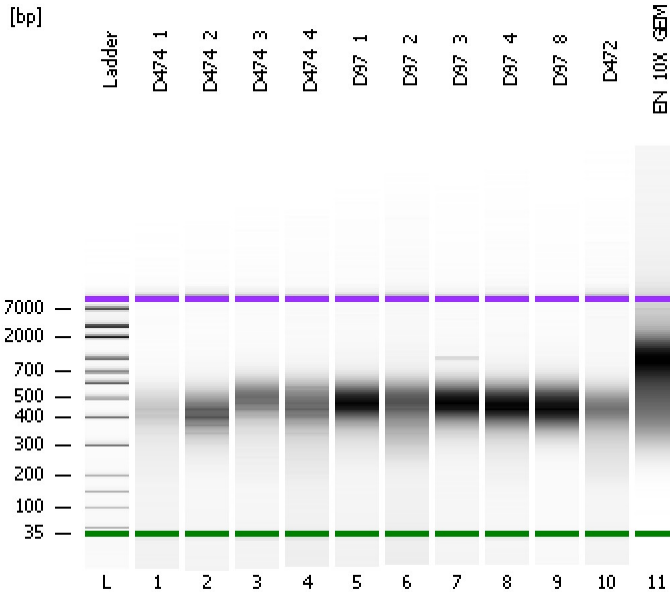


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2018-03-13\2018-03-13\_002.xad

Created: 3/13/2018 2:53:04 PM  
Modified: 3/13/2018 3:34:21 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

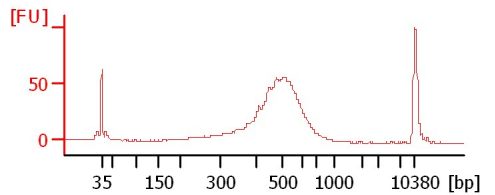
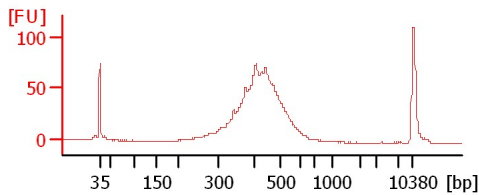
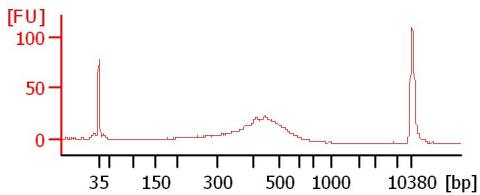
Chip Information:

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

**D474\_1**

**D474\_2**

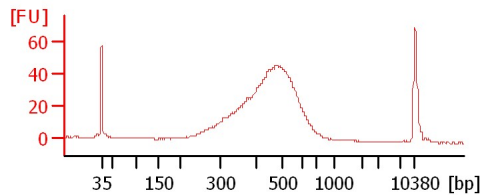
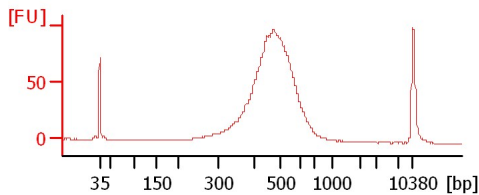
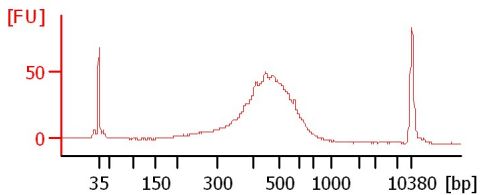
**D474\_3**



**D474\_4**

**D97\_1**

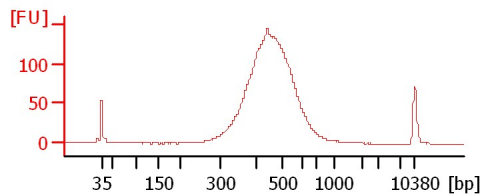
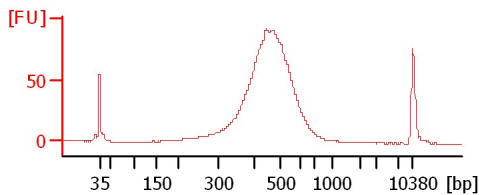
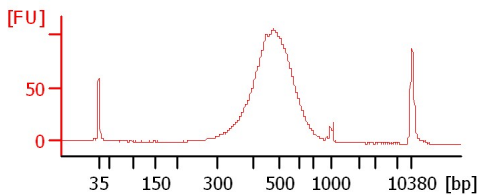
**D97\_2**



**D97\_3**

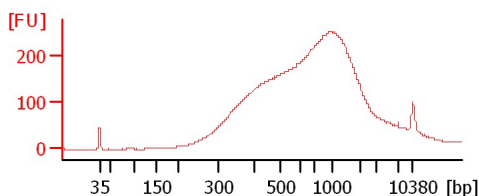
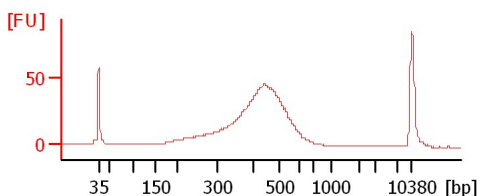
**D97\_4**

**D97\_8**



**D472**

**EN\_10X\_GEM**



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-03-13\2018-03-13\_002.xad

Created: 3/13/2018 2:53:04 PM  
 Modified: 3/13/2018 3:34:21 PM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
D474_1		<input type="checkbox"/>	✓			
D474_2		<input type="checkbox"/>	✓			
D474_3		<input type="checkbox"/>	✓			
D474_4		<input type="checkbox"/>	✓			
D97_1		<input type="checkbox"/>	✓			
D97_2		<input type="checkbox"/>	✓			
D97_3		<input type="checkbox"/>	✓			
D97_4		<input type="checkbox"/>	✓			
D97_8		<input type="checkbox"/>	✓			
D472		<input type="checkbox"/>	✓			
EN_10X_GEM		<input type="checkbox"/>	✓			
Ladder		<input type="checkbox"/>	✓			

