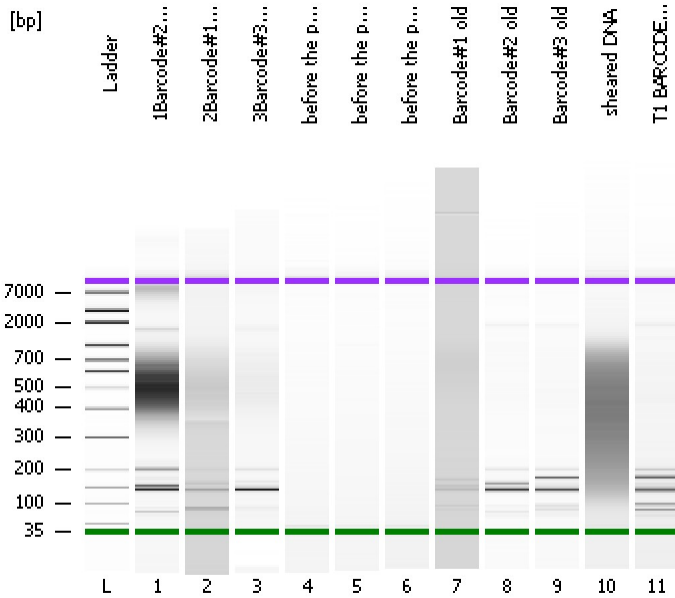


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2018-12-10\2018-12-10_001.xad

Created: 12/10/2018 2:33:20 PM
Modified: 12/10/2018 3:14:41 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

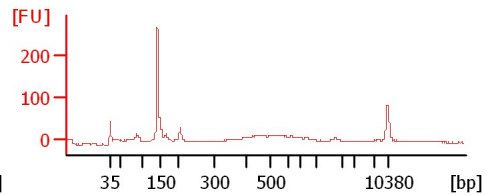
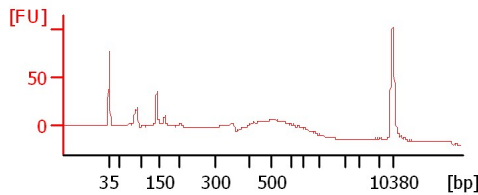
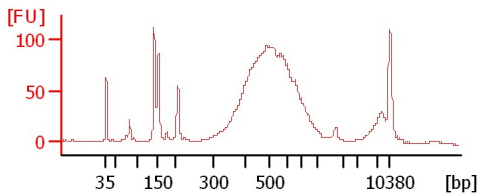
Chip Information:

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

1Barcode#2 new

2Barcode#1 new

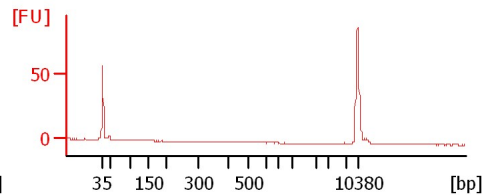
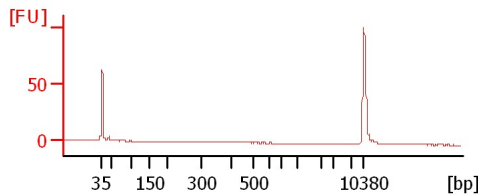
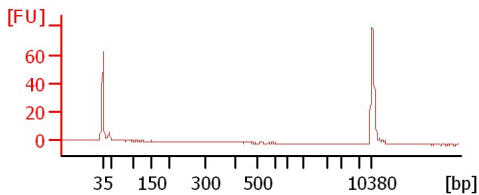
3Barcode#3 new



before the pcr1

before the pcr2

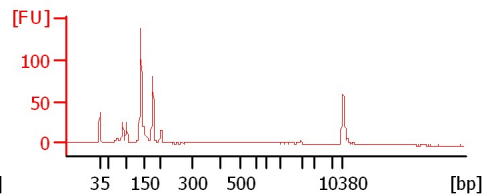
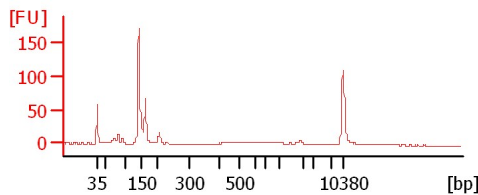
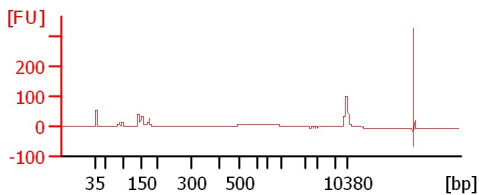
before the pcr3



Barcode#1 old

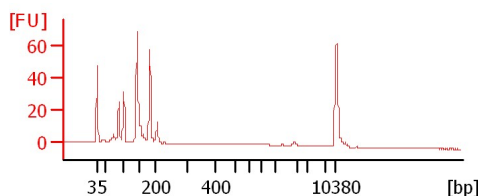
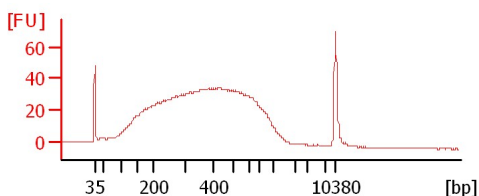
Barcode#2 old

Barcode#3 old



sheared DNA

T1 BARCODE#1



Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2018-12-10\2018-12-10_001.xad

Created: 12/10/2018 2:33:20 PM
Modified: 12/10/2018 3:14:41 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
1Barcode#2 new		<input type="checkbox"/>	✓			
2Barcode#1 new		<input type="checkbox"/>	✓			
3Barcode#3 new		<input type="checkbox"/>	✓			
before the pcr1		<input type="checkbox"/>	✓			
before the pcr2		<input type="checkbox"/>	✓			
before the pcr3		<input type="checkbox"/>	✓			
Barcode#1 old		<input type="checkbox"/>	✓			
Barcode#2 old		<input type="checkbox"/>	✓			
Barcode#3 old		<input type="checkbox"/>	✓			
sheared DNA		<input type="checkbox"/>	✓			
T1 BARCODE#1		<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\2018-12-10\2018-12-10_001.xad

