

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-22\2016-05-22\_001.xad

Created: 5/22/2016 9:41:53 AM  
Modified: 5/22/2016 10:41:50 AM

**Electrophoresis File Run Summary**

Instrument Information:

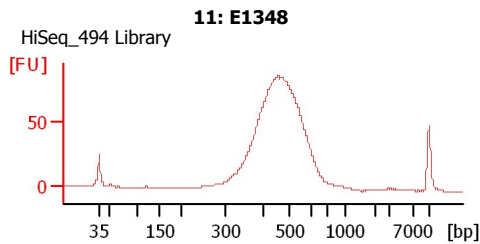
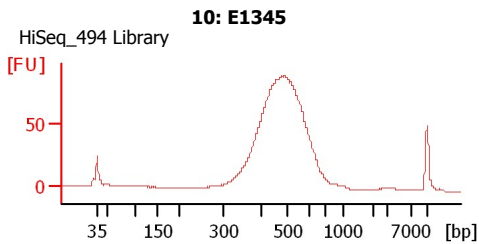
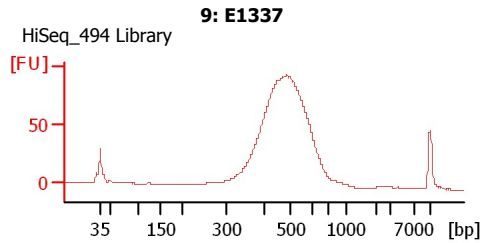
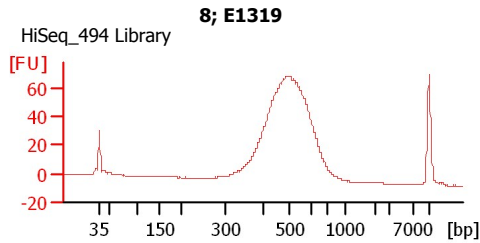
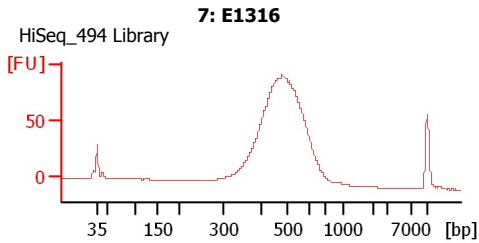
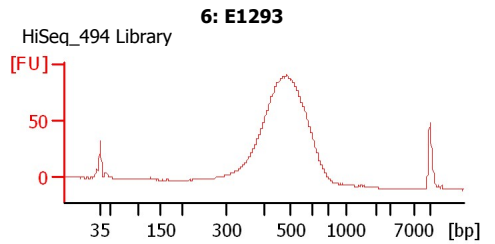
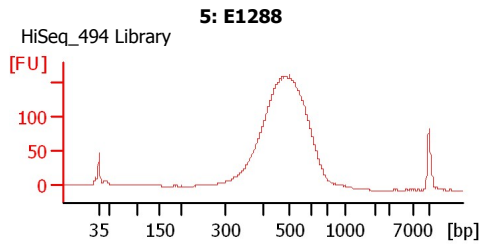
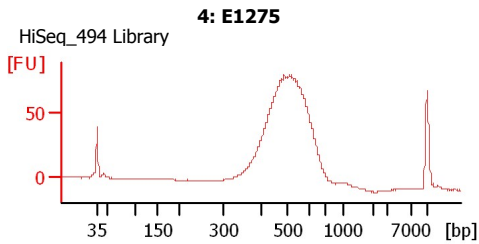
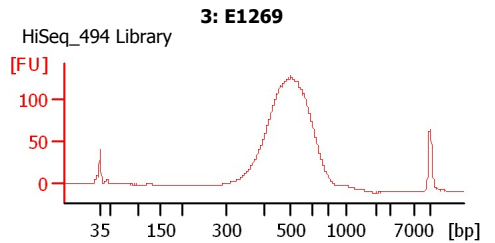
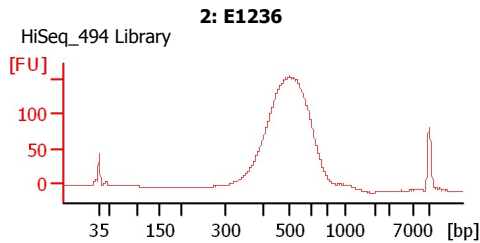
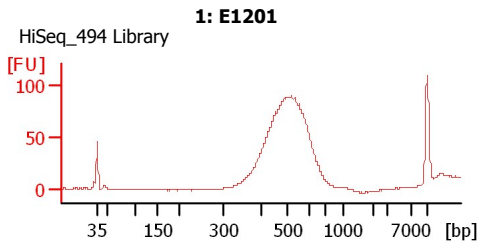
Instrument Name: DE13701086      Firmware: C.01.069  
Serial#: DE13701086      Type: G2938B