**Chip Lot #**

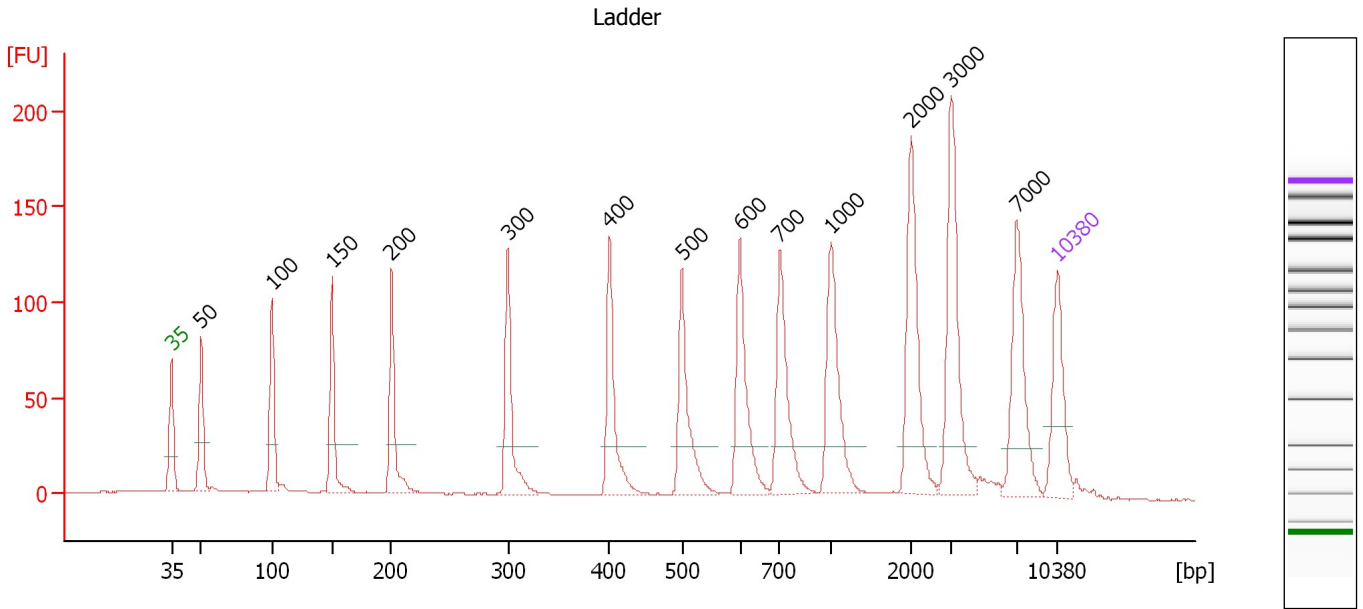
**Reagent Kit Lot #**

**Chip Comments :**

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-03-13\2018-03-13\_002.xad

Created: 3/13/2018 2:53:04 PM  
 Modified: 3/13/2018 3:34:21 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.3

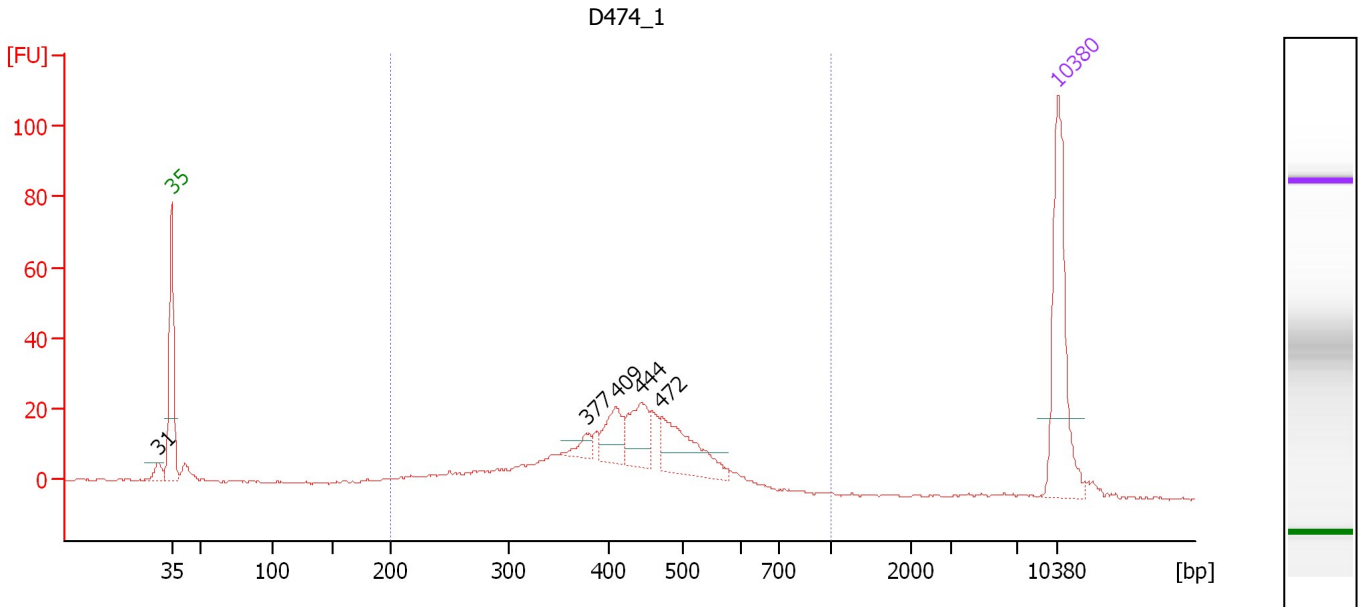
**Peak table for Ladder**

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	50.93
4	150	150.00	1,515.2	Ladder Peak	55.70
5	200	150.00	1,136.4	Ladder Peak	60.38
6	300	150.00	757.6	Ladder Peak	69.58
7	400	150.00	568.2	Ladder Peak	77.61
8	500	150.00	454.5	Ladder Peak	83.32
9	600	150.00	378.8	Ladder Peak	87.89
10	700	150.00	324.7	Ladder Peak	91.05
11	1,000	150.00	227.3	Ladder Peak	95.08
12	2,000	150.00	113.6	Ladder Peak	101.43
13	3,000	150.00	75.8	Ladder Peak	104.58
14	7,000	150.00	32.5	Ladder Peak	109.75
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-03-13\2018-03-13\_002.xad

