	255	50.57	300.8		65.30
7	265	92.18	527.2		66.23
8	278	104.41	568.2		67.47
9	288	79.51	418.2		68.36
10	298	153.38	780.4		69.24
11	324	91.25	426.9		71.37
12	353	45.76	196.2		73.73
13	371	41.23	168.3		75.16
14	386	35.48	139.3		76.35
15	416	33.13	120.8		78.37
16	446	10.52	35.8		80.10
17	475	13.44	42.9		81.77
18	493	17.11	52.6		82.81
19	10,380	75.00	10.9	Upper Marker	113.00

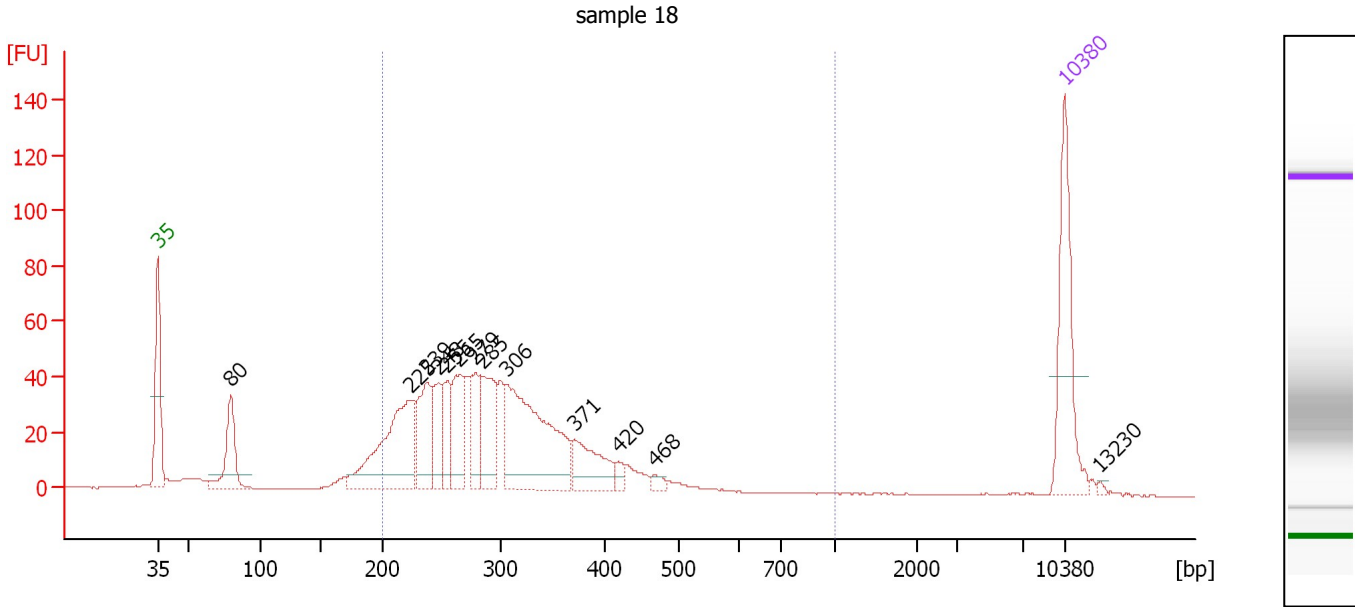
Region table for sample 6 : sample 17

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
200	1,000	323	1,192.45	953.3	6,112.8	88	29.3

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-12-26\2018-12-26_002.xad

Created: 12/26/2018 2:52:04 PM
 Modified: 12/26/2018 3:32:29 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : sample 18

Number of peaks found: 13 Corr. Area 1: 843.0
 Noise: 0.2

Peak table for sample 7 : sample 18

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	80	63.18	1,196.3		48.68
3	225	141.28	952.0		62.56
4	239	65.39	415.3		63.82
5	248	38.15	233.1		64.67
6	255	38.18	226.8		65.33
7	265	53.23	303.8		66.28
8	279	44.28	240.8		67.49
9	285	68.64	364.6		68.09
10	306	174.74	864.4		69.95
11	371	48.65	198.8		75.13
12	420	6.98	25.2		78.60
13	468	5.50	17.8		81.37
14	10,380	75.00	10.9	Upper Marker	113.00
15	13,230	0.00	0.0		115.72