Created: 12/10/2018 2:33:20 PM
Modified: 12/10/2018 3:14:41 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

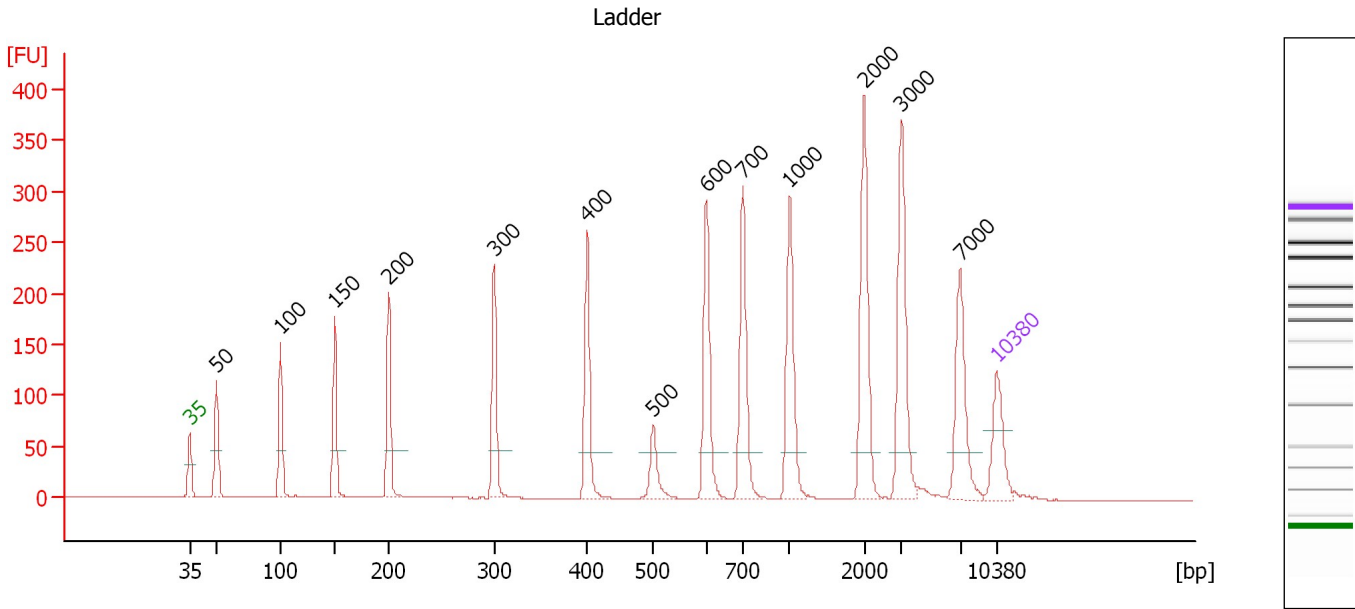
Ladder

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\2018-12-10\2018-12-10_001.xad

Created: 12/10/2018 2:33:20 PM
 Modified: 12/10/2018 3:14:41 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

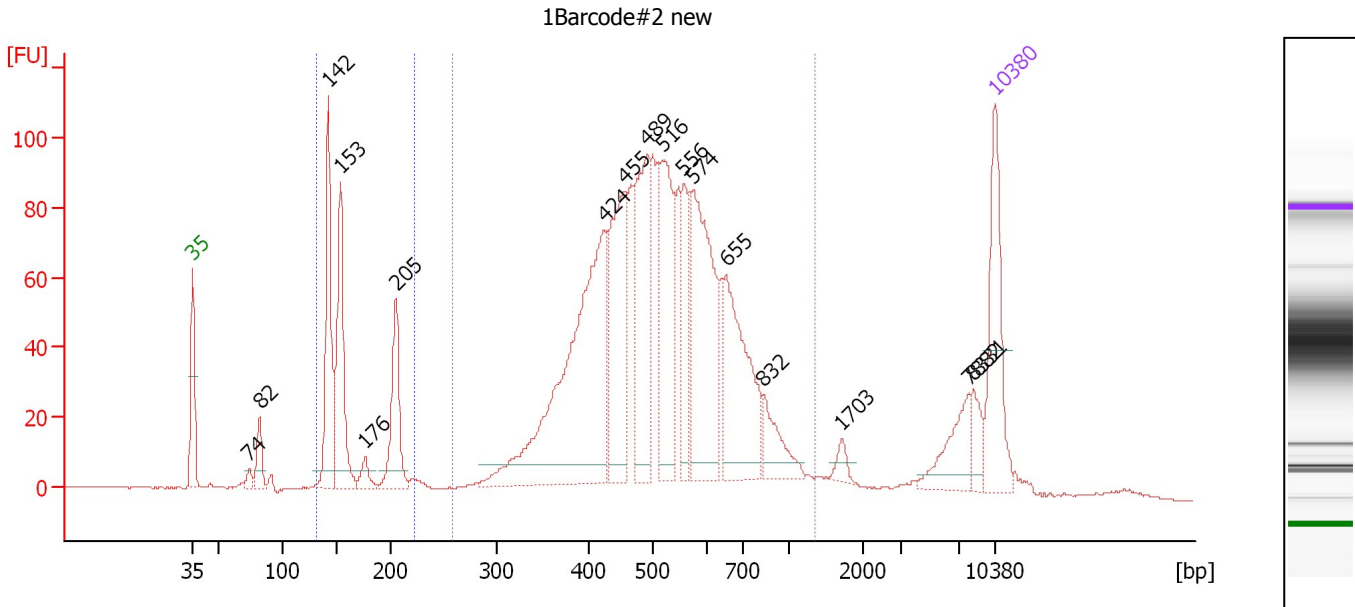
Peak table for Ladder

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	45.31
3	100	150.00	2,272.7	Ladder Peak	50.87
4	150	150.00	1,515.2	Ladder Peak	55.58
5	200	150.00	1,136.4	Ladder Peak	60.26
6	300	150.00	757.6	Ladder Peak	69.42
7	400	150.00	568.2	Ladder Peak	77.51
8	500	150.00	454.5	Ladder Peak	83.20
9	600	150.00	378.8	Ladder Peak	87.83
10	700	150.00	324.7	Ladder Peak	90.98
11	1,000	150.00	227.3	Ladder Peak	95.05
12	2,000	150.00	113.6	Ladder Peak	101.53
13	3,000	150.00	75.8	Ladder Peak	104.76
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\2018-12-10\2018-12-10_001.xad

