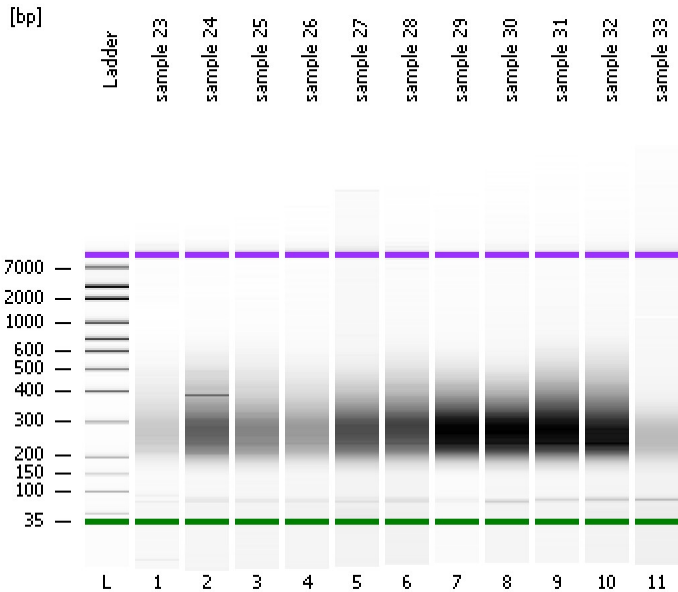


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2018-12-27\2018-12-27_001.xad

Created: 12/27/2018 10:39:56 AM
Modified: 12/27/2018 11:21:16 AM

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

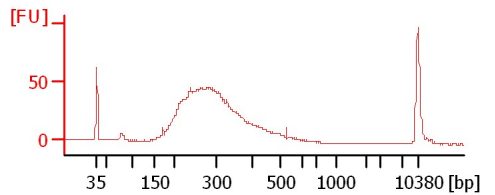
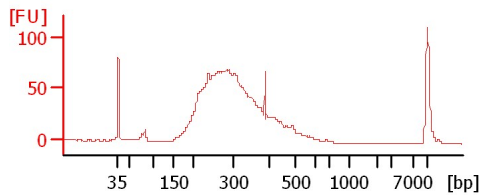
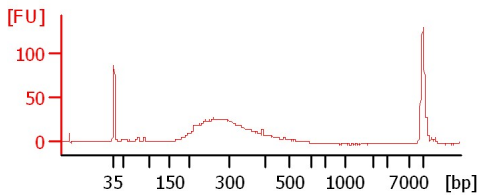
Chip Information:

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

sample 23

sample 24

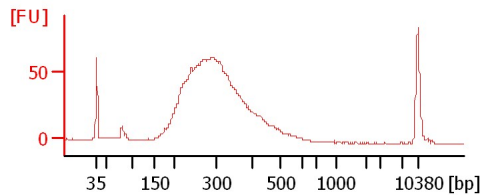
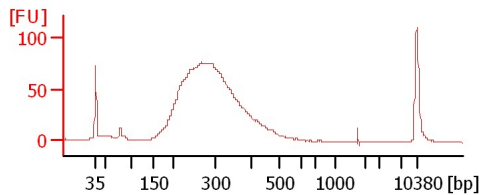
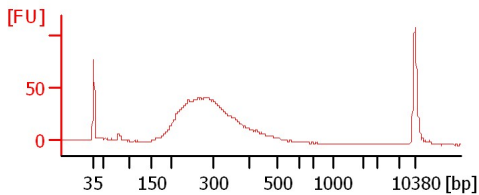
sample 25



sample 26

sample 27

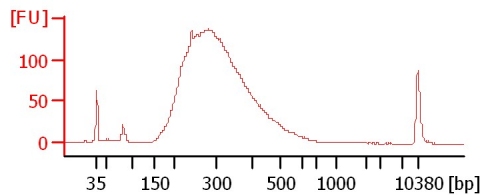
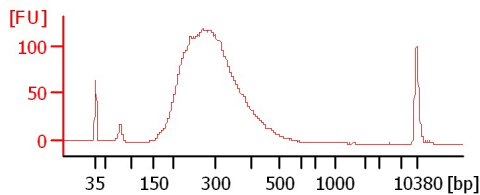
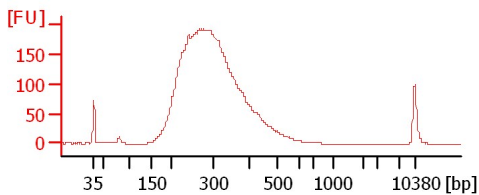
sample 28



sample 29

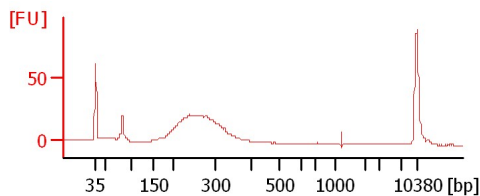
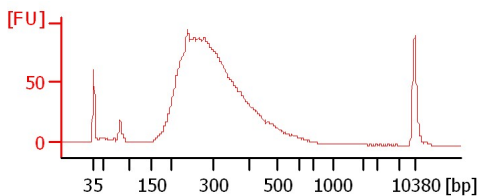
sample 30

sample 31



sample 32

sample 33



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-12-27\2018-12-27_001.xad

Created: 12/27/2018 10:39:56 AM
 Modified: 12/27/2018 11:21:16 AM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
sample 23		<input type="checkbox"/>	✓			
sample 24		<input type="checkbox"/>	✓			
sample 25		<input type="checkbox"/>	✓			
sample 26		<input type="checkbox"/>	✓			
sample 27		<input type="checkbox"/>	✓			
sample 28		<input type="checkbox"/>	✓			
sample 29		<input type="checkbox"/>	✓			
sample 30		<input type="checkbox"/>	✓			
sample 31		<input type="checkbox"/>	✓			
sample 32		<input type="checkbox"/>	✓			
sample 33		<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\2018-12-27\2018-12-27_001.xad

Created: 12/27/2018 10:39:56 AM
Modified: 12/27/2018 11:21:16 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