Created: 3/13/2018 2:53:04 PM  
 Modified: 3/13/2018 3:34:21 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : D474\_1**

Number of peaks found: 5                      Corr. Area 1: 359.6  
 Noise: 0.3

**Peak table for sample 1 : D474\_1**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	31	0.00	0.0		41.90
2	35	125.00	5,411.3	Lower Marker	43.00
3	377	10.51	42.2		75.76
4	409	29.19	108.2		78.10
5	444	38.06	130.0		80.09
6	472	56.16	180.5		81.69
7	10,380	75.00	10.9	Upper Marker	113.00

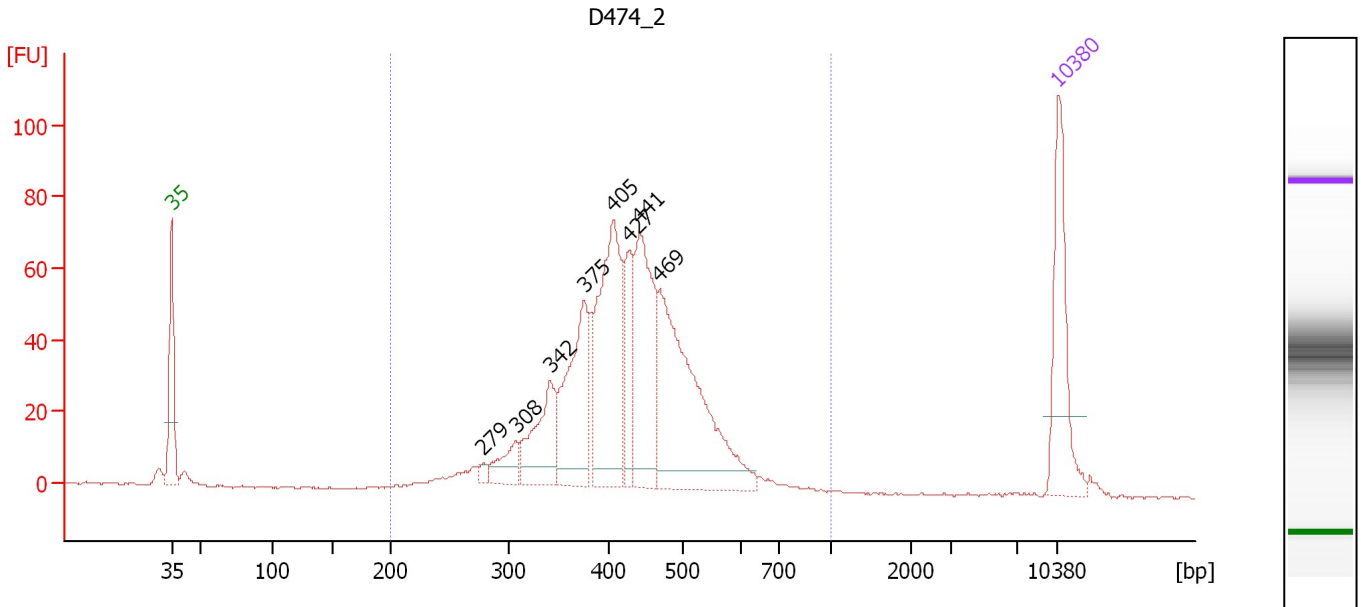
**Region table for sample 1 : D474\_1**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Conc. [pg/μl]	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	421	359.6	335.78	1,304.4	93	21.1

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-03-13\2018-03-13\_002.xad

Created: 3/13/2018 2:53:04 PM  
 Modified: 3/13/2018 3:34:21 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : D474\_2**

Number of peaks found: 8                      Corr. Area 1: 983.5  
 Noise: 0.3

**Peak table for sample 2 : D474\_2**

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	279	6.14	33.4		67.64
3	308	30.39	149.6		70.21
4	342	78.58	348.5		72.92
5	375	125.09	505.7		75.59
6	405	186.22	696.4		77.90
7	427	55.66	197.4		79.16
8	441	142.44	489.1		79.96
9	469	235.70	762.2		81.52
10	10,380	75.00	10.9	Upper Marker	113.00

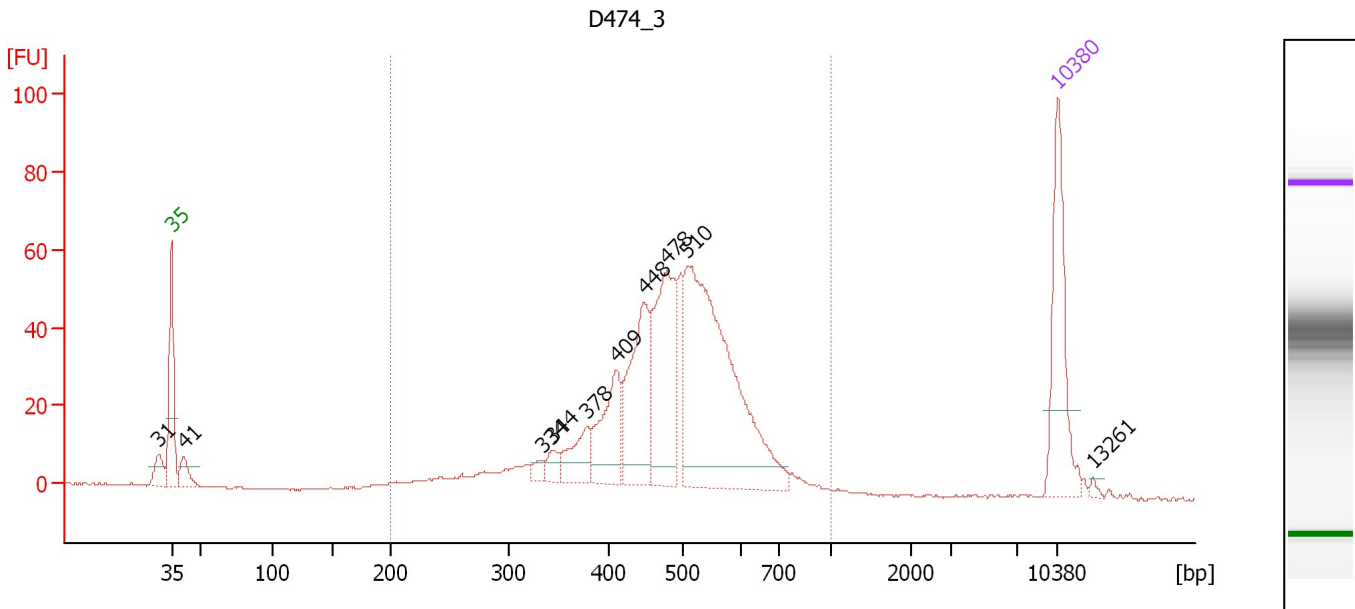
**Region table for sample 2 : D474\_2**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Conc. [pg/μl]	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	428	983.5	955.58	3,559.9	97	19.6

