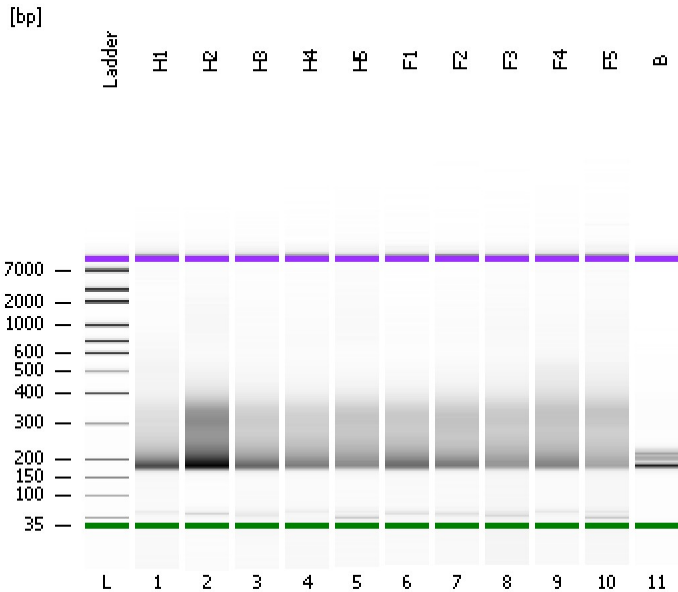


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2018-11-15\2018-11-15\_001.xad

Created: 11/15/2018 11:20:45 AM  
Modified: 11/15/2018 12:02:02 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

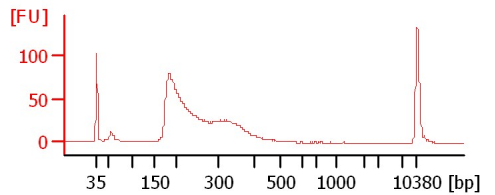
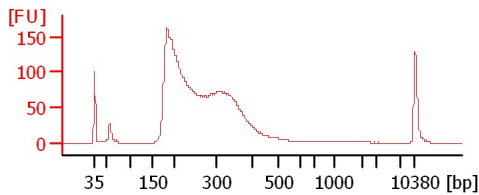
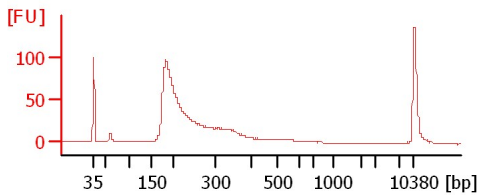
Chip Information:

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

H1

H2

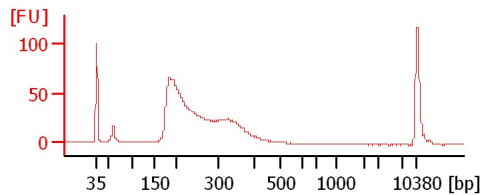
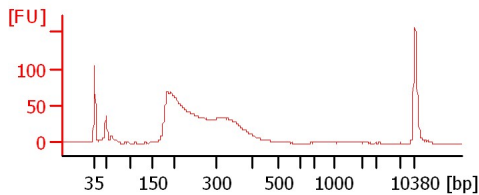
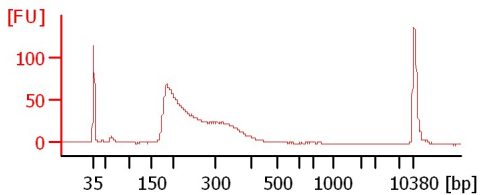
H3



H4

H5

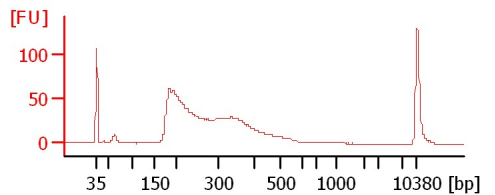
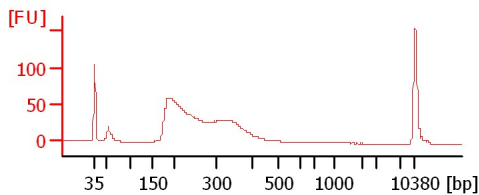
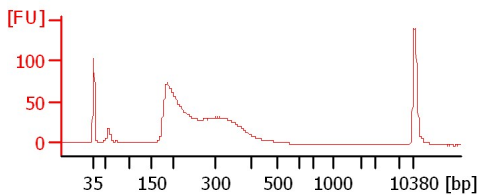
F1



F2

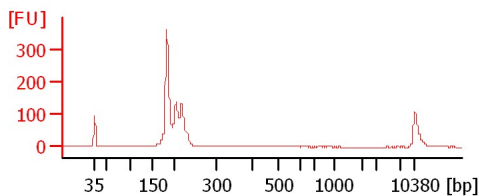
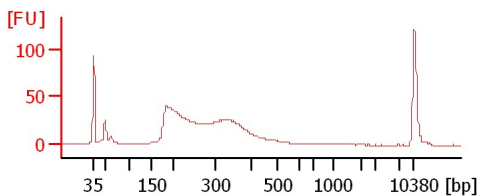
F3

F4



F5

B



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-11-15\2018-11-15\_001.xad

Created: 11/15/2018 11:20:45 AM  
 Modified: 11/15/2018 12:02:02 PM

**Electrophoresis File Run Summary (Chip Summary)**

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
H1		<input type="checkbox"/>	✓			
H2		<input type="checkbox"/>	✓			
H3		<input type="checkbox"/>	✓			
H4		<input type="checkbox"/>	✓			
H5		<input type="checkbox"/>	✓			
F1		<input type="checkbox"/>	✓			
F2		<input type="checkbox"/>	✓			
F3		<input type="checkbox"/>	✓			
F4		<input type="checkbox"/>	✓			
F5		<input type="checkbox"/>	✓			
B		<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\2018-11-15\2018-11-15\_001.xad