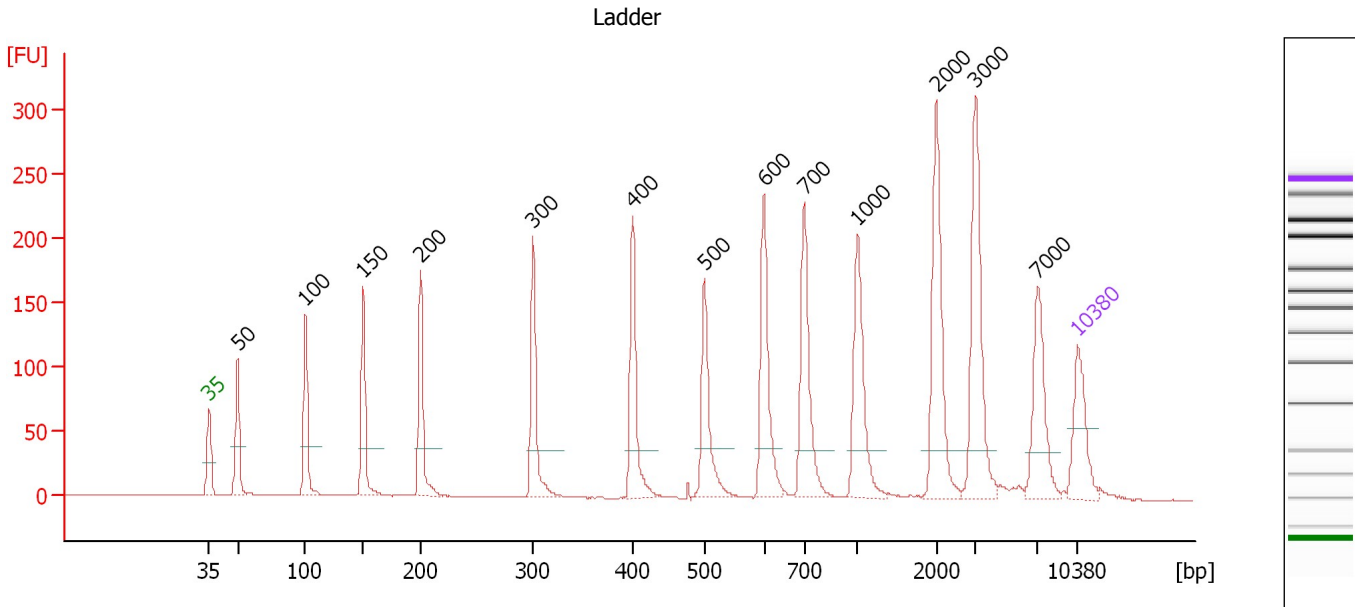
Ladder

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\2018-12-27\2018-12-27_001.xad

Created: 12/27/2018 10:39:56 AM
 Modified: 12/27/2018 11:21:16 AM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

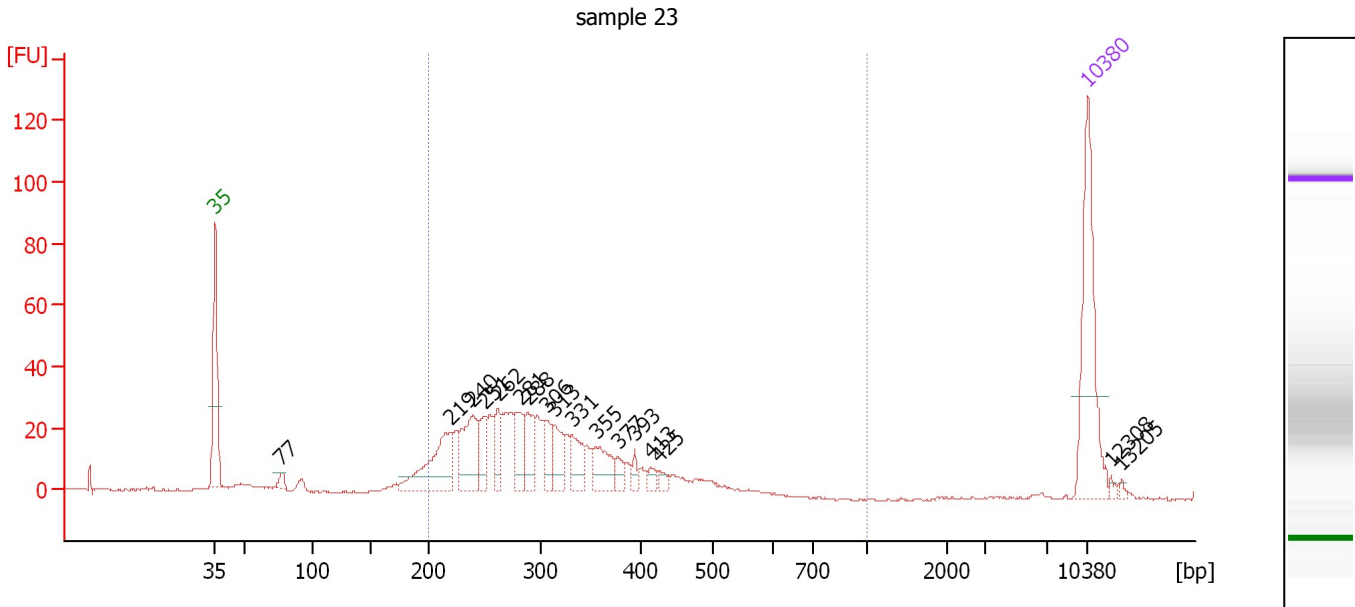
Peak table for Ladder

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	45.32
3	100	150.00	2,272.7	Ladder Peak	50.78
4	150	150.00	1,515.2	Ladder Peak	55.46
5	200	150.00	1,136.4	Ladder Peak	60.06
6	300	150.00	757.6	Ladder Peak	69.13
7	400	150.00	568.2	Ladder Peak	77.16
8	500	150.00	454.5	Ladder Peak	82.96
9	600	150.00	378.8	Ladder Peak	87.73
10	700	150.00	324.7	Ladder Peak	91.00
11	1,000	150.00	227.3	Ladder Peak	95.25
12	2,000	150.00	113.6	Ladder Peak	101.61
13	3,000	150.00	75.8	Ladder Peak	104.79
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\2018-12-27\2018-12-27_001.xad

Created: 12/27/2018 10:39:56 AM
 Modified: 12/27/2018 11:21:16 AM

Electropherogram Summary Continued ...