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-03-13\2018-03-13\_002.xad

Created: 3/13/2018 2:53:04 PM  
 Modified: 3/13/2018 3:34:21 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : D474\_3**

Number of peaks found: 10                      Corr. Area 1: 783.3  
 Noise: 0.3

**Peak table for sample 3 : D474\_3**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	31	0.00	0.0		41.97
2	35	125.00	5,411.3	Lower Marker	43.00
3	41	22.67	834.0		43.97
4	334	9.28	42.1		72.28
5	344	13.58	59.8		73.10
6	378	37.64	151.0		75.82
7	409	67.28	249.1		78.13
8	448	109.11	369.2		80.33
9	478	135.75	430.0		82.08
10	510	314.23	933.7		83.77
11	10,380	75.00	10.9	Upper Marker	113.00
12	13,261	0.00	0.0		115.77

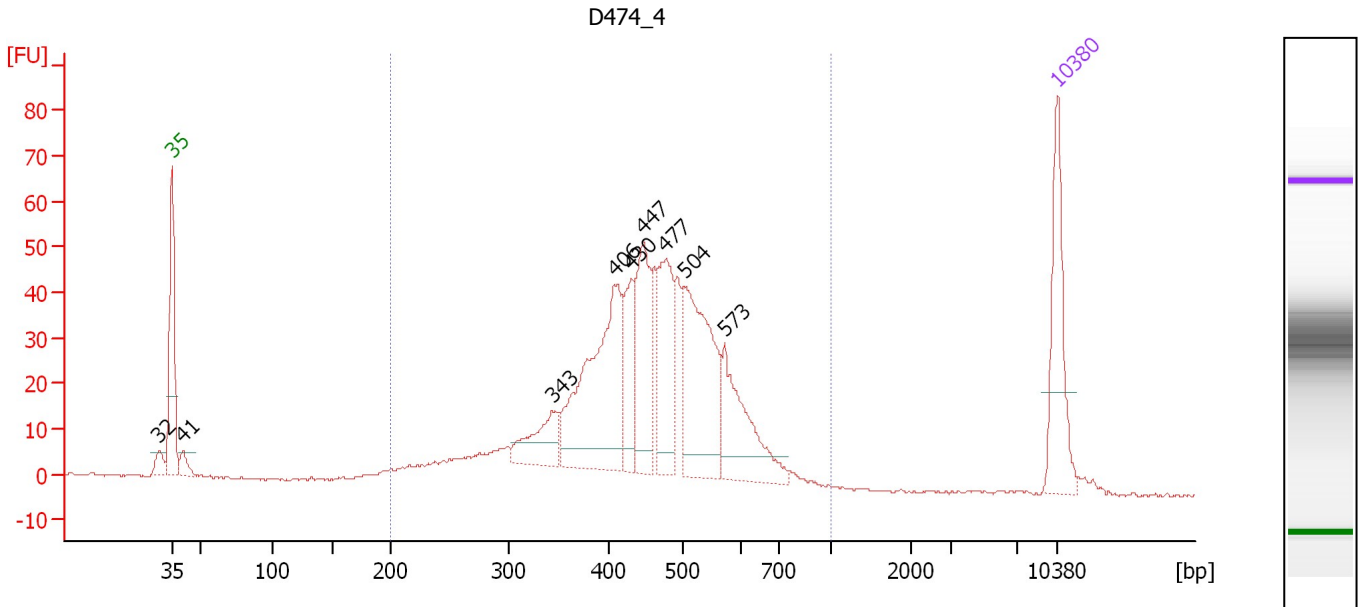
**Region table for sample 3 : D474\_3**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Conc. [pg/μl]	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
200	1,000	486	783.3	836.42	2,809.9	95	21.3

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-03-13\2018-03-13\_002.xad

Created: 3/13/2018 2:53:04 PM  
 Modified: 3/13/2018 3:34:21 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : D474\_4**

Number of peaks found: 9                      Corr. Area 1: 810.6  
 Noise: 0.2

**Peak table for sample 4 : D474\_4**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	32	0.00	0.0		42.00
2	35	125.00	5,411.3	Lower Marker	43.00
3	41	18.41	685.7		43.89
4	343	55.89	246.8		73.04
5	406	214.68	800.3		77.97
6	430	61.68	217.2		79.34
7	447	114.52	388.3		80.28
8	477	102.14	324.3		82.02
9	504	172.76	519.6		83.49
10	573	100.48	265.9		86.64
11	10,380	75.00	10.9	Upper Marker	113.00