Created: 12/10/2018 2:33:20 PM
 Modified: 12/10/2018 3:14:41 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : 1Barcode#2 new

Number of peaks found: 17 Corr. Area 1: 1,726.1
 Noise: 0.3 Corr. Area 2: 319.4

Peak table for sample 1 : 1Barcode#2 new

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	74	8.34	171.8		47.93
3	82	29.57	549.5		48.81
4	142	142.35	1,520.6		54.81
5	153	137.41	1,359.0		55.88
6	176	14.93	128.5		58.02
7	205	82.13	606.8		60.72
8	424	342.00	1,223.1		78.86
9	455	151.87	506.1		80.63
10	489	145.16	449.7		82.58
11	516	130.00	382.0		83.93
12	556	55.96	152.5		85.79
13	574	180.50	476.5		86.63
14	655	132.42	306.4		89.56
15	832	37.34	68.0		92.77
16	1,703	8.45	7.5		99.60
17	7,882	38.48	7.4		110.67
18	8,331	17.82	3.2		111.09
19	10,380	75.00	10.9	Upper Marker	113.00

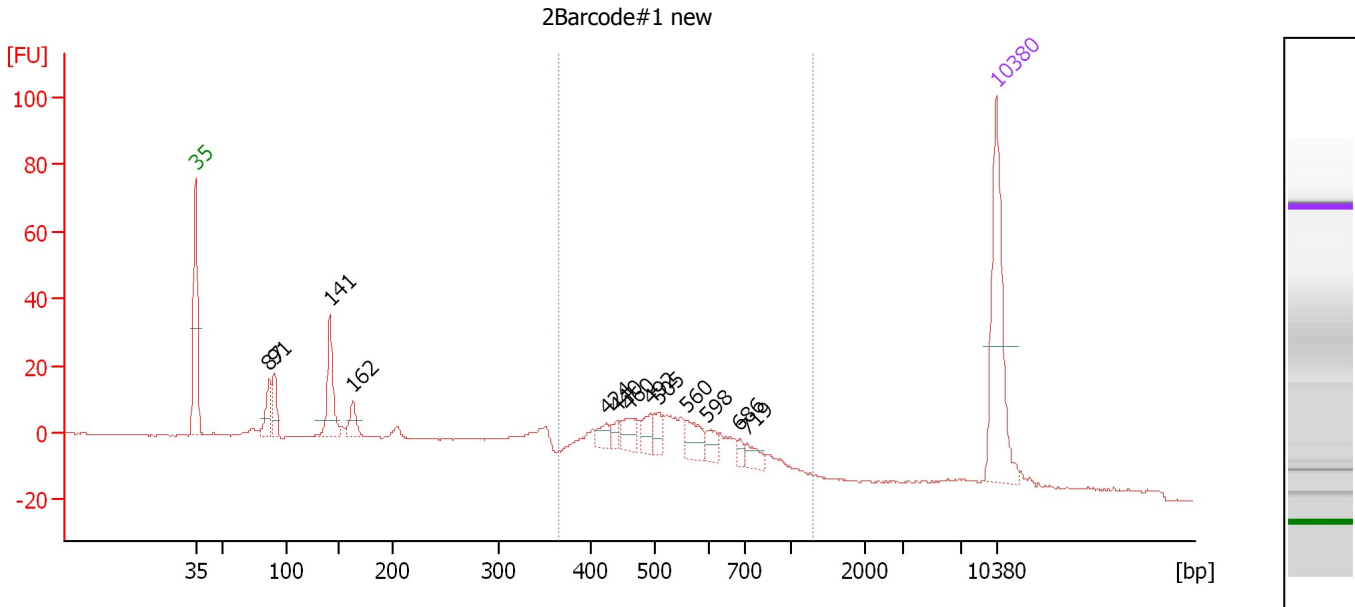
Region table for sample 1 : 1Barcode#2 new

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
131	223	164	390.26	319.4	3,709.3	14	15.7
260	1,347	530	1,528.42	1,726.1	4,740.4	76	27.0

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-12-10\2018-12-10_001.xad

Created: 12/10/2018 2:33:20 PM
 Modified: 12/10/2018 3:14:41 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : 2Barcode#1 new

Number of peaks found: 13 Corr. Area 1: 269.3
 Noise: 0.2

Peak table for sample 2 : 2Barcode#1 new

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	87	26.15	455.0		49.43
3	91	24.32	403.7		49.90
4	141	52.94	568.4		54.74
5	162	16.50	153.8		56.75
6	424	9.78	34.9		78.89
7	440	7.39	25.4		79.82
8	460	15.80	52.0		80.94
9	492	13.76	42.4		82.75
10	505	11.25	33.7		83.45
11	560	19.93	54.0		85.97
12	598	10.09	25.6		87.74
13	686	4.96	10.9		90.54
14	719	9.74	20.5		91.24
15	10,380	75.00	10.9	Upper Marker	113.00