Overall Results for sample 1 : sample 23

Number of peaks found: 17 Corr. Area 1: 571.0
 Noise: 0.3

Peak table for sample 1 : sample 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	77	7.00	137.2		48.30
3	219	75.09	518.6		61.81
4	240	55.43	350.5		63.65
5	251	24.75	149.4		64.68
6	262	23.99	138.8		65.66
7	281	32.49	175.1		67.42
8	288	28.20	148.2		68.06
9	306	20.35	100.8		69.60
10	313	26.96	130.4		70.20
11	331	25.18	115.3		71.61
12	355	27.75	118.5		73.53
13	377	8.78	35.3		75.33
14	393	6.37	24.6		76.61
15	413	5.93	21.8		77.89
16	425	5.56	19.8		78.62
17	10,380	75.00	10.9	Upper Marker	113.00
18	12,308	0.00	0.0		114.84
19	13,205	0.00	0.0		115.69

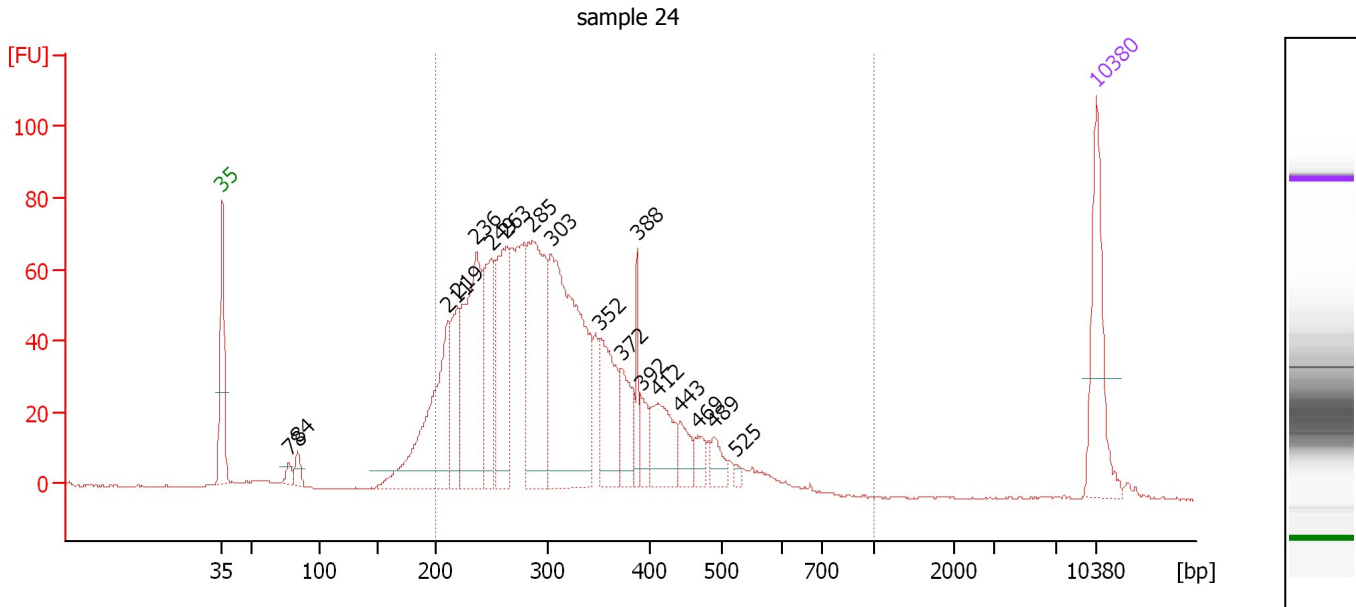
Region table for sample 1 : sample 23

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	308	538.55	571.0	2,832.9	89	24.4

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-12-27\2018-12-27_001.xad

Created: 12/27/2018 10:39:56 AM
 Modified: 12/27/2018 11:21:16 AM

Electropherogram Summary Continued ...



Overall Results for sample 2 : sample 24

Number of peaks found: 18 Corr. Area 1: 1,578.2
 Noise: 0.2

Peak table for sample 2 : sample 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	78	11.24	218.2		48.38
3	84	15.82	284.5		49.06
4	211	204.30	1,464.0		61.10
5	219	80.46	555.5		61.82
6	236	214.26	1,373.3		63.36
7	249	106.19	645.9		64.51
8	263	145.05	836.4		65.75
9	285	216.65	1,150.3		67.80
10	303	333.60	1,670.4		69.34
11	352	87.57	376.9		73.30
12	372	51.51	209.7		74.93
13	388	29.60	115.5		76.21
14	392	24.16	93.3		76.55
15	412	63.42	233.1		77.87
16	443	26.57	90.8		79.66
17	469	18.33	59.2		81.16
18	489	18.72	58.0		82.35
19	525	4.04	11.7		84.15
20	10,380	75.00	10.9	Upper Marker	113.00