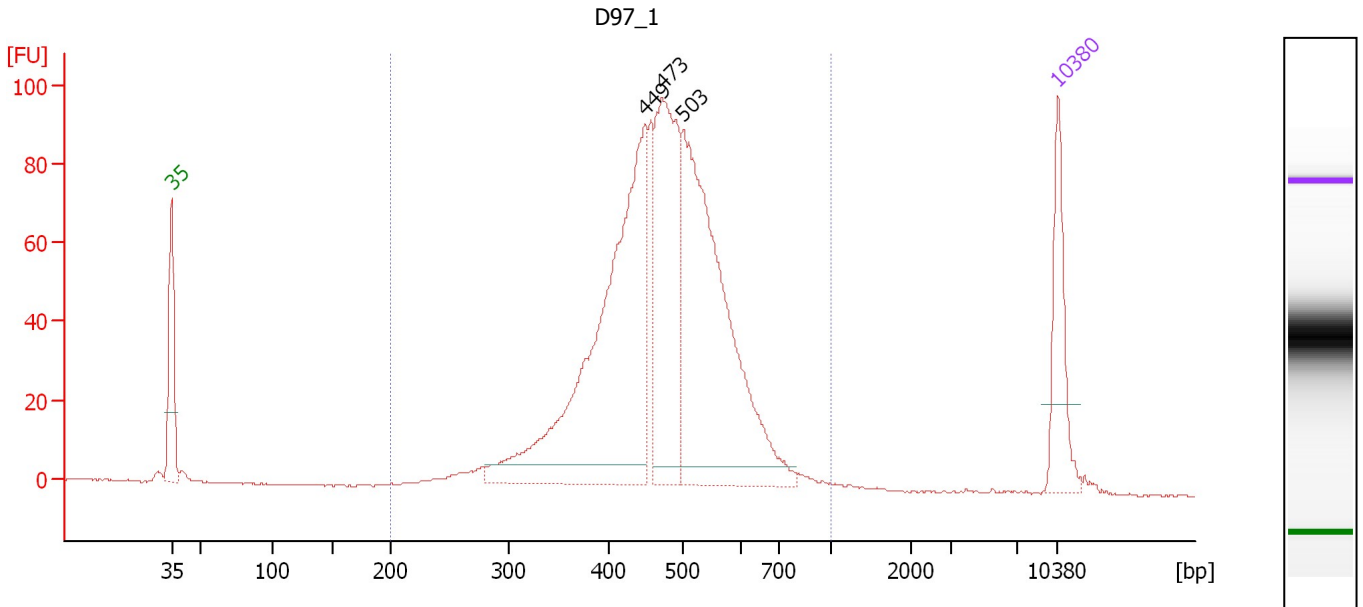
**Region table for sample 4 : D474\_4**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Conc. [pg/μl]	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	455	810.6	1,103.98	3,994.6	96	22.6

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-03-13\2018-03-13\_002.xad

Created: 3/13/2018 2:53:04 PM  
 Modified: 3/13/2018 3:34:21 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : D97\_1**

Number of peaks found: 3                      Corr. Area 1: 1,266.8  
 Noise: 0.2

**Peak table for sample 5 : D97\_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	449	559.83	1,889.1		80.41
3	473	288.04	923.3		81.76
4	503	499.71	1,506.6		83.43
5	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 5 : D97\_1**

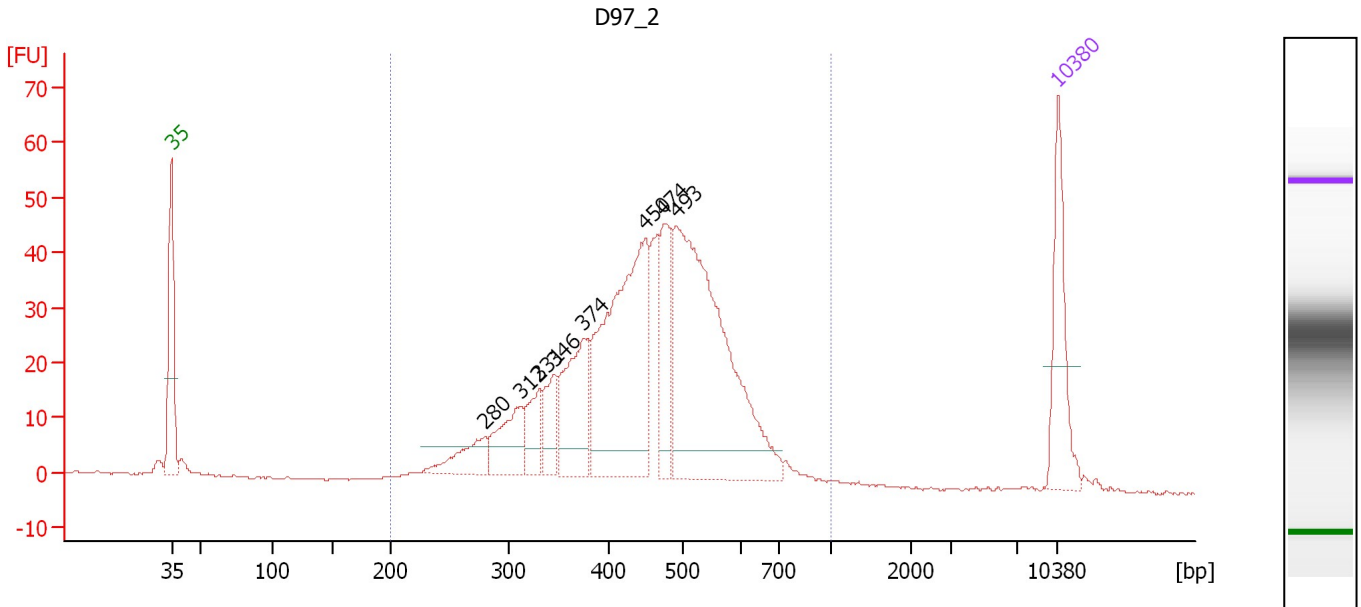
From [bp]	To [bp]	Average Size [bp]	Corr. Area	Conc. [pg/μl]	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	476	1,266.8	1,474.86	4,947.7	98	19.2



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-03-13\2018-03-13\_002.xad

Created: 3/13/2018 2:53:04 PM  
 Modified: 3/13/2018 3:34:21 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : D97\_2**