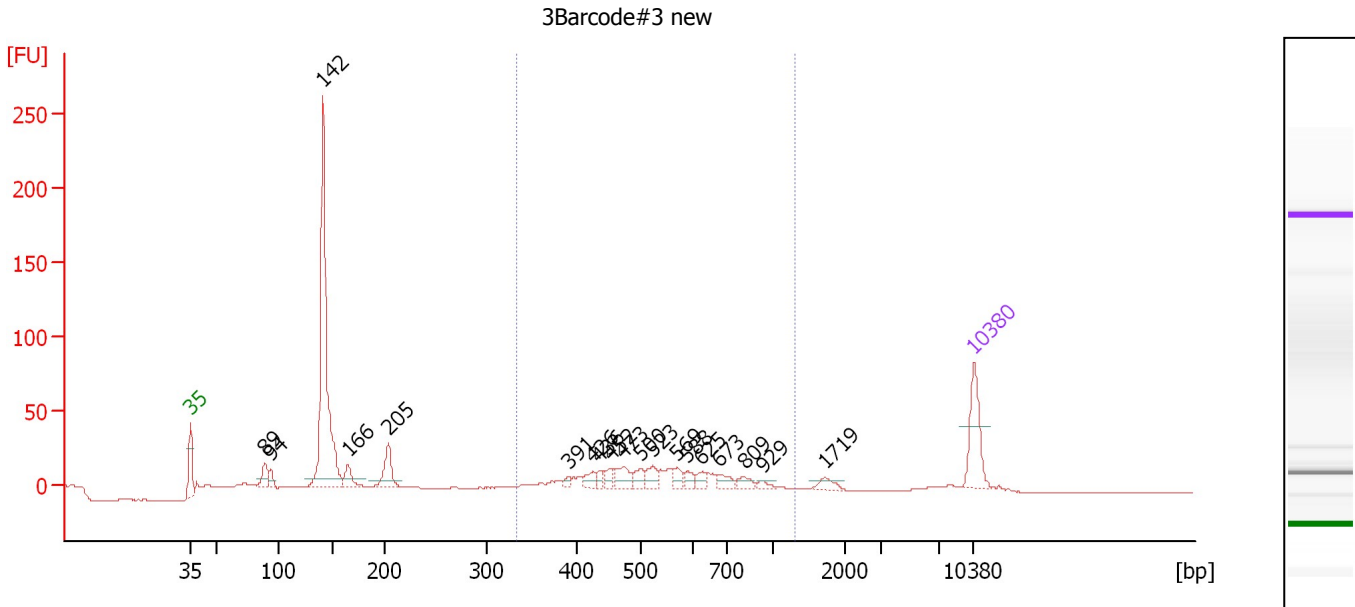
Region table for sample 2 : 2Barcode#1 new

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
365	1,284	556	247.80	269.3	725.7	42	26.1

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-12-10\2018-12-10_001.xad

Created: 12/10/2018 2:33:20 PM
 Modified: 12/10/2018 3:14:41 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : 3Barcode#3 new

Number of peaks found: 19 Corr. Area 1: 266.1
 Noise: 0.2

Peak table for sample 3 : 3Barcode#3 new

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	89	40.66	693.6		49.62
3	94	21.41	346.8		50.15
4	142	584.11	6,237.9		54.82
5	166	36.82	336.6		57.06
6	205	64.95	481.0		60.68
7	391	9.01	34.9		76.78
8	426	19.44	69.2		78.98
9	436	12.35	42.9		79.55
10	452	18.35	61.6		80.45
11	473	36.34	116.3		81.69
12	500	21.29	64.5		83.22
13	523	24.98	72.4		84.27
14	569	18.35	48.8		86.41
15	588	16.04	41.3		87.27
16	625	14.42	35.0		88.60
17	673	18.55	41.8		90.13
18	809	14.24	26.7		92.46
19	929	7.26	11.9		94.08
20	1,719	12.99	11.5		99.71
21	10,380	75.00	10.9	Upper Marker	113.00

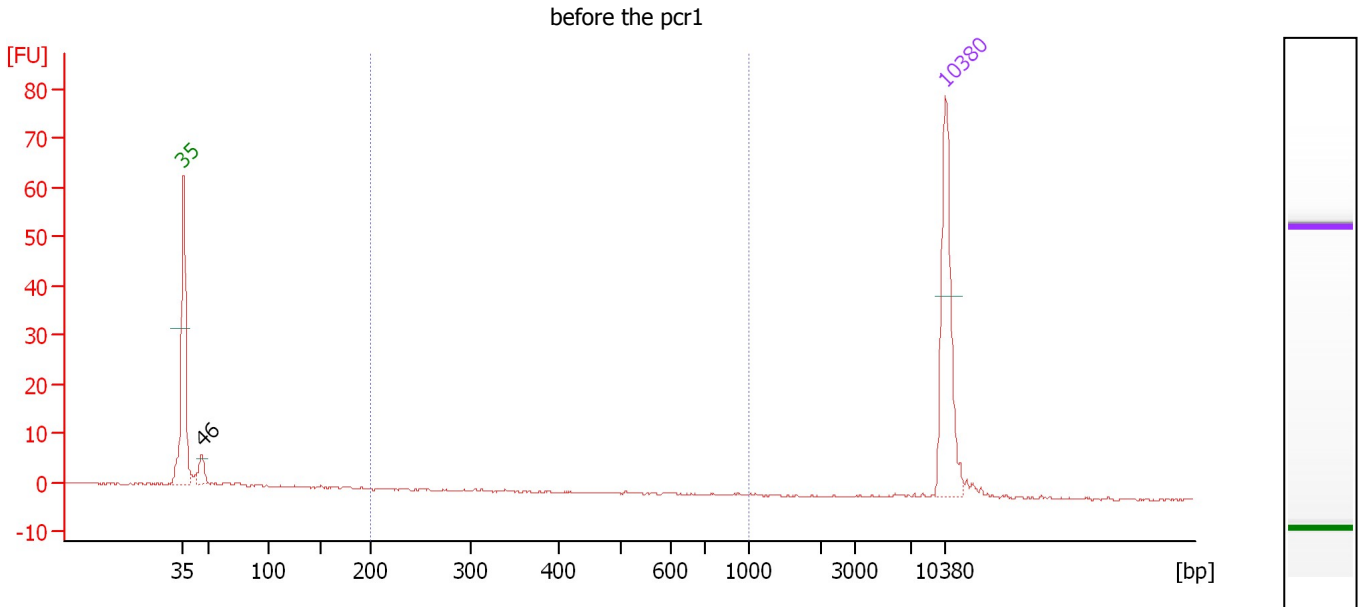
Region table for sample 3 : 3Barcode#3 new

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
335	1,288	561	361.53	266.1	1,066.6	37	28.3

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-12-10\2018-12-10_001.xad

Created: 12/10/2018 2:33:20 PM
 Modified: 12/10/2018 3:14:41 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : before the pcr1