Created: 11/15/2018 11:20:45 AM  
Modified: 11/15/2018 12:02:02 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

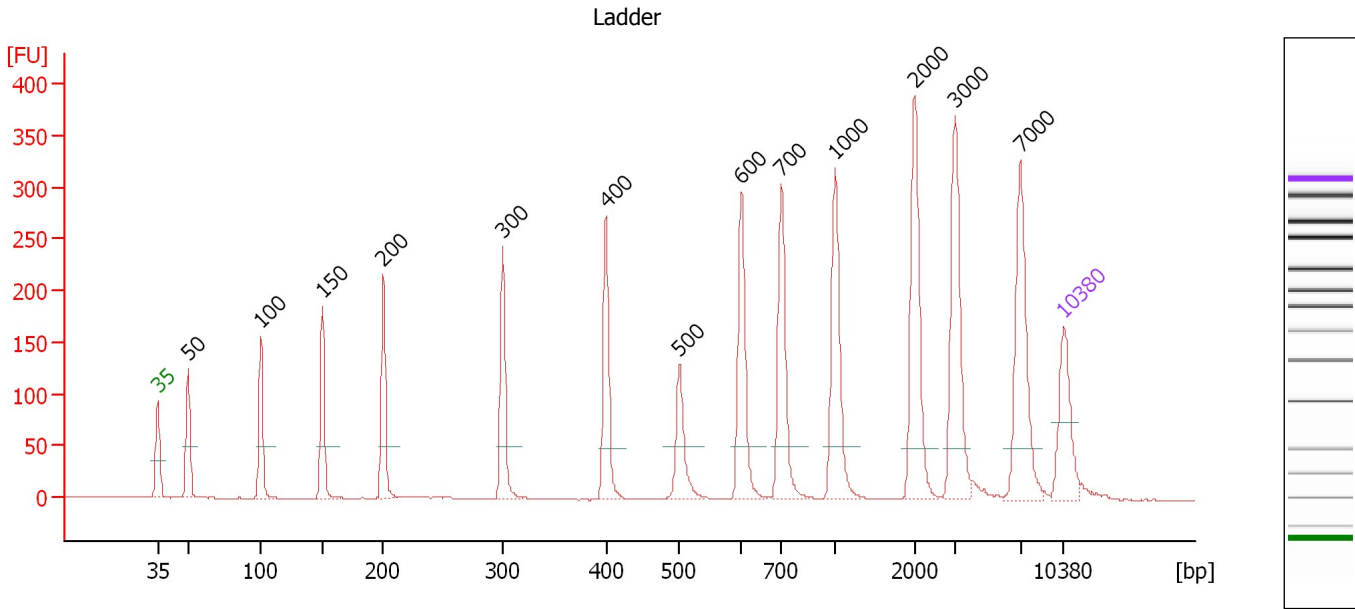
**Ladder**

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\2018-11-15\2018-11-15\_001.xad

Created: 11/15/2018 11:20:45 AM  
 Modified: 11/15/2018 12:02:02 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.2

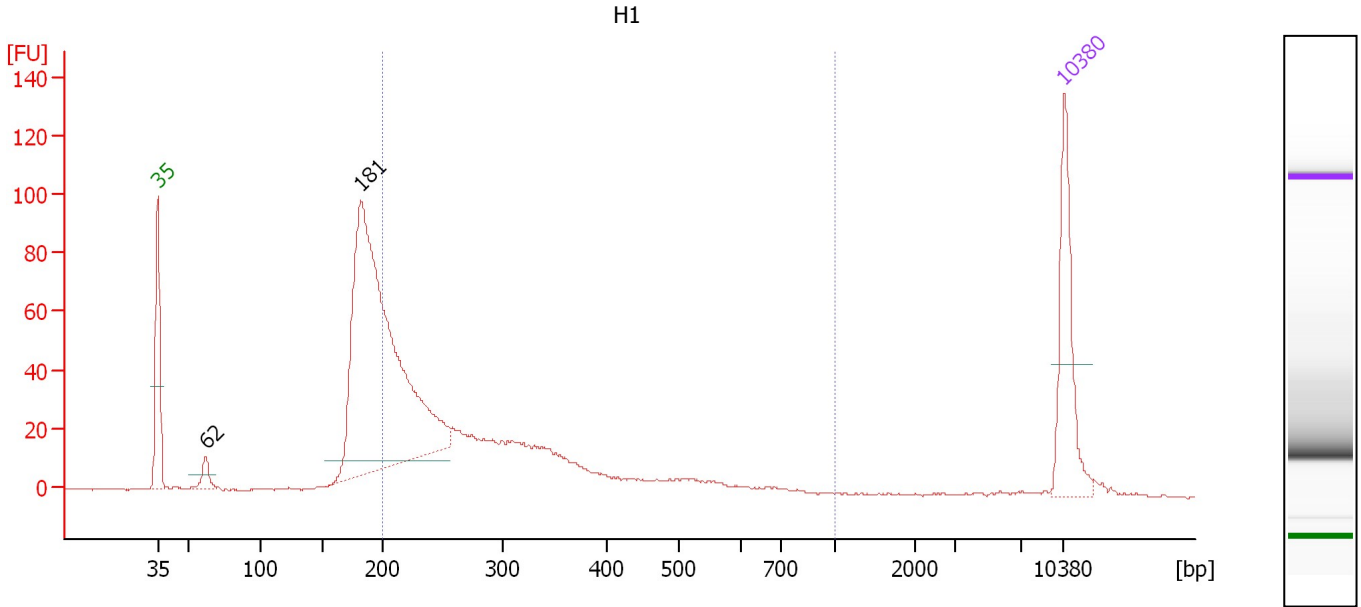
**Peak table for Ladder**

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	55.74
5	200	150.00	1,136.4	Ladder Peak	60.44
6	300	150.00	757.6	Ladder Peak	69.68
7	400	150.00	568.2	Ladder Peak	77.62
8	500	150.00	454.5	Ladder Peak	83.30
9	600	150.00	378.8	Ladder Peak	88.10
10	700	150.00	324.7	Ladder Peak	91.16
11	1,000	150.00	227.3	Ladder Peak	95.33
12	2,000	150.00	113.6	Ladder Peak	101.46
13	3,000	150.00	75.8	Ladder Peak	104.57
14	7,000	150.00	32.5	Ladder Peak	109.63
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-11-15\2018-11-15\_001.xad