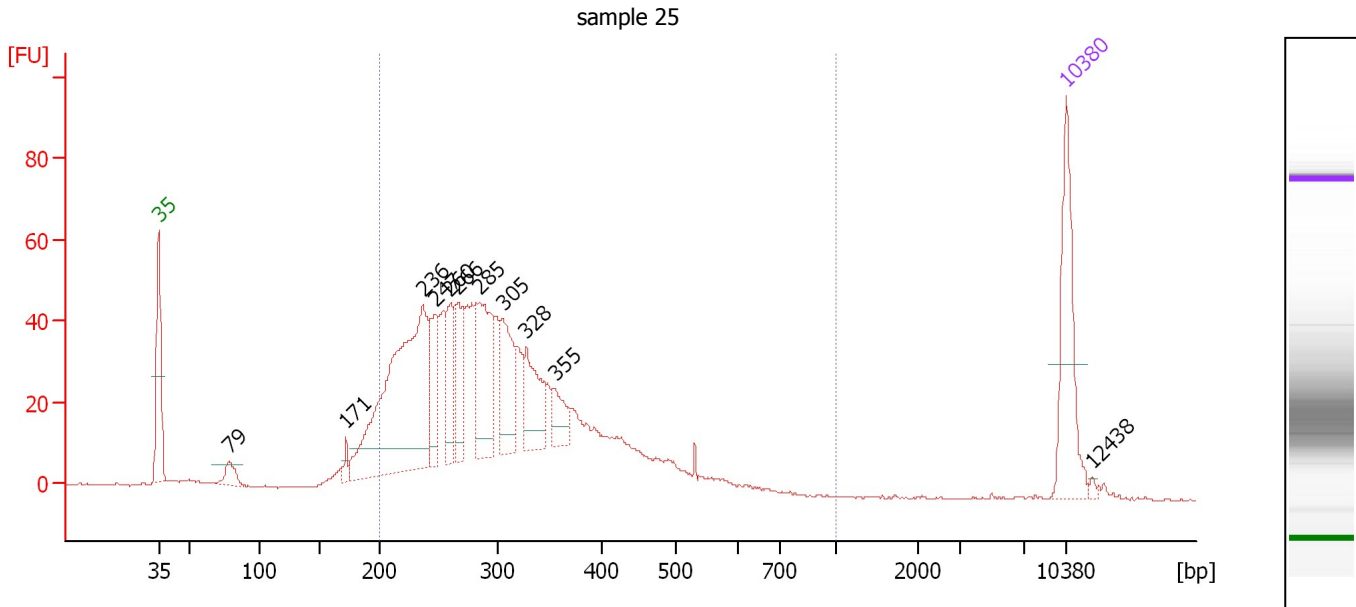
Region table for sample 2 : sample 24

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	316	1,808.65	1,578.2	9,399.5	92	26.6

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-12-27\2018-12-27_001.xad

Created: 12/27/2018 10:39:56 AM
 Modified: 12/27/2018 11:21:16 AM

Electropherogram Summary Continued ...



Overall Results for sample 3 : sample 25

Number of peaks found: 11 Corr. Area 1: 1,010.9
 Noise: 0.2

Peak table for sample 3 : sample 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	79	19.93	383.8		48.45
3	171	9.49	83.8		57.44
4	236	331.34	2,122.9		63.37
5	247	50.66	310.7		64.33
6	260	51.38	299.3		65.50
7	266	50.67	288.3		66.07
8	285	105.28	559.5		67.77
9	305	69.85	346.5		69.56
10	328	62.39	288.0		71.39
11	355	25.32	108.0		73.57
12	10,380	75.00	10.9	Upper Marker	113.00
13	12,438	0.00	0.0		114.96

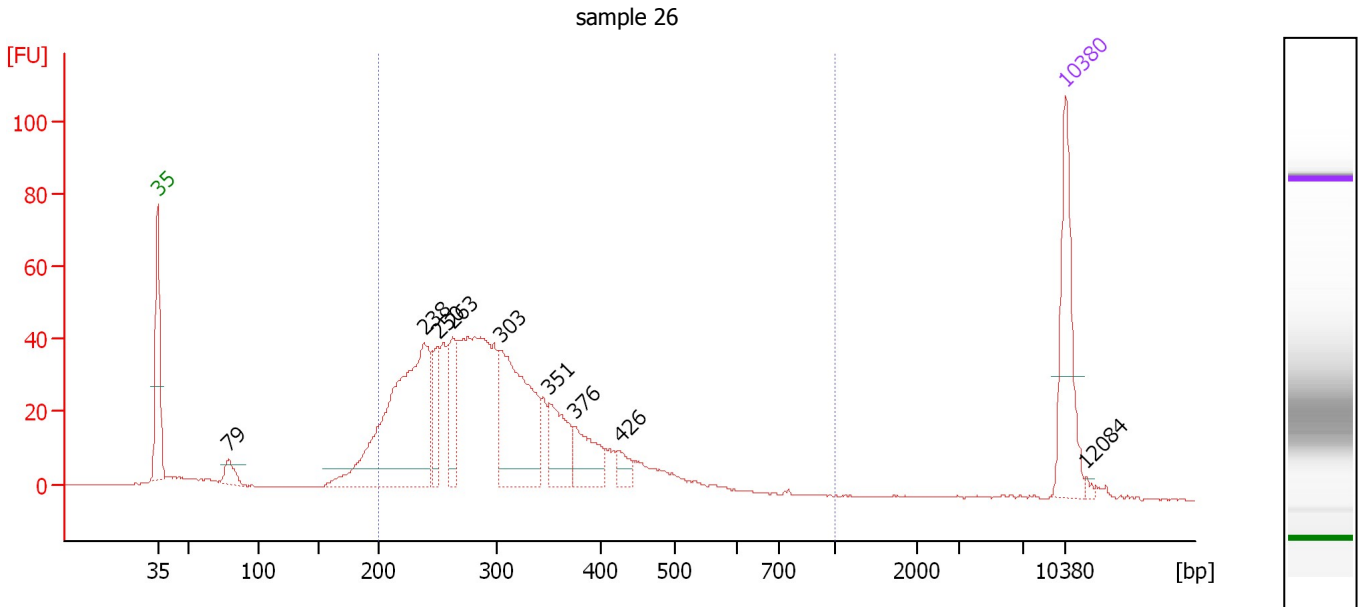
Region table for sample 3 : sample 25

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	311	1,327.05	1,010.9	6,998.7	90	27.0

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-12-27\2018-12-27_001.xad

Created: 12/27/2018 10:39:56 AM
 Modified: 12/27/2018 11:21:16 AM

Electropherogram Summary Continued ...



Overall Results for sample 4 : sample 26

Number of peaks found: 9 Corr. Area 1: 893.8
 Noise: 0.2

Peak table for sample 4 : sample 26

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	19.01	365.7		48.46
3	238	311.70	1,981.5		63.54
4	250	45.69	276.6		64.62
5	263	57.74	333.0		65.75
6	303	181.72	907.4		69.40
7	351	62.88	271.3		73.24
8	376	49.34	198.9		75.22
9	426	15.35	54.6		78.65
10	10,380	75.00	10.9	Upper Marker	113.00
11	12,084	0.00	0.0		114.62