Number of peaks found: 8                      Corr. Area 1: 788.5  
 Noise: 0.2

**Peak table for sample 6 : D97\_2**

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	280	49.42	267.1		67.78
3	312	68.74	333.7		70.56
4	331	45.50	208.4		72.06
5	346	45.04	197.2		73.28
6	374	114.49	463.3		75.56
7	450	319.90	1,077.8		80.44
8	474	89.89	287.3		81.83
9	493	426.38	1,311.7		82.89
10	10,380	75.00	10.9	Upper Marker	113.00

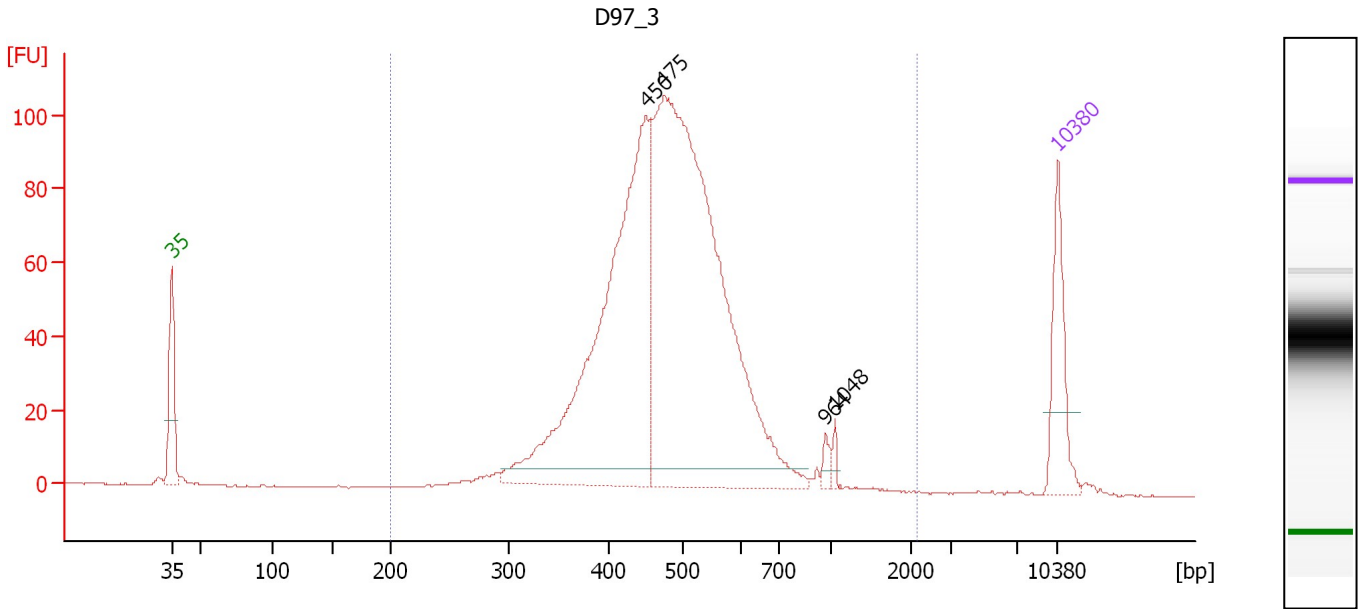
**Region table for sample 6 : D97\_2**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Conc. [pg/μl]	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	455	788.5	1,313.86	4,733.7	98	22.8

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-03-13\2018-03-13\_002.xad

Created: 3/13/2018 2:53:04 PM  
 Modified: 3/13/2018 3:34:21 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : D97\_3**

Number of peaks found: 4                      Corr. Area 1: 1,378.3  
 Noise: 0.2

**Peak table for sample 7 : D97\_3**

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	450	688.51	2,316.9		80.48
3	475	1,026.33	3,274.5		81.88
4	964	10.02	15.7		94.60
5	1,048	8.27	12.0		95.39
6	10,380	75.00	10.9	Upper Marker	113.00

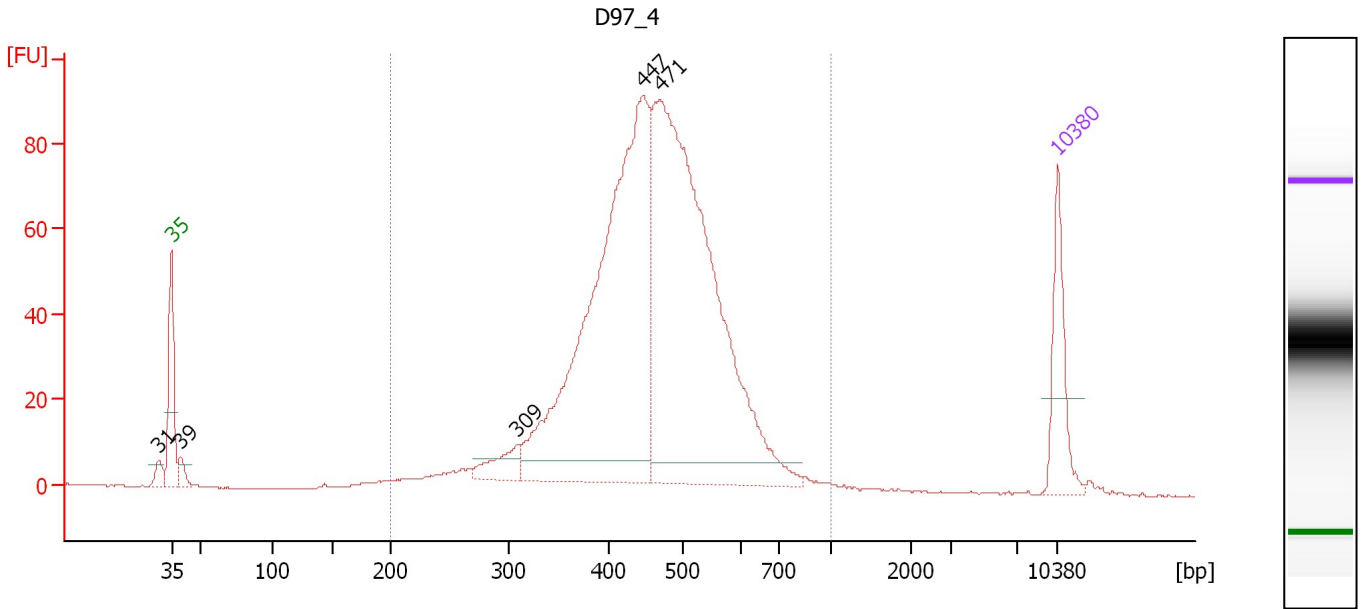
**Region table for sample 7 : D97\_3**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Conc. [pg/μl]	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
200	2,152	493	1,378.3	1,799.91	5,893.3	99	26.1