Number of peaks found: 1 Corr. Area 1: 0.0
 Noise: 0.2

Peak table for sample 4 : before the pcr1

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	46	17.14	563.2		44.71
3	10,380	75.00	10.9	Upper Marker	113.00

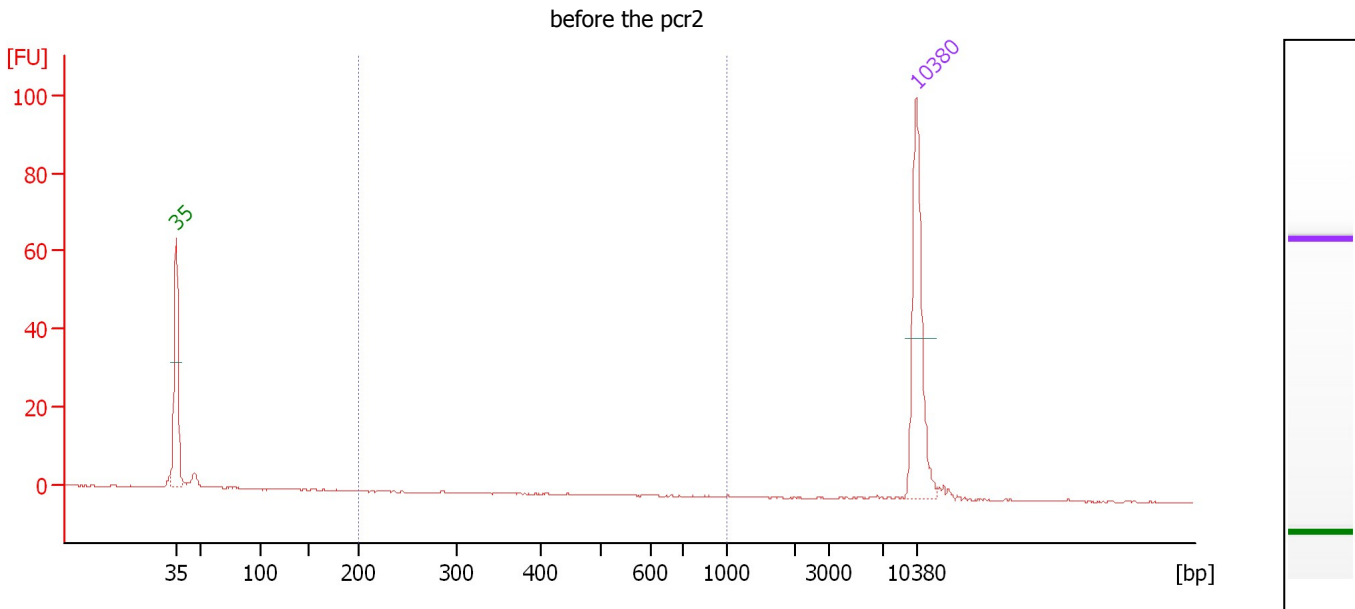
Region table for sample 4 : before the pcr1

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	0.00	0.0	0.0	0	0.0

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-12-10\2018-12-10_001.xad

Created: 12/10/2018 2:33:20 PM
 Modified: 12/10/2018 3:14:41 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : before the pcr2

Number of peaks found: 0 Corr. Area 1: 0.0
 Noise: 0.1

Peak table for sample 5 : before the pcr2

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

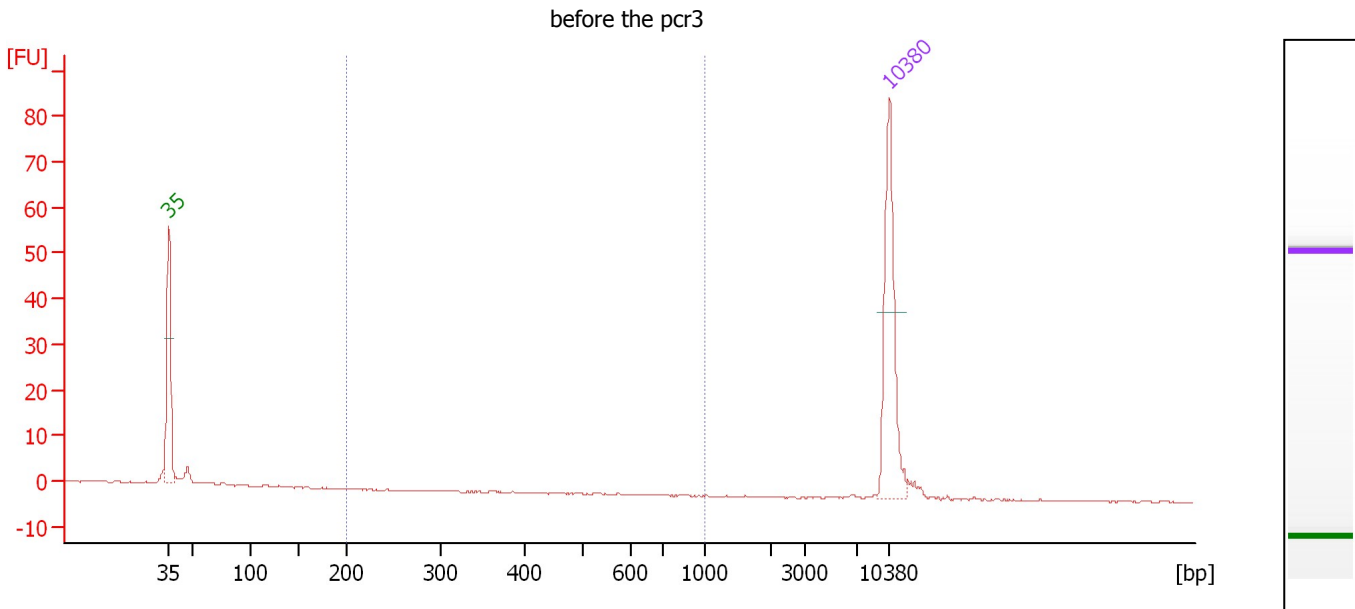
Region table for sample 5 : before the pcr2