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 Modified: 11/15/2018 12:02:02 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : H1**

Number of peaks found: 2                      Corr. Area 1: 651.4  
 Noise: 0.2

**Peak table for sample 1 : H1**

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	62	20.36	496.5		46.72
3	181	624.90	5,222.3		58.69
4	10,380	75.00	10.9	Upper Marker	113.00

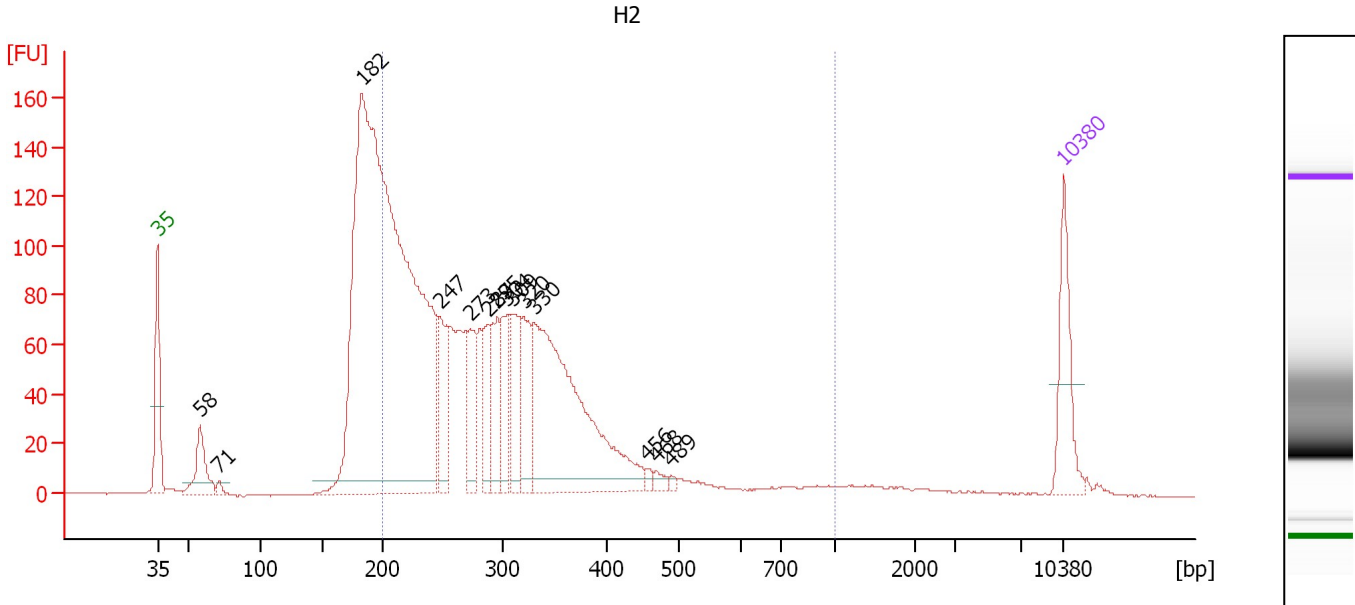
**Region table for sample 1 : H1**

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	303	597.94	651.4	3,382.4	59	37.3

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-11-15\2018-11-15\_001.xad

Created: 11/15/2018 11:20:45 AM  
 Modified: 11/15/2018 12:02:02 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : H2**

Number of peaks found: 14                      Corr. Area 1: 1,974.5  
 Noise: 0.2

**Peak table for sample 2 : H2**

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	58	79.59	2,068.5		46.29
3	71	8.97	190.1		47.77
4	182	1,752.36	14,575.5		58.77
5	247	93.87	575.4		64.80
6	273	83.35	463.3		67.14
7	287	72.33	381.6		68.50
8	295	82.99	425.5		69.26
9	304	78.74	391.9		70.03
10	309	83.43	409.2		70.39
11	320	88.53	418.8		71.29
12	330	466.68	2,143.2		72.05
13	456	6.27	20.8		80.79
14	468	9.29	30.0		81.51
15	489	3.98	12.3		82.68
16	10,380	75.00	10.9	Upper Marker	113.00