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-03-13\2018-03-13\_002.xad

Created: 3/13/2018 2:53:04 PM  
 Modified: 3/13/2018 3:34:21 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : D97\_4**

Number of peaks found: 5                      Corr. Area 1: 1,266.7  
 Noise: 0.1

**Peak table for sample 8 : D97\_4**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	31	0.00	0.0		41.97
2	35	125.00	5,411.3	Lower Marker	43.00
3	39	21.40	824.0		43.68
4	309	45.54	223.3		70.30
5	447	844.61	2,864.0		80.28
6	471	930.10	2,993.4		81.65
7	10,380	75.00	10.9	Upper Marker	113.00

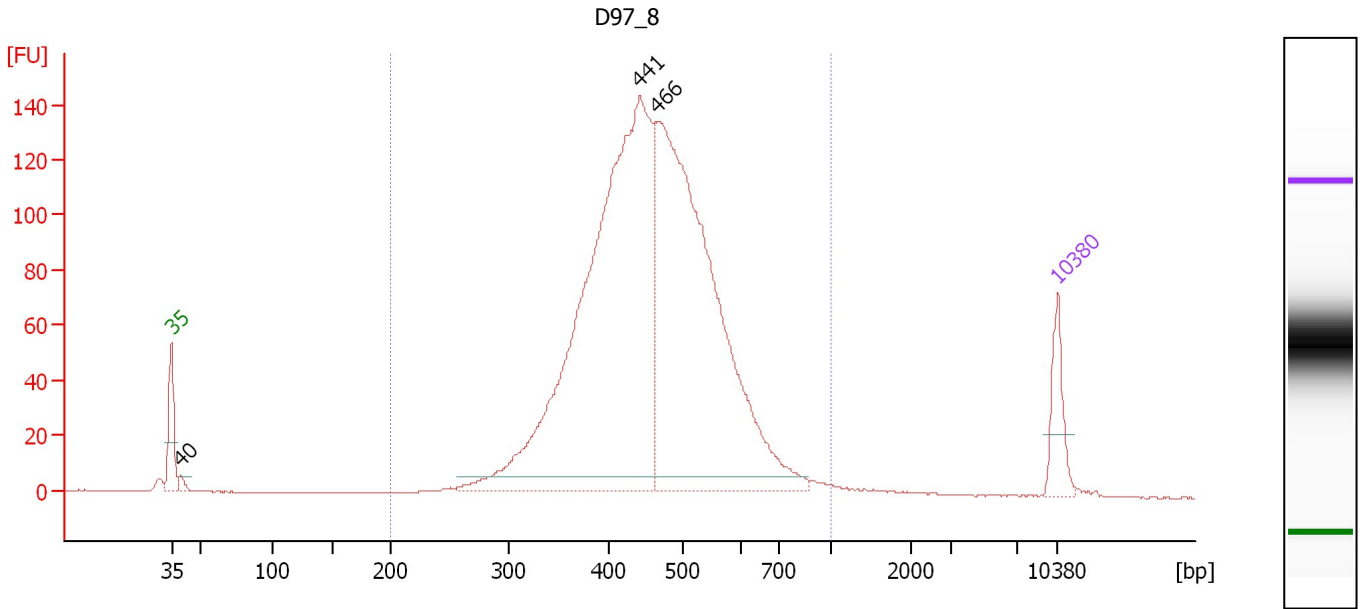
**Region table for sample 8 : D97\_4**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Conc. [pg/μl]	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	462	1,266.7	1,972.84	6,873.2	97	20.4

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-03-13\2018-03-13\_002.xad

Created: 3/13/2018 2:53:04 PM  
 Modified: 3/13/2018 3:34:21 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : D97\_8**

Number of peaks found: 3                      Corr. Area 1: 1,976.9  
 Noise: 0.2

**Peak table for sample 9 : D97\_8**

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	40	18.59	708.8		43.75
3	441	1,720.82	5,910.7		79.95
4	466	1,453.60	4,723.4		81.39
5	10,380	75.00	10.9	Upper Marker	113.00

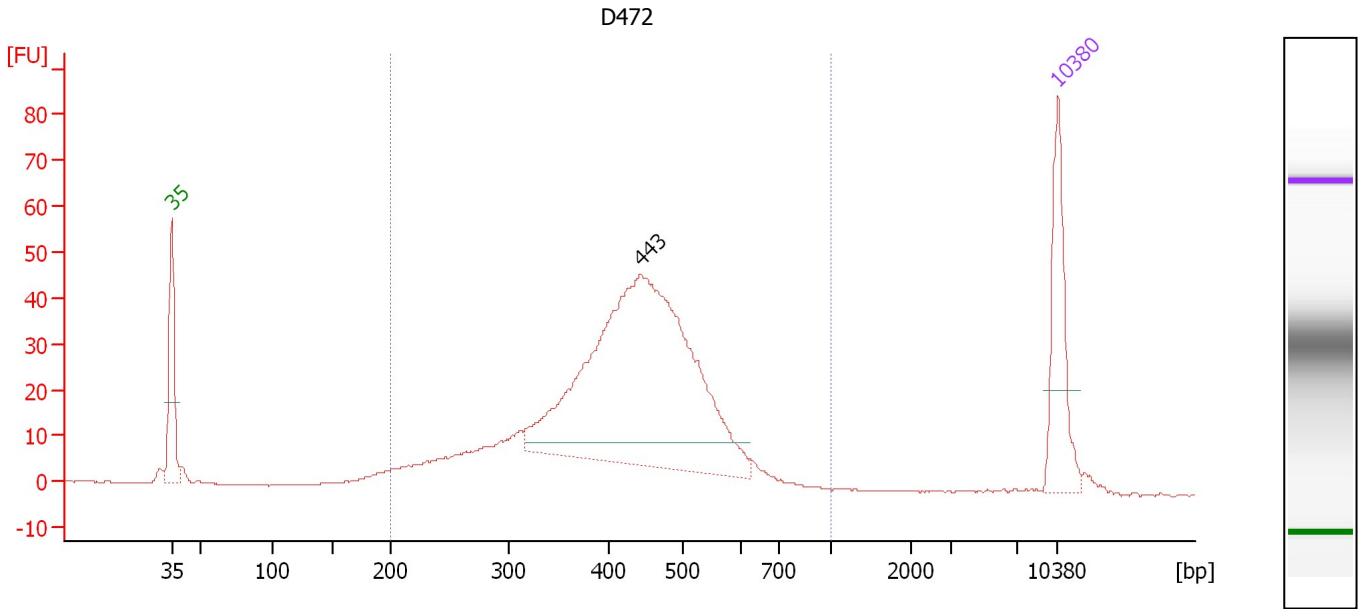
**Region table for sample 9 : D97\_8**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Conc. [pg/μl]	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	464	1,976.9	3,260.62	11,191.3	98	20.0