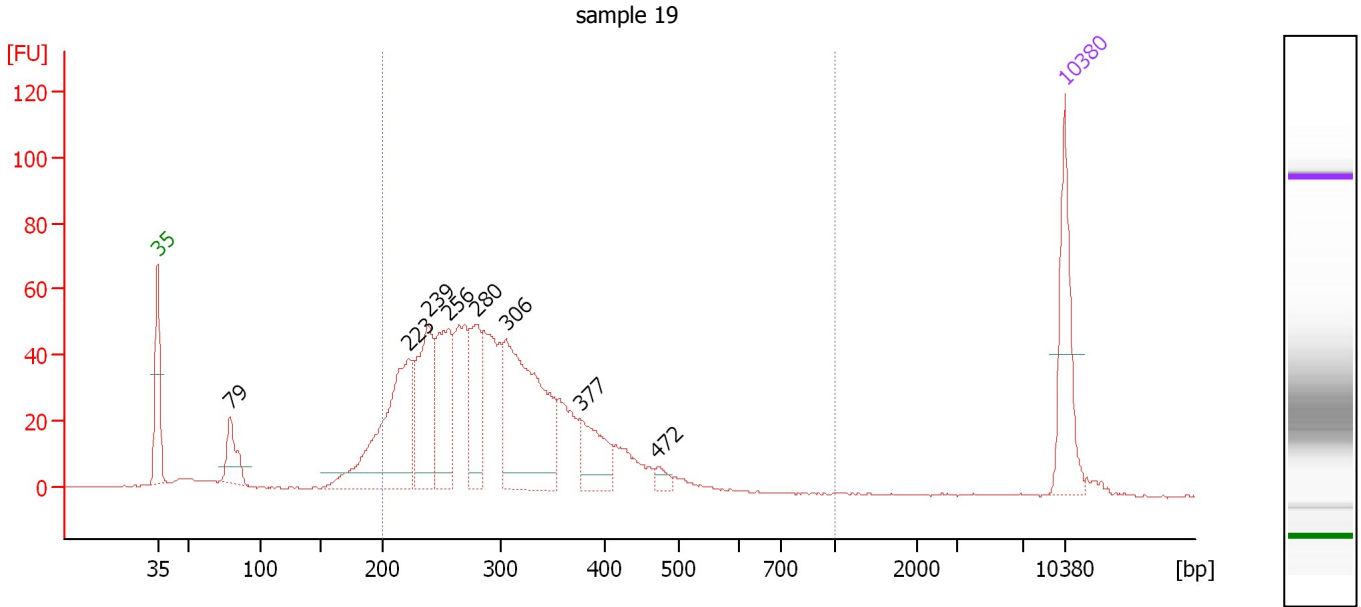
Region table for sample 7 : sample 18

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	302	742.05	843.0	3,949.2	85	23.8

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-12-26\2018-12-26_002.xad

Created: 12/26/2018 2:52:04 PM
 Modified: 12/26/2018 3:32:29 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : sample 19

Number of peaks found: 8 Corr. Area 1: 1,016.6
 Noise: 0.2

Peak table for sample 8 : sample 19

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	79	53.57	1,025.4		48.59
3	223	225.03	1,530.6		62.37
4	239	135.69	860.3		63.86
5	256	117.02	693.2		65.39
6	280	83.51	452.2		67.60
7	306	245.44	1,216.6		69.90
8	377	60.25	242.0		75.64
9	472	10.44	33.5		81.59
10	10,380	75.00	10.9	Upper Marker	113.00