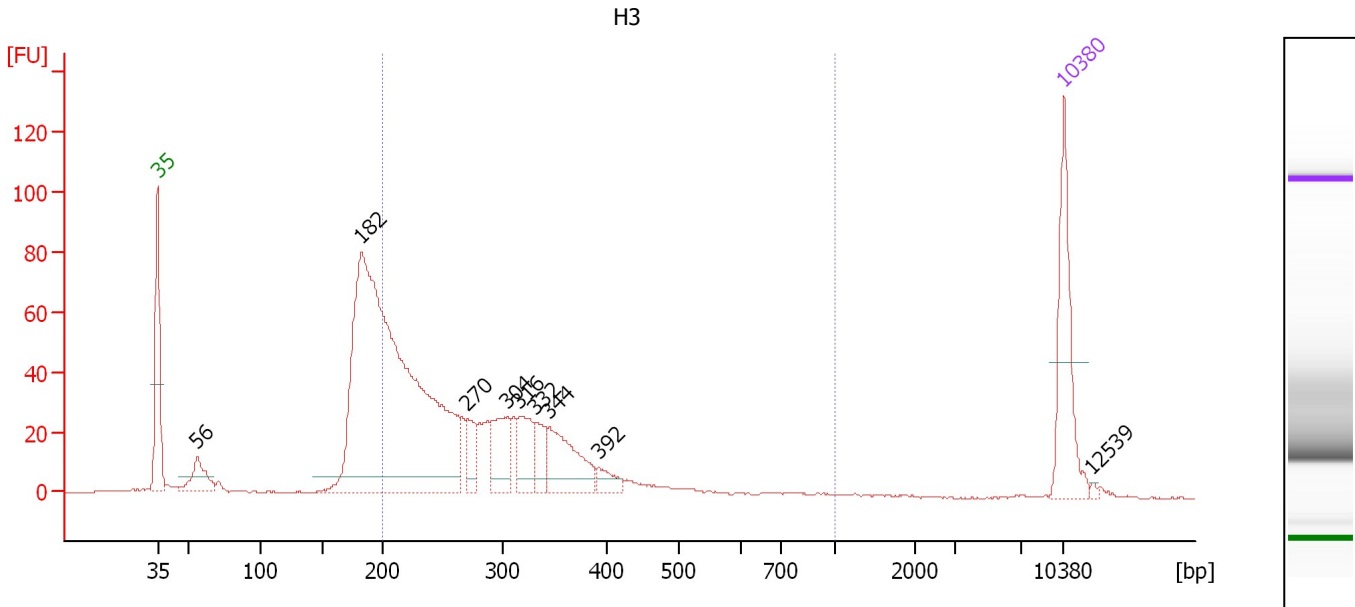
**Region table for sample 2 : H2**

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	303	2,200.27	1,974.5	12,070.9	71	32.9

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-11-15\2018-11-15\_001.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : H3**

Number of peaks found: 9                      Corr. Area 1: 766.9  
 Noise: 0.2

**Peak table for sample 3 : H3**

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	56	42.85	1,151.6		46.07
3	182	843.01	7,029.2		58.72
4	270	29.91	167.7		66.93
5	304	53.54	266.8		70.00
6	316	47.19	226.1		70.96
7	332	27.37	125.0		72.20
8	344	77.34	340.2		73.21
9	392	16.36	63.2		77.01
10	10,380	75.00	10.9	Upper Marker	113.00
11	12,539	0.00	0.0		115.15

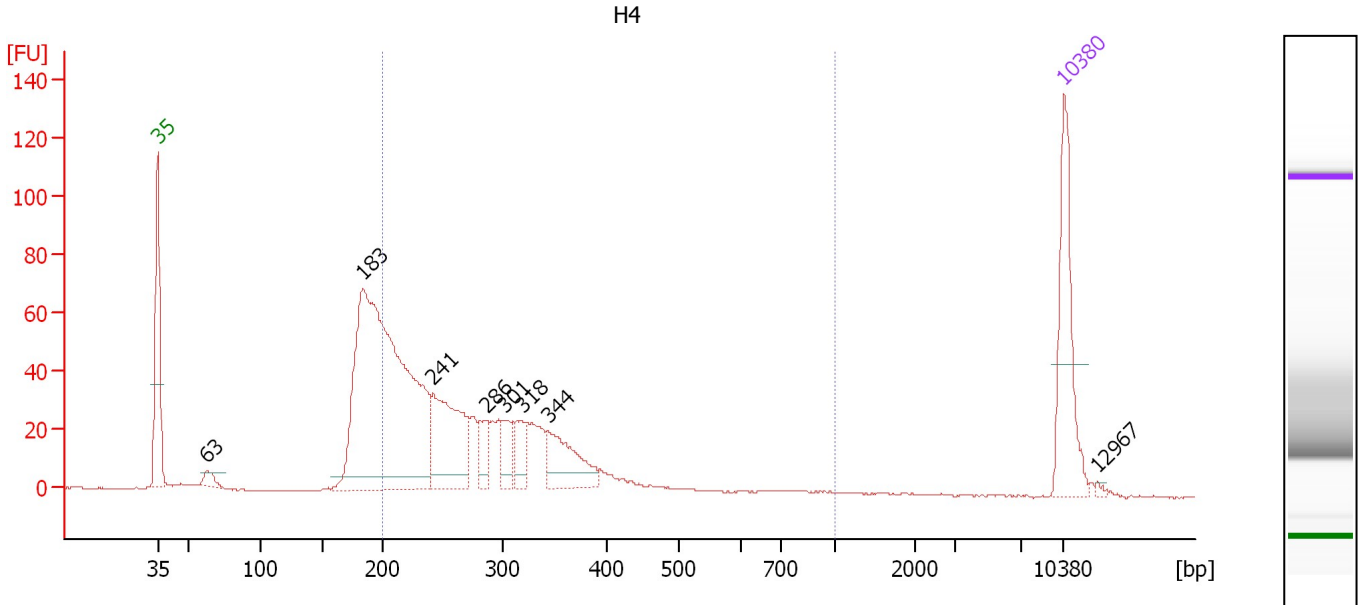
**Region table for sample 3 : H3**

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	295	782.38	766.9	4,383.5	64	32.0

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-11-15\2018-11-15\_001.xad

Created: 11/15/2018 11:20:45 AM  
 Modified: 11/15/2018 12:02:02 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : H4**

Number of peaks found: 8                      Corr. Area 1: 737.5  
 Noise: 0.3

**Peak table for sample 4 : H4**

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	63	13.65	326.8		46.85
3	183	565.42	4,674.9		58.87
4	241	123.97	778.0		64.27
5	286	26.78	142.1		68.35
6	301	24.29	122.3		69.76
7	318	28.25	134.5		71.12
8	344	59.46	262.2		73.14
9	10,380	75.00	10.9	Upper Marker	113.00
10	12,967	0.00	0.0		115.58