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	0	0.00	0.0	0.0	0	0.0

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-12-10\2018-12-10_001.xad

Created: 12/10/2018 2:33:20 PM
 Modified: 12/10/2018 3:14:41 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : before the pcr3

Number of peaks found: 0 Corr. Area 1: 0.0
 Noise: 0.2

Peak table for sample 6 : before the pcr3

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

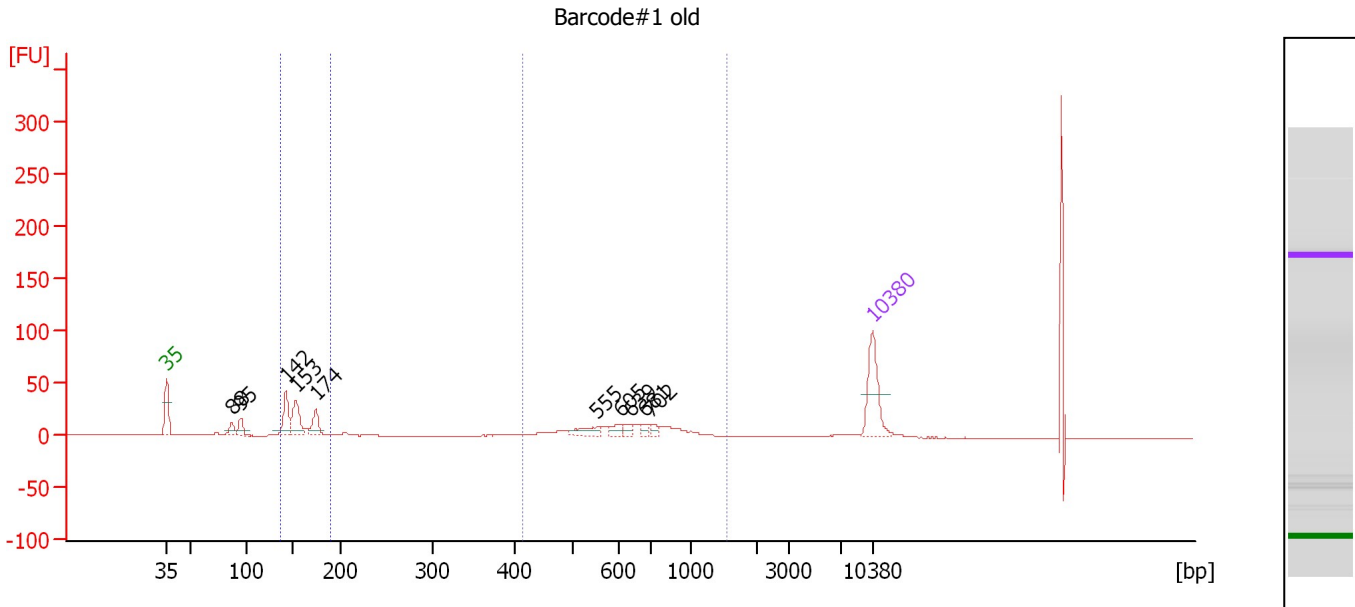
Region table for sample 6 : before the pcr3

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	0	0.00	0.0	0.0	0	0.0

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-12-10\2018-12-10_001.xad

Created: 12/10/2018 2:33:20 PM
 Modified: 12/10/2018 3:14:41 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : Barcode#1 old

Number of peaks found: 10 Corr. Area 1: 161.1
 Noise: 0.2 Corr. Area 2: 133.5

Peak table for sample 7 : Barcode#1 old

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	88	22.35	386.5		49.49
3	95	26.91	428.3		50.33
4	142	67.36	719.5		54.82
5	153	71.46	707.4		55.87
6	174	38.88	338.7		57.82
7	555	24.13	65.9		85.73
8	605	15.14	37.9		88.00
9	639	10.62	25.2		89.05
10	681	10.48	23.3		90.37
11	702	10.41	22.5		91.00
12	10,380	75.00	10.9	Upper Marker	113.00

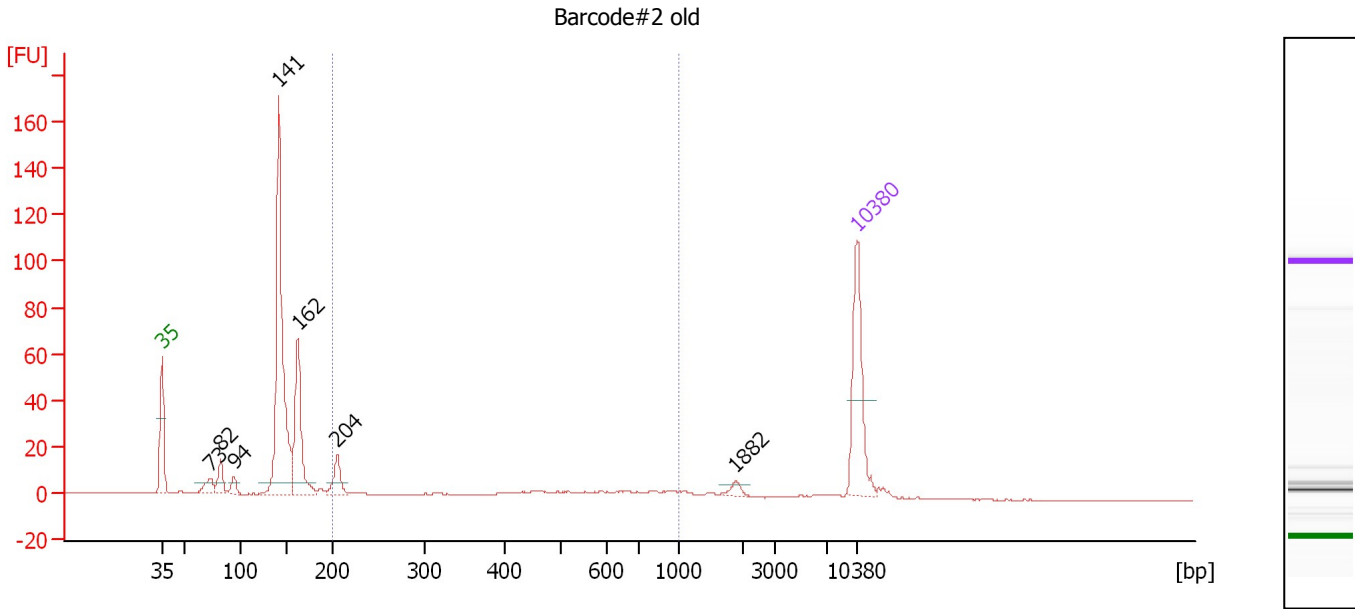
Region table for sample 7 : Barcode#1 old