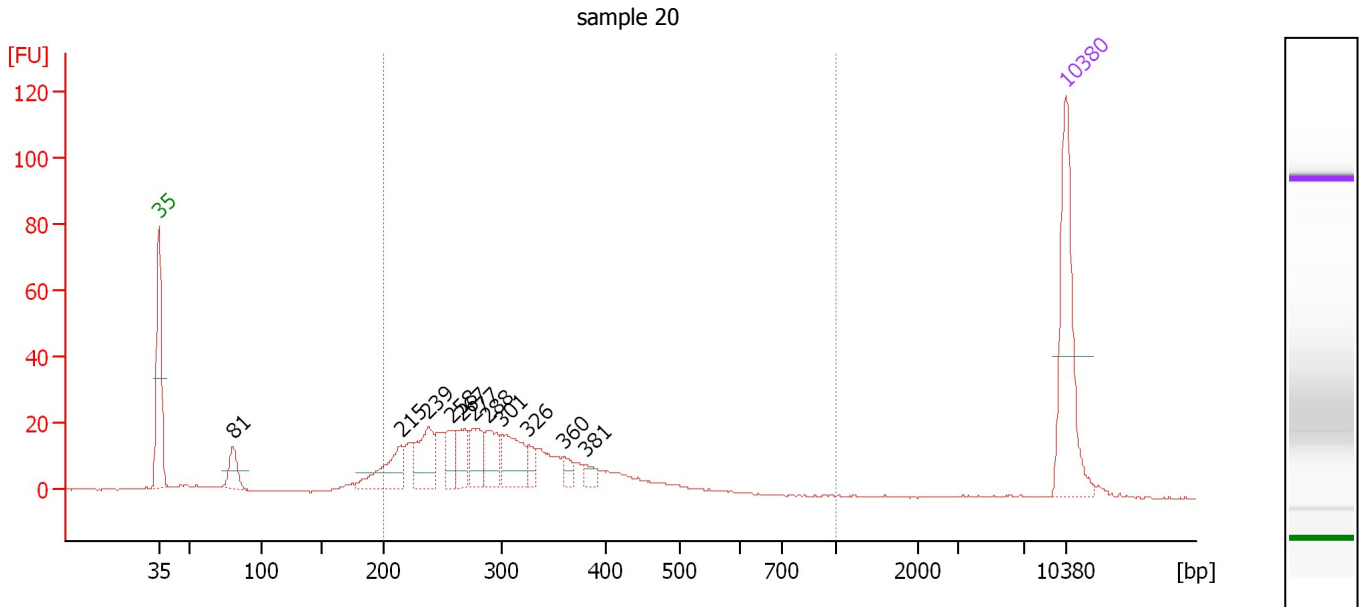
Region table for sample 8 : sample 19

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	302	1,179.38	1,016.6	6,273.7	88	23.1

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-12-26\2018-12-26_002.xad

Created: 12/26/2018 2:52:04 PM
 Modified: 12/26/2018 3:32:29 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : sample 20

Number of peaks found: 11 Corr. Area 1: 406.2
 Noise: 0.2

Peak table for sample 9 : sample 20

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	81	26.20	492.5		48.75
3	215	46.40	326.5		61.69
4	239	46.66	296.4		63.81
5	258	22.33	131.0		65.63
6	267	28.18	160.1		66.40
7	277	27.72	151.7		67.33
8	288	33.64	177.2		68.32
9	301	42.83	215.8		69.51
10	326	11.57	53.8		71.53
11	360	8.87	37.3		74.27
12	381	8.08	32.1		75.98
13	10,380	75.00	10.9	Upper Marker	113.00

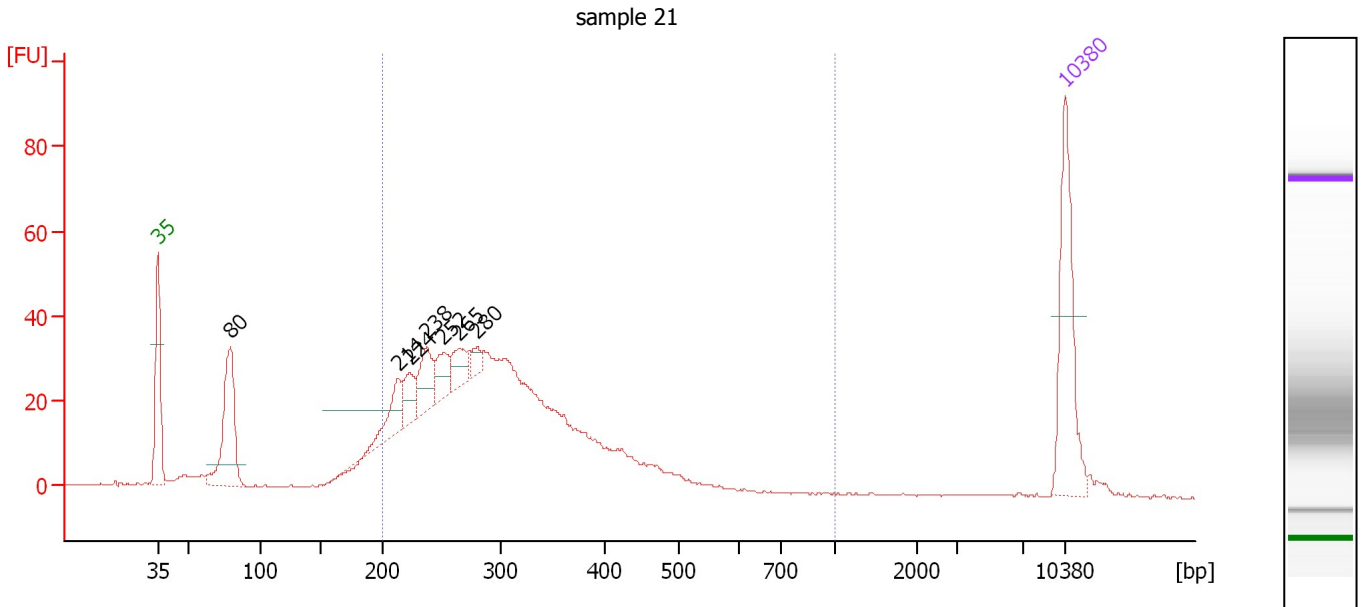
Region table for sample 9 : sample 20

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
200	1,000	310	429.60	406.2	2,254.7	86	25.8