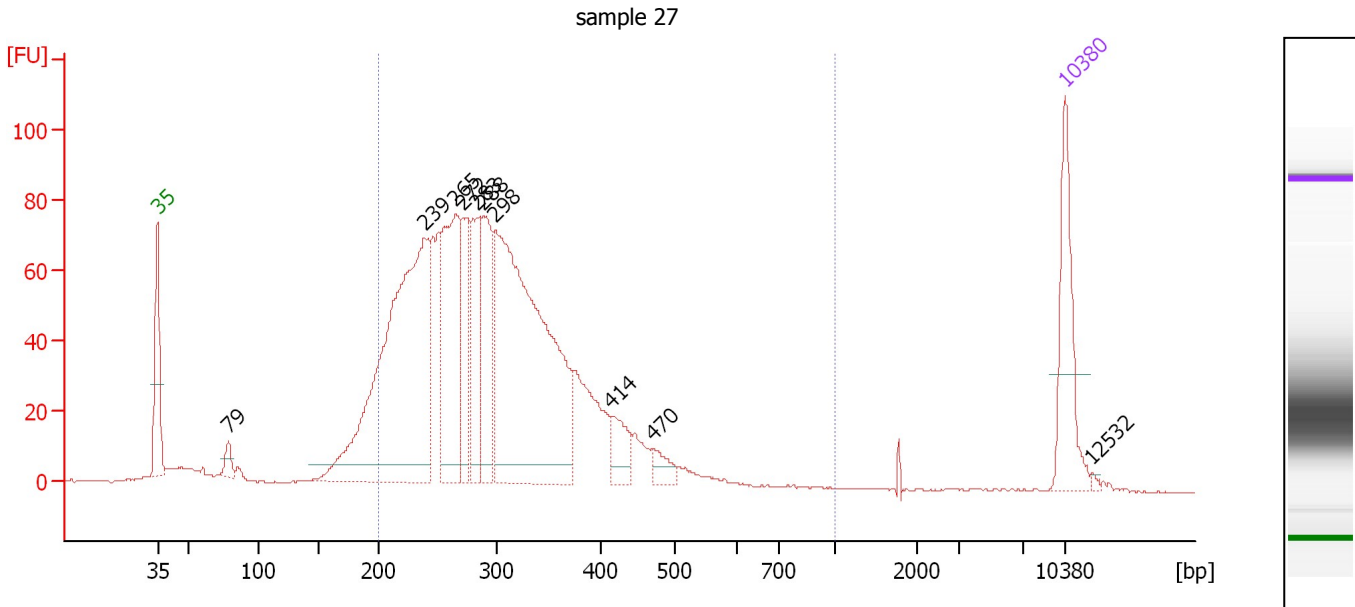
Region table for sample 4 : sample 26

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	308	1,085.08	893.8	5,728.1	89	25.6

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-12-27\2018-12-27_001.xad

Created: 12/27/2018 10:39:56 AM
 Modified: 12/27/2018 11:21:16 AM

Electropherogram Summary Continued ...



Overall Results for sample 5 : sample 27

Number of peaks found: 10 Corr. Area 1: 1,597.2
 Noise: 0.3

Peak table for sample 5 : sample 27

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	17.32	333.3		48.46
3	239	536.35	3,404.8		63.57
4	265	198.64	1,133.9		65.99
5	272	93.17	518.8		66.60
6	283	96.57	516.2		67.62
7	288	124.41	654.4		68.04
8	298	528.22	2,682.6		68.98
9	414	36.92	135.1		77.98
10	470	17.66	56.9		81.24
11	10,380	75.00	10.9	Upper Marker	113.00
12	12,532	0.00	0.0		115.05

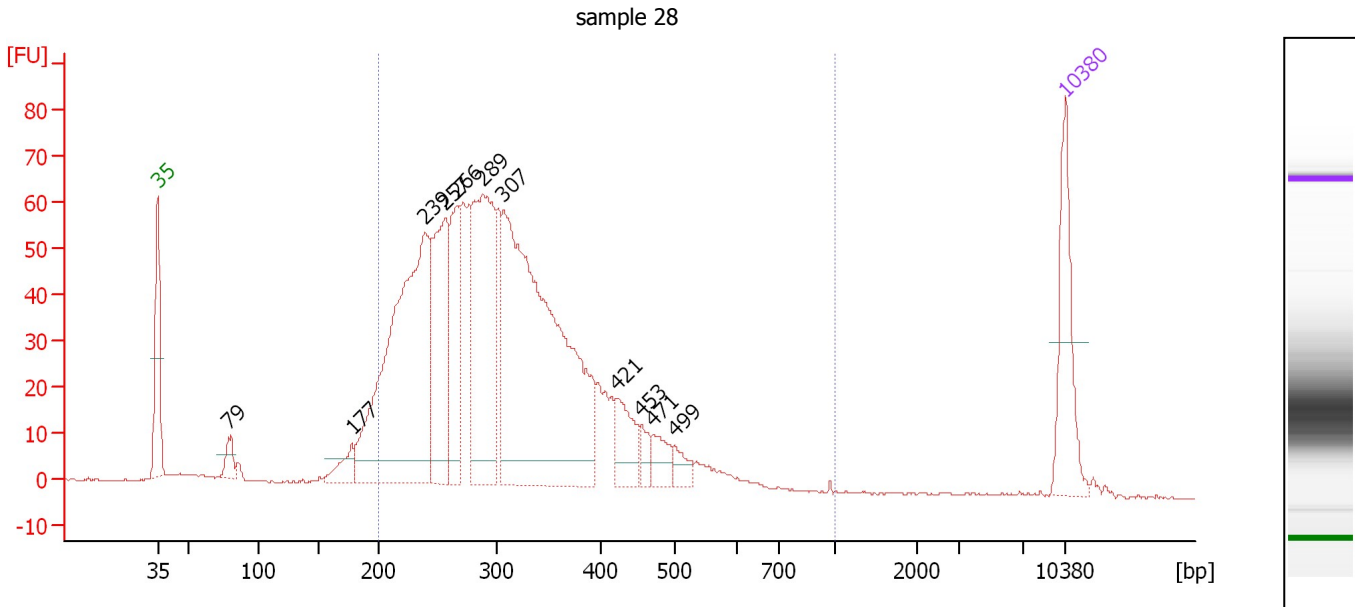
Region table for sample 5 : sample 27

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	304	1,797.23	1,597.2	9,545.3	90	24.7

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-12-27\2018-12-27_001.xad

Created: 12/27/2018 10:39:56 AM
 Modified: 12/27/2018 11:21:16 AM

Electropherogram Summary Continued ...