**Region table for sample 4 : H4**

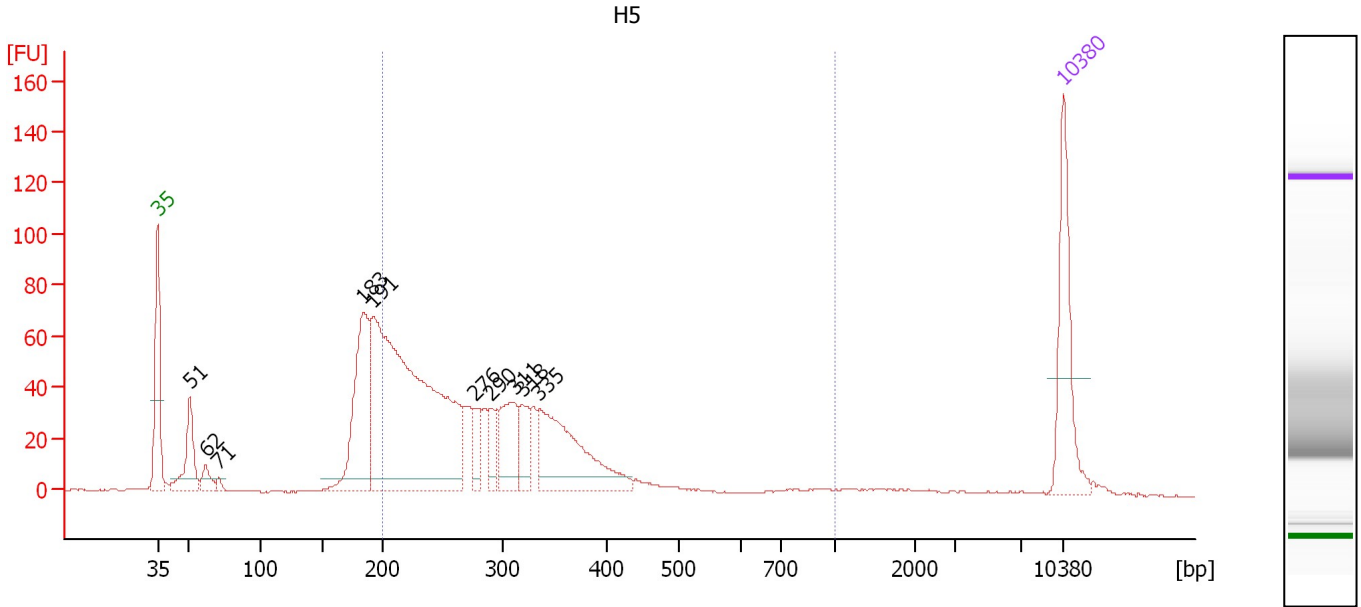
From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	290	667.63	737.5	3,777.7	69	31.5



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-11-15\2018-11-15\_001.xad

Created: 11/15/2018 11:20:45 AM  
 Modified: 11/15/2018 12:02:02 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : H5**

Number of peaks found: 10                      Corr. Area 1: 953.0  
 Noise: 0.2

**Peak table for sample 5 : H5**

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	51	69.37	2,048.0		45.50
3	62	19.76	483.0		46.70
4	71	6.21	132.7		47.71
5	183	169.11	1,397.6		58.88
6	191	587.29	4,658.7		59.60
7	276	31.88	175.2		67.44
8	290	26.38	137.7		68.79
9	311	68.90	336.1		70.52
10	318	33.34	158.6		71.14
11	335	144.63	653.3		72.49
12	10,380	75.00	10.9	Upper Marker	113.00

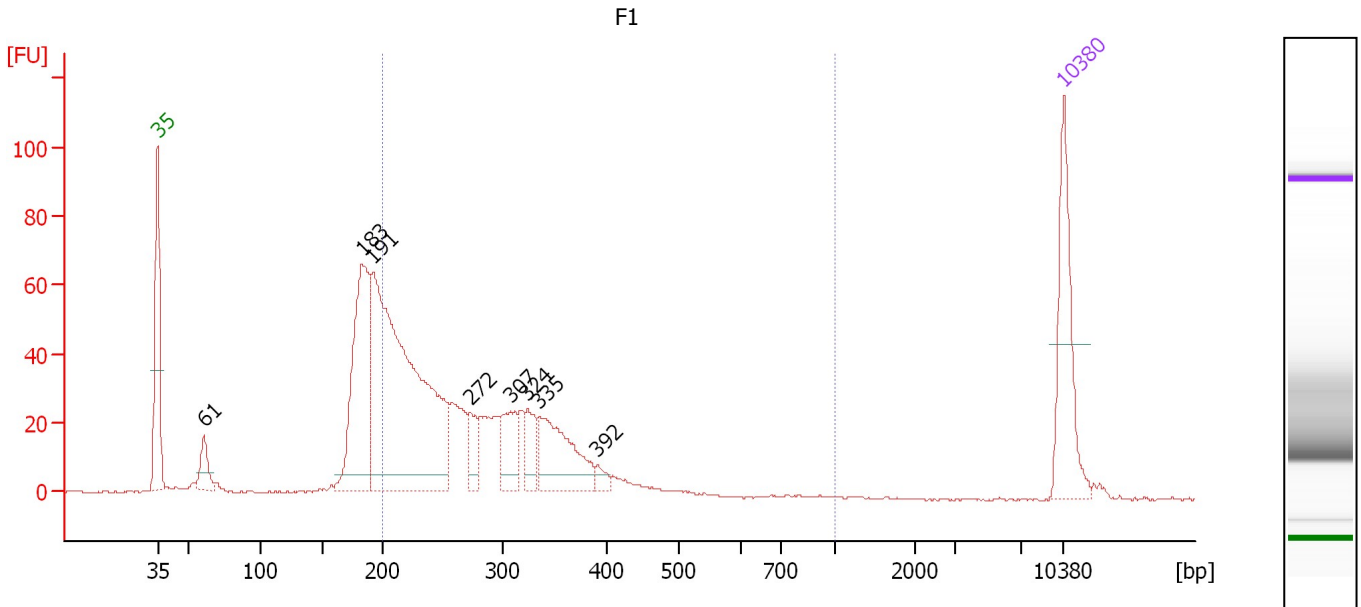
**Region table for sample 5 : H5**

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	851.23	953.0	4,718.5	70	32.7

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-11-15\2018-11-15\_001.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : F1**