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-12-26\2018-12-26_002.xad

Created: 12/26/2018 2:52:04 PM
 Modified: 12/26/2018 3:32:29 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : sample 21

Number of peaks found: 7 Corr. Area 1: 684.7
 Noise: 0.2

Peak table for sample 10 : sample 21

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	80	119.15	2,269.5		48.63
3	214	36.52	258.7		61.56
4	224	25.29	171.0		62.49
5	238	37.41	238.4		63.74
6	252	26.29	158.1		65.05
7	265	23.51	134.4		66.25
8	280	11.18	60.4		67.65
9	10,380	75.00	10.9	Upper Marker	113.00

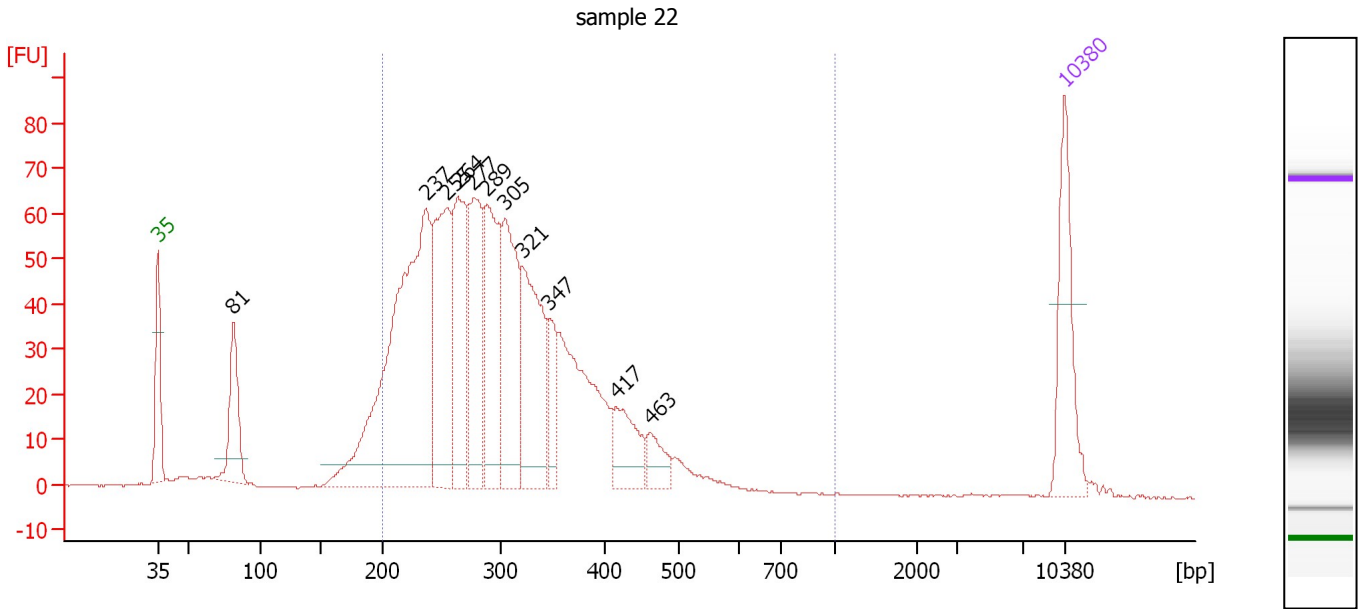
Region table for sample 10 : sample 21

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
200	1,000	304	913.29	684.7	4,853.7	83	24.2

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-12-26\2018-12-26_002.xad

Created: 12/26/2018 2:52:04 PM
 Modified: 12/26/2018 3:32:29 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : sample 22

Number of peaks found: 11 Corr. Area 1: 1,292.9
 Noise: 0.2

Peak table for sample 11 : sample 22

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	81	96.52	1,799.4		48.82
3	237	498.38	3,180.8		63.71
4	255	193.32	1,150.7		65.28
5	264	161.58	926.3		66.18
6	277	143.51	783.7		67.38
7	289	165.09	865.8		68.43
8	305	156.19	776.0		69.85
9	321	161.57	763.5		71.10
10	347	43.40	189.6		73.20
11	417	57.74	209.8		78.45
12	463	28.71	94.0		81.07
13	10,380	75.00	10.9	Upper Marker	113.00

Region table for sample 11 : sample 22

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	305	1,787.16	1,292.9	9,461.3	90	23.9

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2018-12-26\2018-12-26_002.xad

Created: 12/26/2018 2:52:04 PM
Modified: 12/26/2018 3:32:29 PM

Gel Image