Overall Results for sample 6 : sample 28

Number of peaks found: 11 Corr. Area 1: 1,326.9
 Noise: 0.1

Peak table for sample 6 : sample 28

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	24.73	474.2		48.49
3	177	30.72	262.5		57.97
4	239	476.46	3,019.2		63.61
5	257	181.49	1,071.5		65.19
6	266	114.70	652.9		66.06
7	289	265.77	1,393.3		68.13
8	307	615.00	3,037.4		69.67
9	421	48.19	173.4		78.39
10	453	16.49	55.1		80.26
11	471	26.71	85.9		81.27
12	499	17.56	53.3		82.91
13	10,380	75.00	10.9	Upper Marker	113.00

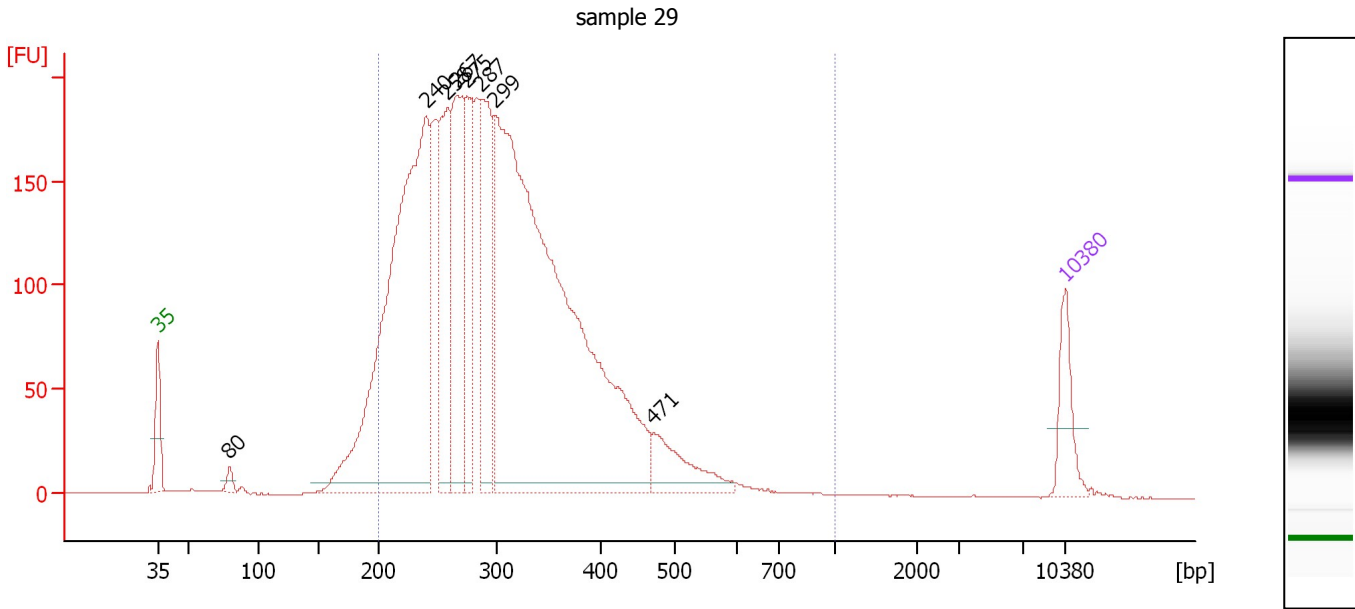
Region table for sample 6 : sample 28

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	1,973.55	1,326.9	10,241.7	92	26.2

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-12-27\2018-12-27_001.xad

Created: 12/27/2018 10:39:56 AM
 Modified: 12/27/2018 11:21:16 AM

Electropherogram Summary Continued ...



Overall Results for sample 7 : sample 29

Number of peaks found: 8 Corr. Area 1: 4,042.0
 Noise: 0.1

Peak table for sample 7 : sample 29

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	22.96	437.3		48.54
3	240	1,380.51	8,712.6		63.69
4	258	324.51	1,905.1		65.33
5	267	366.55	2,081.4		66.12
6	275	252.32	1,390.1		66.86
7	287	344.23	1,817.1		67.95
8	299	2,090.08	10,589.7		69.04
9	471	129.30	416.1		81.27
10	10,380	75.00	10.9	Upper Marker	113.00

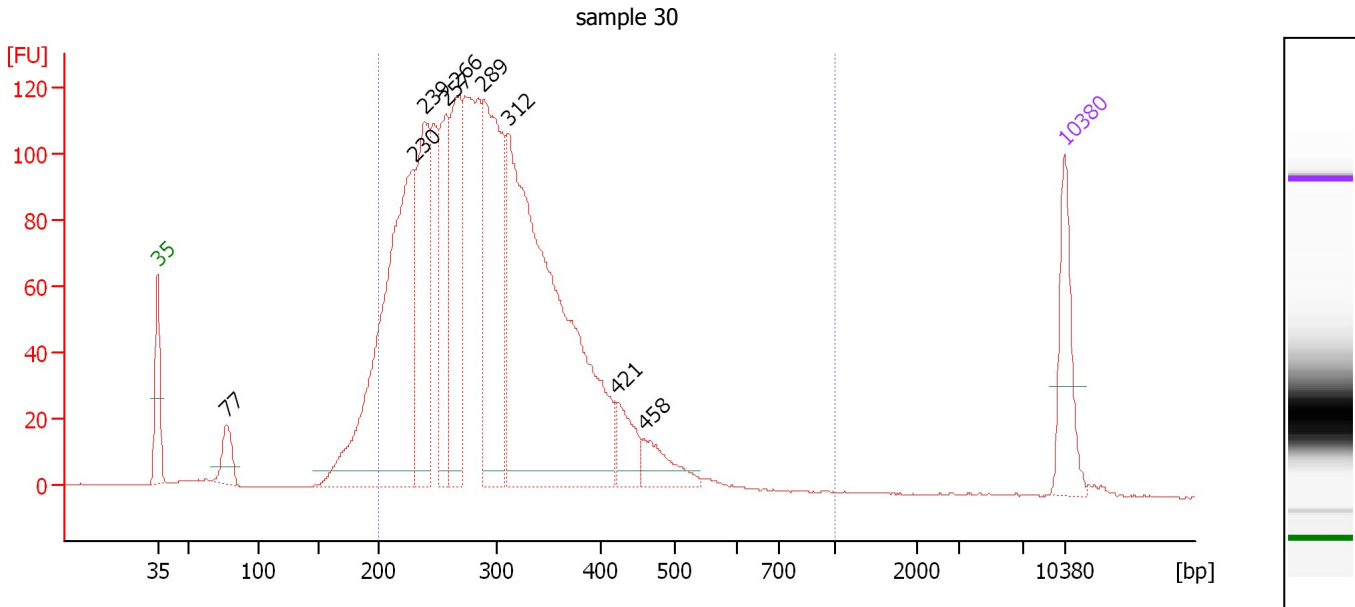
Region table for sample 7 : sample 29

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	309	5,012.15	4,042.0	26,334.4	94	26.3