Number of peaks found: 8                      Corr. Area 1: 687.3  
 Noise: 0.3

**Peak table for sample 6 : F1**

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	61	31.72	787.9		46.59
3	183	201.47	1,672.2		58.80
4	191	496.57	3,930.2		59.64
5	272	26.87	149.5		67.12
6	307	46.85	230.9		70.27
7	324	30.56	143.1		71.55
8	335	92.89	419.7		72.49
9	392	8.92	34.5		76.97
10	10,380	75.00	10.9	Upper Marker	113.00

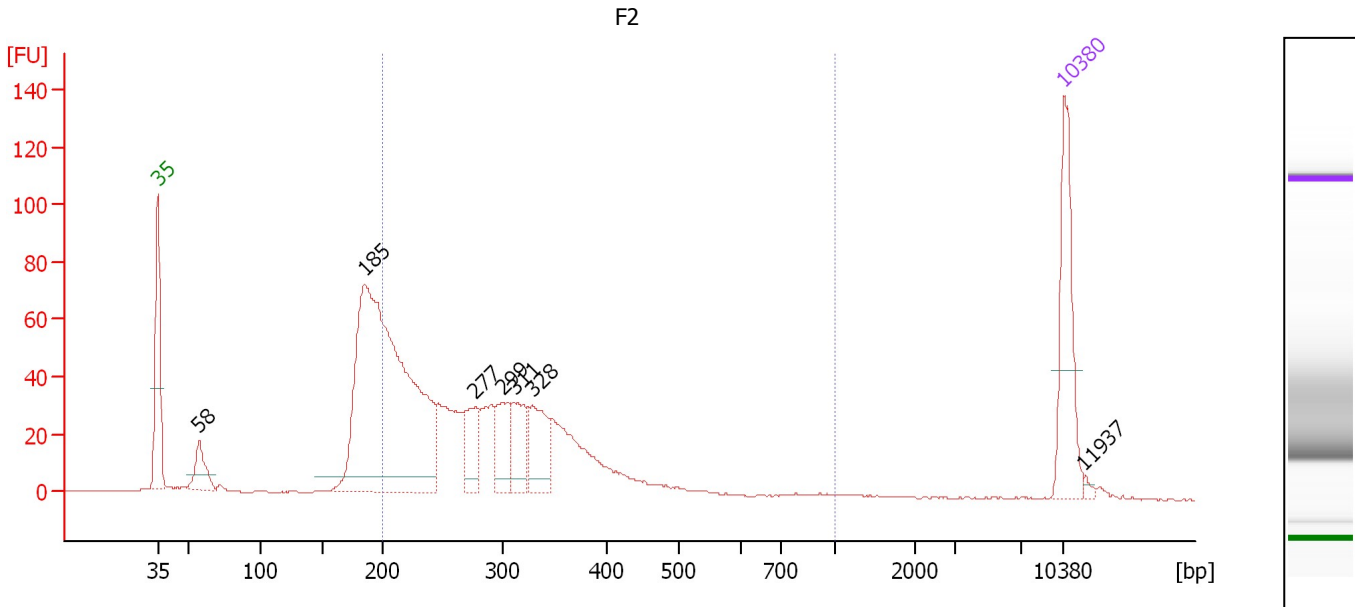
**Region table for sample 6 : F1**

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	282	732.85	687.3	4,174.4	68	23.9

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-11-15\2018-11-15\_001.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : F2**

Number of peaks found: 7                      Corr. Area 1: 828.0  
 Noise: 0.2

**Peak table for sample 7 : F2**

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	58	38.39	1,009.9		46.21
3	185	597.76	4,906.1		59.00
4	277	47.26	258.9		67.52
5	299	47.75	241.6		69.63
6	311	50.14	244.5		70.53
7	328	58.89	271.7		71.93
8	10,380	75.00	10.9	Upper Marker	113.00
9	11,937	0.00	0.0		114.55

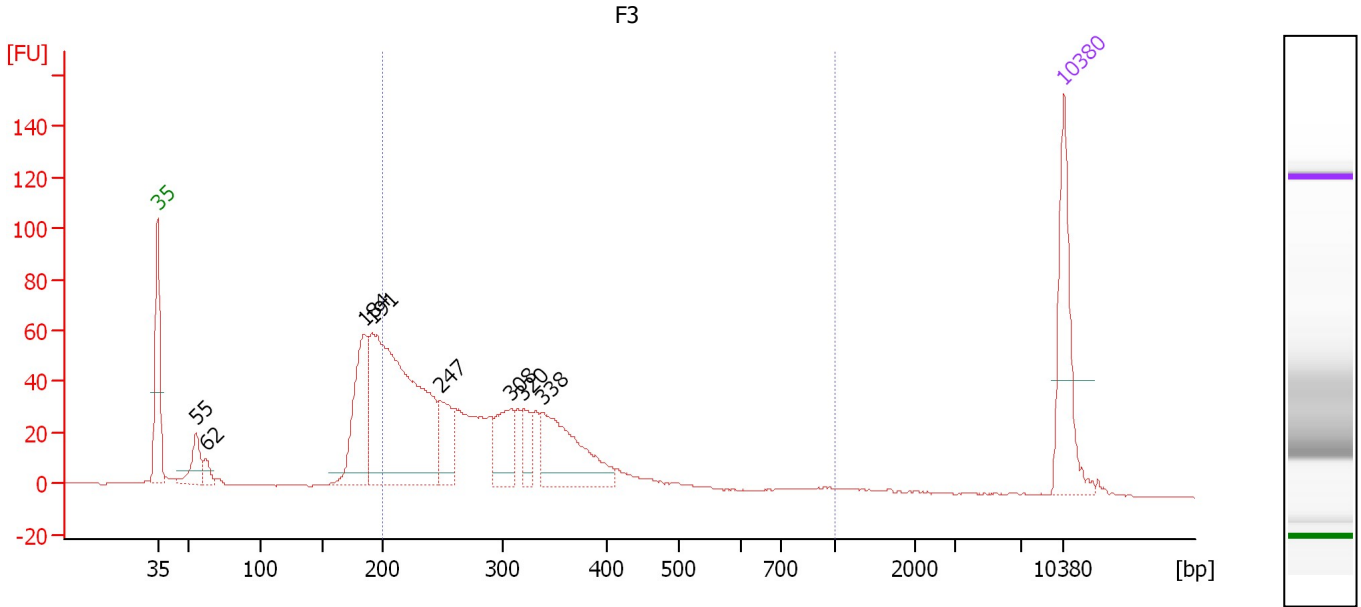
**Region table for sample 7 : F2**

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	293	765.68	828.0	4,247.6	71	27.0