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
136	189	155	190.98	133.5	1,879.8	31	8.2
415	1,530	670	157.27	161.1	384.0	38	27.2

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-12-10\2018-12-10_001.xad

Created: 12/10/2018 2:33:20 PM
 Modified: 12/10/2018 3:14:41 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : Barcode#2 old

Number of peaks found: 7 Corr. Area 1: 72.7
 Noise: 0.2

Peak table for sample 8 : Barcode#2 old

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	73	19.70	408.0		47.88
3	82	24.60	452.7		48.90
4	94	12.38	198.6		50.25
5	141	313.32	3,361.4		54.76
6	162	117.81	1,103.1		56.69
7	204	28.56	211.7		60.66
8	1,882	5.93	4.8		100.76
9	10,380	75.00	10.9	Upper Marker	113.00

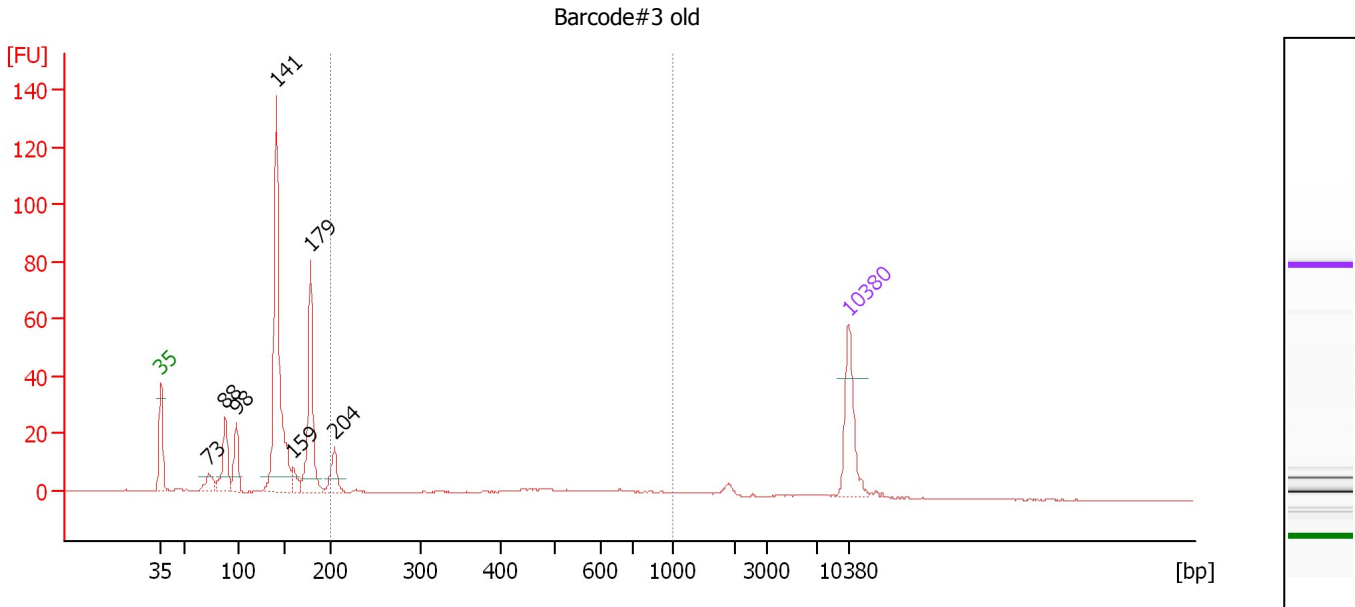
Region table for sample 8 : Barcode#2 old

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	483	77.75	72.7	356.3	16	46.8

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-12-10\2018-12-10_001.xad

Created: 12/10/2018 2:33:20 PM
 Modified: 12/10/2018 3:14:41 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : Barcode#3 old

Number of peaks found: 7 Corr. Area 1: 65.5
 Noise: 0.1

Peak table for sample 9 : Barcode#3 old

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	73	29.88	618.5		47.89
3	88	89.17	1,529.3		49.57
4	98	66.78	1,031.2		50.66
5	141	436.93	4,696.9		54.73
6	159	24.62	233.9		56.47
7	179	199.71	1,694.0		58.26
8	204	45.36	336.4		60.65
9	10,380	75.00	10.9	Upper Marker	113.00