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-03-13\2018-03-13\_002.xad

Created: 3/13/2018 2:53:04 PM  
 Modified: 3/13/2018 3:34:21 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : D472**

Number of peaks found: 1                      Corr. Area 1: 723.1  
 Noise: 0.1

**Peak table for sample 10 : D472**

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	443	588.29	2,013.6		80.04
3	10,380	75.00	10.9	Upper Marker	113.00

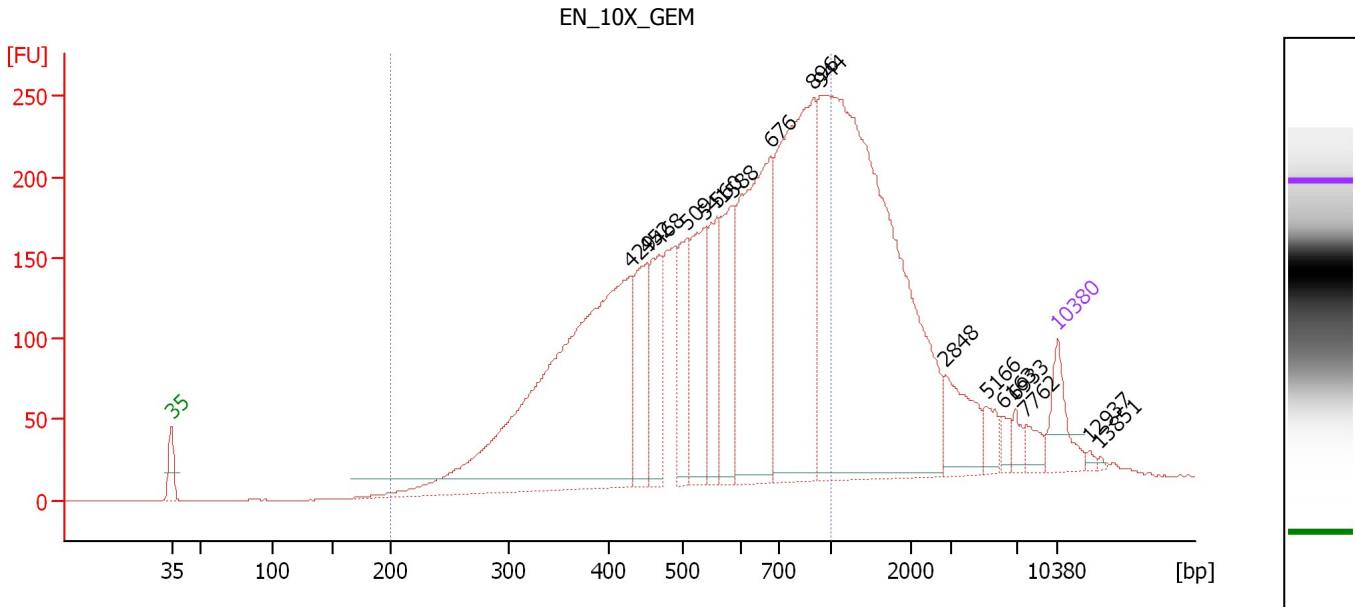
**Region table for sample 10 : D472**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Conc. [pg/μl]	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	427	723.1	904.49	3,496.1	95	23.1

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-03-13\2018-03-13\_002.xad

Created: 3/13/2018 2:53:04 PM  
 Modified: 3/13/2018 3:34:21 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : EN\_10X\_GEM**

Number of peaks found: 17                      Corr. Area 1: 4,609.2  
 Noise: 0.2

**Peak table for sample 11 : EN\_10X\_GEM**

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	429	1,361.31	4,802.9		79.29
3	452	221.16	741.4		80.58
4	468	196.93	637.0		81.51
5	509	170.76	508.2		83.74
6	541	242.11	677.9		85.20
7	560	191.99	519.2		86.08
8	588	212.97	548.4		87.36
9	676	597.28	1,338.6		90.29
10	896	717.48	1,212.9		93.69
11	944	1,559.47	2,502.7		94.33
12	2,848	113.39	60.3		104.10
13	5,166	40.20	11.8		107.38
14	6,163	20.33	5.0		108.67
15	6,933	24.34	5.3		109.66
16	7,762	29.15	5.7		110.48
17	10,380	75.00	10.9	Upper Marker	113.00
18	12,937	0.00	0.0		115.46
19	13,851	0.00	0.0		116.34

**Region table for sample 11 : EN\_10X\_GEM**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Conc. [pg/μl]	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	573	4,609.2	4,788.12	14,936.6	69	33.4

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2018-03-13\2018-03-13\_002.xad

Created: 3/13/2018 2:53:04 PM  
Modified: 3/13/2018 3:34:21 PM

**Gel Image**