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-11-15\2018-11-15\_001.xad

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 Modified: 11/15/2018 12:02:02 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : F3**

Number of peaks found: 8                      Corr. Area 1: 847.2  
 Noise: 0.2

**Peak table for sample 8 : F3**

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	55	39.16	1,074.1		45.94
3	62	13.78	336.7		46.71
4	184	127.39	1,049.0		58.94
5	191	406.88	3,227.4		59.60
6	247	54.49	333.6		64.83
7	308	56.77	279.3		70.31
8	320	28.06	132.8		71.27
9	338	115.08	515.9		72.70
10	10,380	75.00	10.9	Upper Marker	113.00

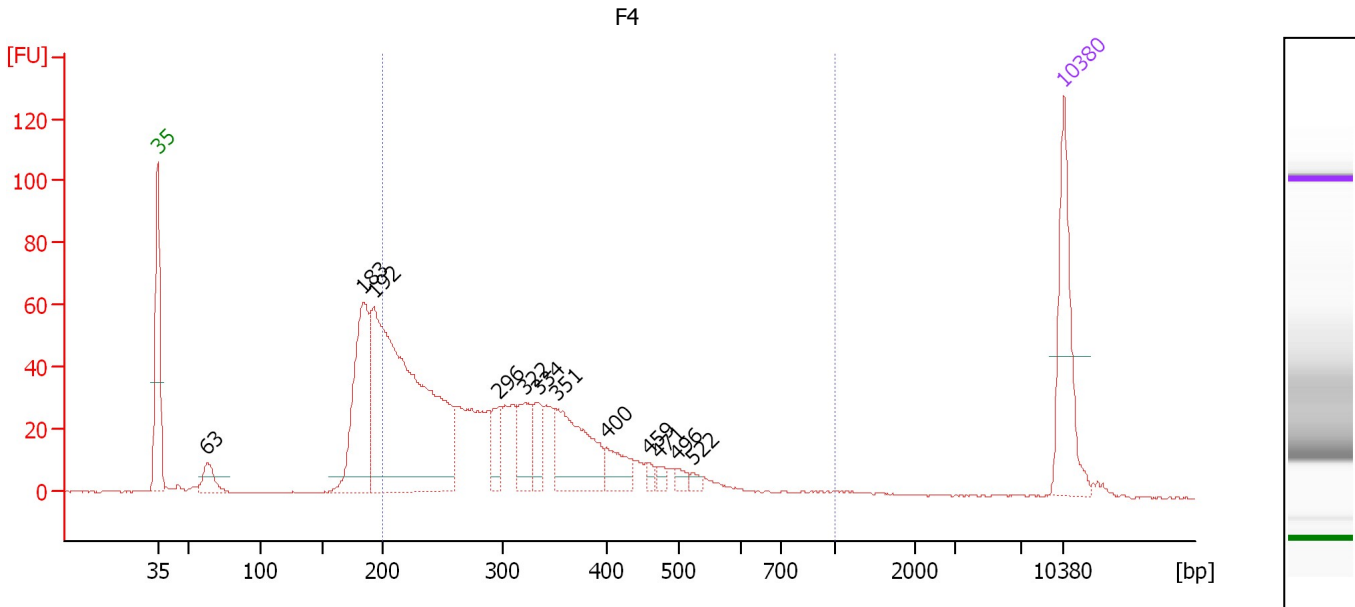
**Region table for sample 8 : F3**

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	733.31	847.2	4,054.3	71	31.5

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-11-15\2018-11-15\_001.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : F4**

Number of peaks found: 12                      Corr. Area 1: 883.5  
 Noise: 0.2

**Peak table for sample 9 : F4**

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	63	27.44	658.1		46.84
3	183	165.67	1,370.3		58.86
4	192	504.09	3,969.1		59.73
5	296	30.00	153.3		69.35
6	322	43.65	205.6		71.40
7	334	32.88	149.2		72.37
8	351	99.98	431.2		73.75
9	400	29.77	112.7		77.64
10	459	6.44	21.3		80.97
11	471	7.03	22.6		81.68
12	496	7.33	22.4		83.07
13	522	5.49	16.0		84.35
14	10,380	75.00	10.9	Upper Marker	113.00