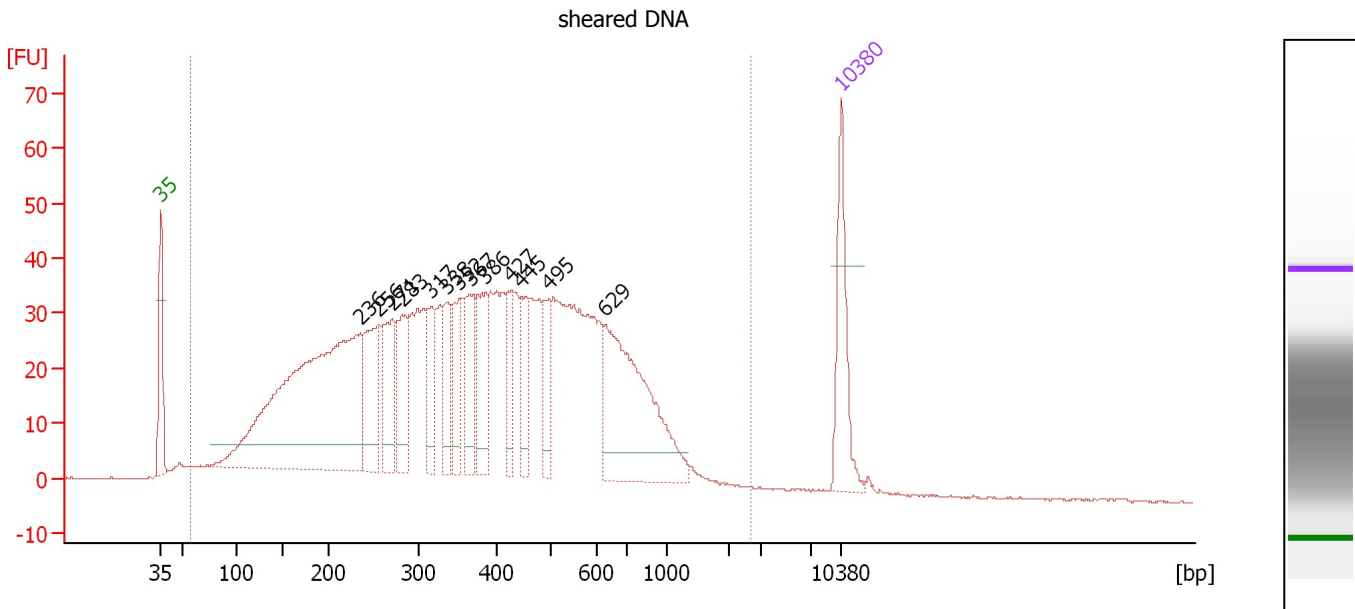
Region table for sample 9 : Barcode#3 old

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	455	133.14	65.5	616.0	15	44.9

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-12-10\2018-12-10_001.xad

Created: 12/10/2018 2:33:20 PM
 Modified: 12/10/2018 3:14:41 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : sheared DNA

Number of peaks found: 13 Corr. Area 1: 1,676.2
 Noise: 0.2

Peak table for sample 10 : sheared 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	236	641.93	4,128.5		63.52
3	256	114.85	679.9		65.38
4	271	100.42	561.6		66.75
5	283	89.06	477.0		67.85
6	317	59.87	286.5		70.76
7	338	58.78	263.8		72.46
8	352	69.16	297.3		73.67
9	367	80.92	334.3		74.82
10	386	81.89	321.2		76.41
11	427	50.64	179.7		79.04
12	445	48.64	165.5		80.08
13	495	46.47	142.1		82.94
14	629	235.06	566.0		88.75
15	10,380	75.00	10.9	Upper Marker	113.00

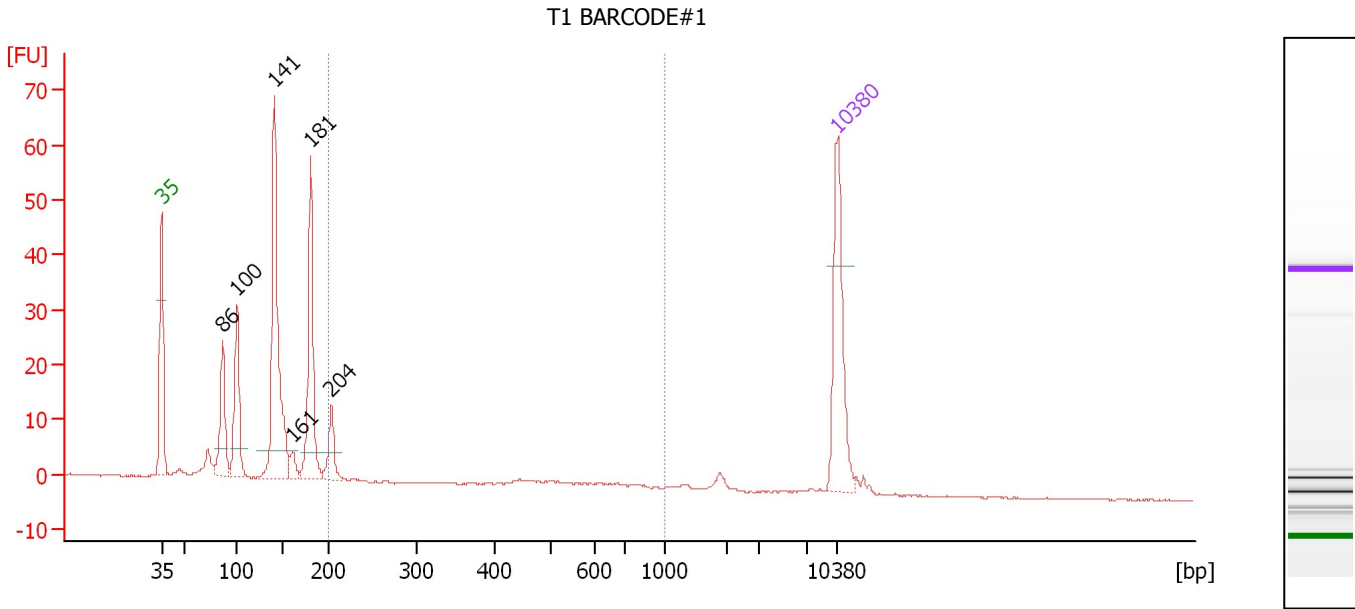
Region table for sample 10 : sheared DNA

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
56	2,692	418	2,951.68	1,676.2	16,908.8	98	59.7

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-12-10\2018-12-10_001.xad

Created: 12/10/2018 2:33:20 PM
 Modified: 12/10/2018 3:14:41 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : T1 BARCODE#1

Number of peaks found: 6 Corr. Area 1: 25.5
 Noise: 0.1

Peak table for sample 11 : T1 BARCODE#1

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	86	69.68	1,222.7		49.35
3	100	84.74	1,286.9		50.84
4	141	208.77	2,248.7		54.70
5	161	12.97	122.3		56.58
6	181	128.89	1,080.5		58.46
7	204	30.39	225.9		60.61
8	10,380	75.00	10.9	Upper Marker	113.00

Region table for sample 11 : T1 BARCODE#1

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	392	47.87	25.5	267.0	9	50.1

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2018-12-10\2018-12-10_001.xad

Created: 12/10/2018 2:33:20 PM
Modified: 12/10/2018 3:14:41 PM

Gel Image