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-12-27\2018-12-27_001.xad

Created: 12/27/2018 10:39:56 AM
 Modified: 12/27/2018 11:21:16 AM

Electropherogram Summary Continued ...



Overall Results for sample 8 : sample 30

Number of peaks found: 9 Corr. Area 1: 2,365.3
 Noise: 0.2

Peak table for sample 8 : sample 30

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	52.42	1,027.1		48.30
3	230	623.71	4,105.2		62.80
4	239	243.90	1,545.5		63.61
5	257	190.00	1,118.0		65.27
6	266	228.91	1,301.9		66.08
7	289	375.70	1,971.8		68.10
8	312	877.18	4,263.2		70.07
9	421	55.65	200.1		78.40
10	458	52.61	174.1		80.53
11	10,380	75.00	10.9	Upper Marker	113.00

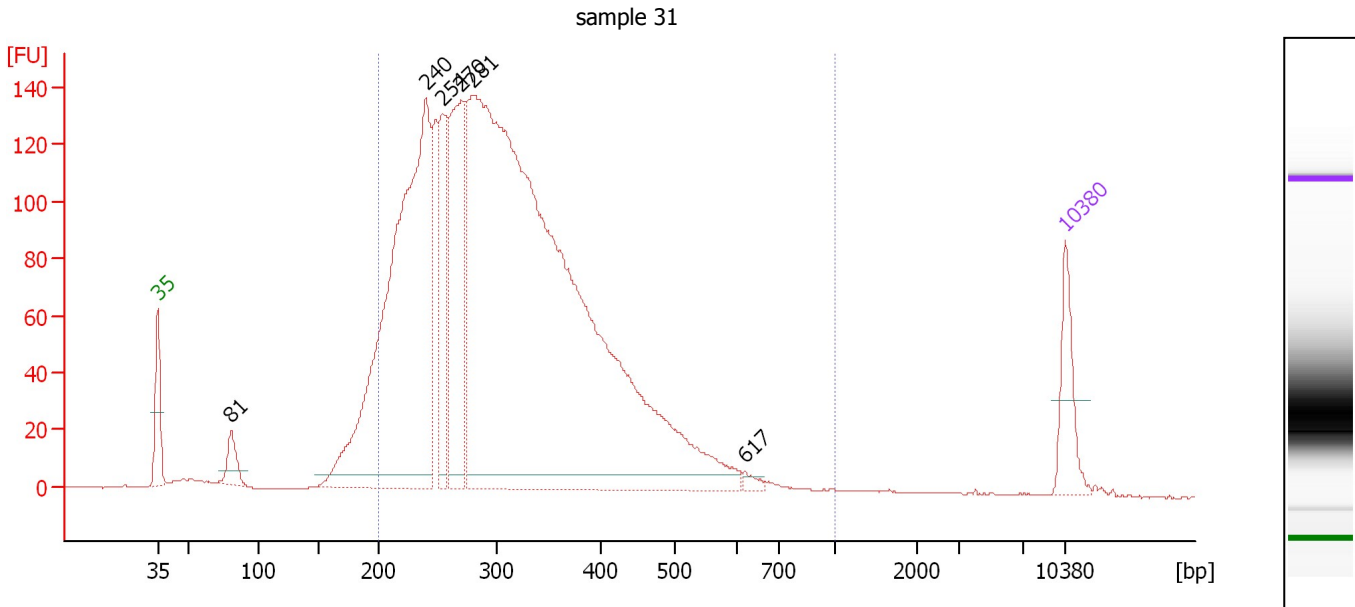
Region table for sample 8 : sample 30

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	2,970.42	2,365.3	15,825.8	92	23.8

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-12-27\2018-12-27_001.xad

Created: 12/27/2018 10:39:56 AM
 Modified: 12/27/2018 11:21:16 AM

Electropherogram Summary Continued ...



Overall Results for sample 9 : sample 31

Number of peaks found: 6 Corr. Area 1: 3,024.7
 Noise: 0.2

Peak table for sample 9 : sample 31

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	58.83	1,101.9		48.69
3	240	1,231.23	7,761.7		63.72
4	254	207.25	1,233.9		65.00
5	270	408.78	2,291.2		66.44
6	281	2,935.19	15,854.4		67.36
7	617	11.01	27.0		88.28
8	10,380	75.00	10.9	Upper Marker	113.00