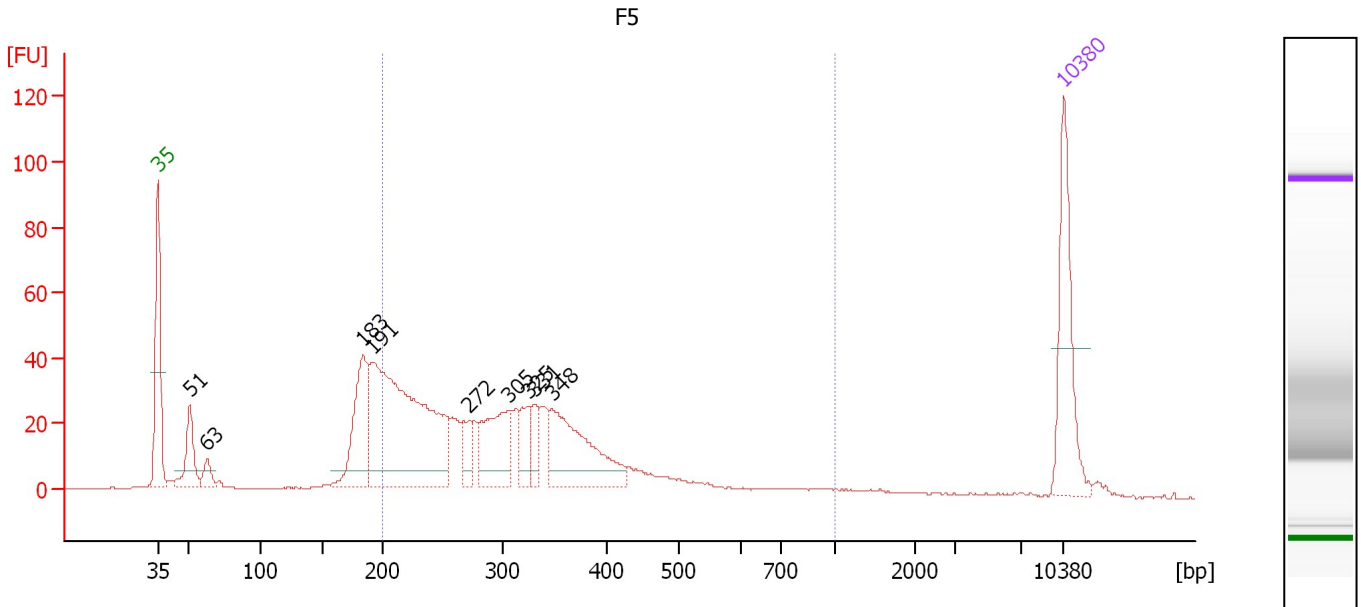
**Region table for sample 9 : F4**

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	884.72	883.5	4,704.7	74	33.6

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-11-15\2018-11-15\_001.xad

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 Modified: 11/15/2018 12:02:02 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : F5**

Number of peaks found: 9                      Corr. Area 1: 690.5  
 Noise: 0.2

**Peak table for sample 10 : F5**

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	51	52.78	1,567.5		45.47
3	63	17.13	412.8		46.80
4	183	105.90	877.6		58.83
5	191	359.60	2,852.1		59.60
6	272	26.94	150.3		67.05
7	305	81.48	404.6		70.09
8	325	28.48	132.7		71.68
9	331	23.46	107.4		72.14
10	348	114.88	500.4		73.48
11	10,380	75.00	10.9	Upper Marker	113.00

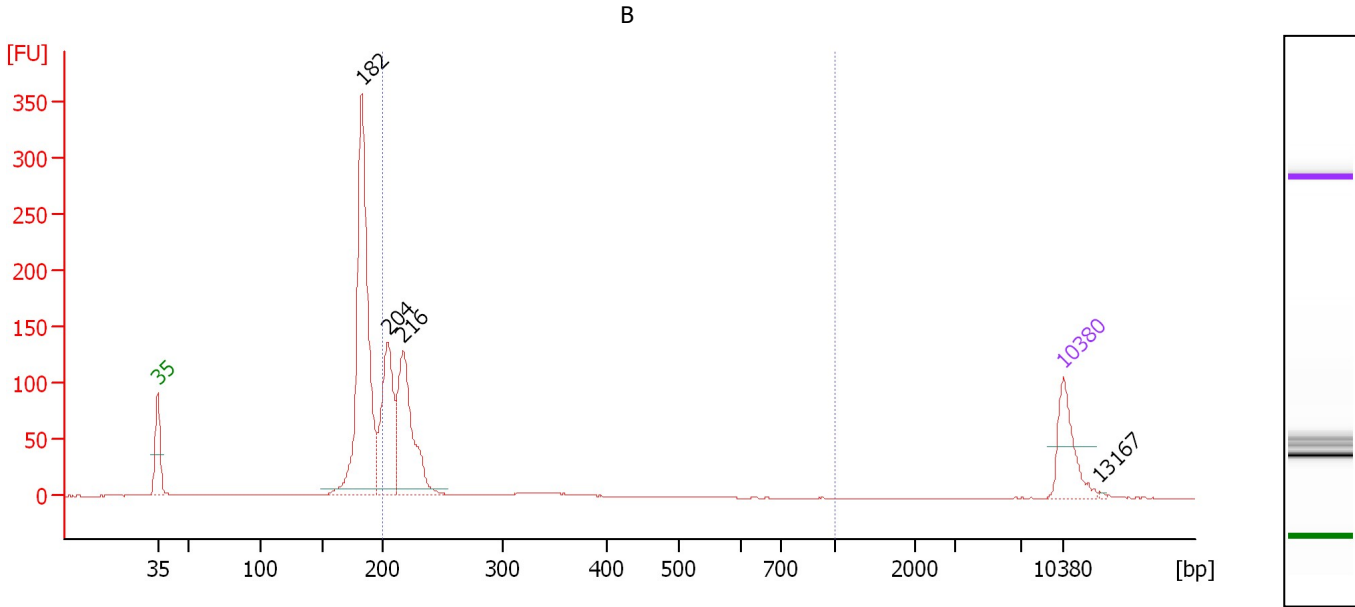
**Region table for sample 10 : F5**

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	321	722.39	690.5	3,814.9	72	34.9

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-11-15\2018-11-15\_001.xad

Created: 11/15/2018 11:20:45 AM  
 Modified: 11/15/2018 12:02:02 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : B**

Number of peaks found: 4                      Corr. Area 1: 513.0  
 Noise: 0.2

**Peak table for sample 11 : B**

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	182	632.54	5,262.5		58.76
3	204	240.78	1,792.4		60.77
4	216	279.28	1,955.8		61.96
5	10,380	75.00	10.9	Upper Marker	113.00
6	13,167	0.00	0.0		115.78

**Region table for sample 11 : B**

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	225	510.19	513.0	3,513.1	42	17.1

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2018-11-15\2018-11-15\_001.xad

Created: 11/15/2018 11:20:45 AM  
Modified: 11/15/2018 12:02:02 PM

**Gel Image**