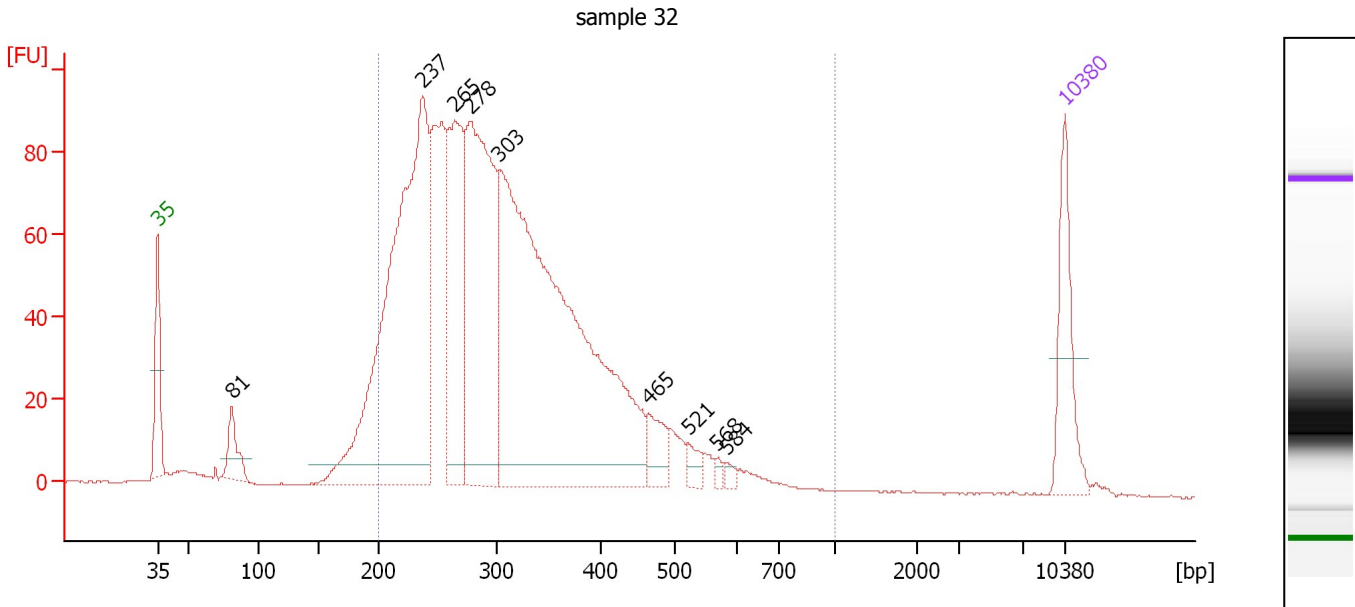
Region table for sample 9 : sample 31

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	319	4,484.69	3,024.7	23,149.4	92	28.2

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-12-27\2018-12-27_001.xad

Created: 12/27/2018 10:39:56 AM
 Modified: 12/27/2018 11:21:16 AM

Electropherogram Summary Continued ...



Overall Results for sample 10 : sample 32

Number of peaks found: 9 Corr. Area 1: 1,893.5
 Noise: 0.2

Peak table for sample 10 : sample 32

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	51.55	962.9		48.72
3	237	736.86	4,703.2		63.45
4	265	247.01	1,414.2		65.92
5	278	429.29	2,342.1		67.11
6	303	959.38	4,796.4		69.37
7	465	40.62	132.5		80.91
8	521	16.16	47.0		83.95
9	568	5.86	15.6		86.22
10	584	7.11	18.4		86.99
11	10,380	75.00	10.9	Upper Marker	113.00

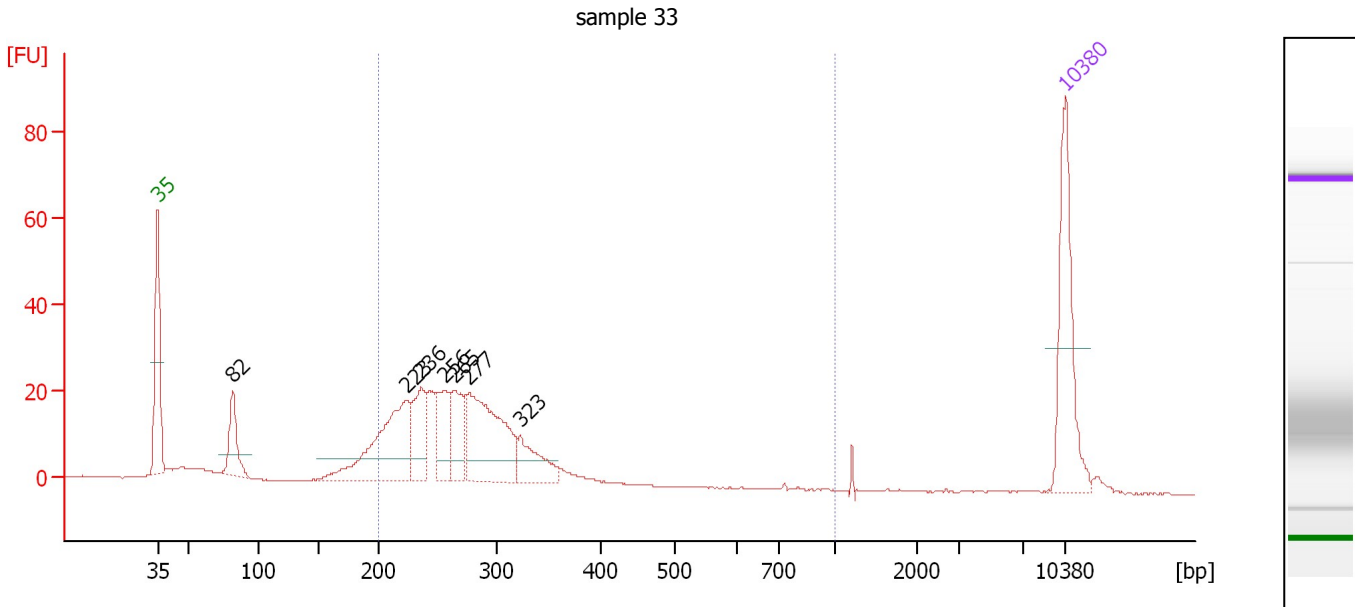
Region table for sample 10 : sample 32

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	315	2,576.46	1,893.5	13,487.5	92	28.6

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-12-27\2018-12-27_001.xad

Created: 12/27/2018 10:39:56 AM
 Modified: 12/27/2018 11:21:16 AM

Electropherogram Summary Continued ...



Overall Results for sample 11 : sample 33

Number of peaks found: 7 Corr. Area 1: 327.1
 Noise: 0.2

Peak table for sample 11 : sample 33

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	82	47.18	875.7		48.77
3	223	128.17	868.9		62.19
4	236	50.77	325.8		63.33
5	256	43.16	255.8		65.10
6	265	43.89	251.1		65.93
7	277	128.26	702.0		67.03
8	323	36.77	172.5		70.98
9	10,380	75.00	10.9	Upper Marker	113.00

Region table for sample 11 : sample 33

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	270	450.41	327.1	2,584.8	79	16.6

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2018-12-27\2018-12-27_001.xad

Created: 12/27/2018 10:39:56 AM
Modified: 12/27/2018 11:21:16 AM

Gel Image