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:



Assay Class: High Sensitivity DNA Assay  
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**Electrophoresis File Run Summary (Chip Summary)**

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
1: E1201	HiSeq_494 Library	<input type="checkbox"/>	✓			
2: E1236	HiSeq_494 Library	<input type="checkbox"/>	✓			
3: E1269	HiSeq_494 Library	<input type="checkbox"/>	✓			
4: E1275	HiSeq_494 Library	<input type="checkbox"/>	✓			
5: E1288	HiSeq_494 Library	<input type="checkbox"/>	✓			
6: E1293	HiSeq_494 Library	<input type="checkbox"/>	✓			
7: E1316	HiSeq_494 Library	<input type="checkbox"/>	✓			
8; E1319	HiSeq_494 Library	<input type="checkbox"/>	✓			
9: E1337	HiSeq_494 Library	<input type="checkbox"/>	✓			
10: E1345	HiSeq_494 Library	<input type="checkbox"/>	✓			
11: E1348	HiSeq_494 Library	<input type="checkbox"/>	✓			
Ladder		<input type="checkbox"/>	✓			

**Chip Lot #**

**Reagent Kit Lot #**

**Chip Comments :**

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**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

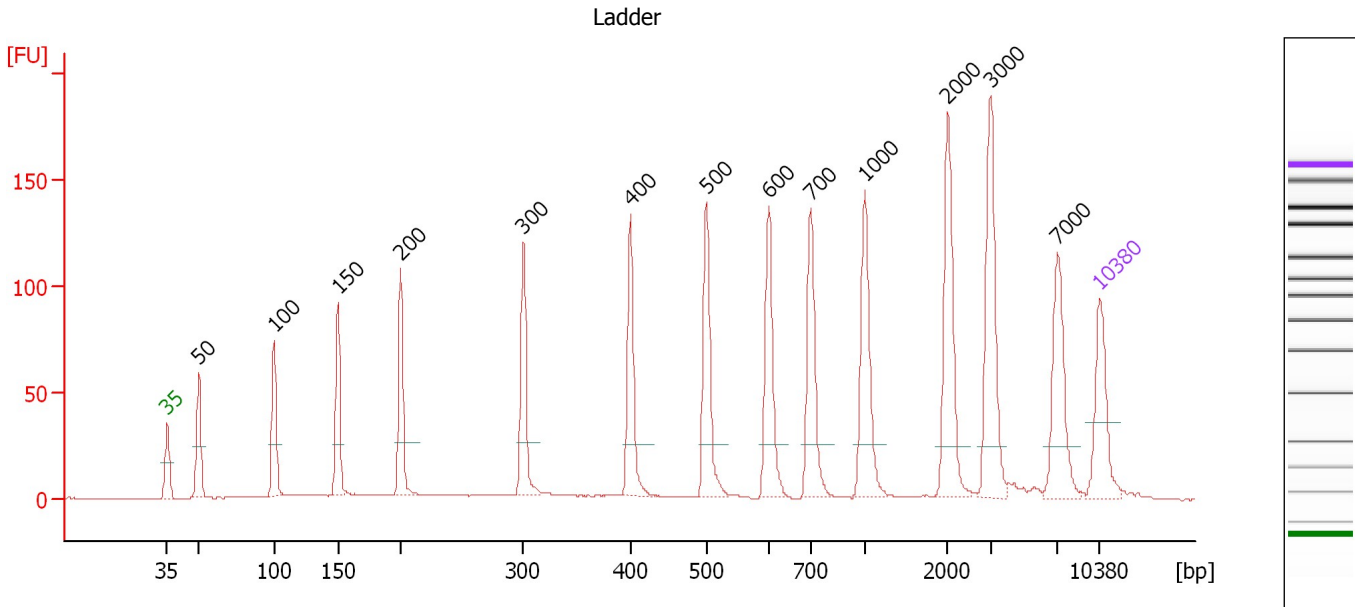
**Ladder**

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

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**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.2

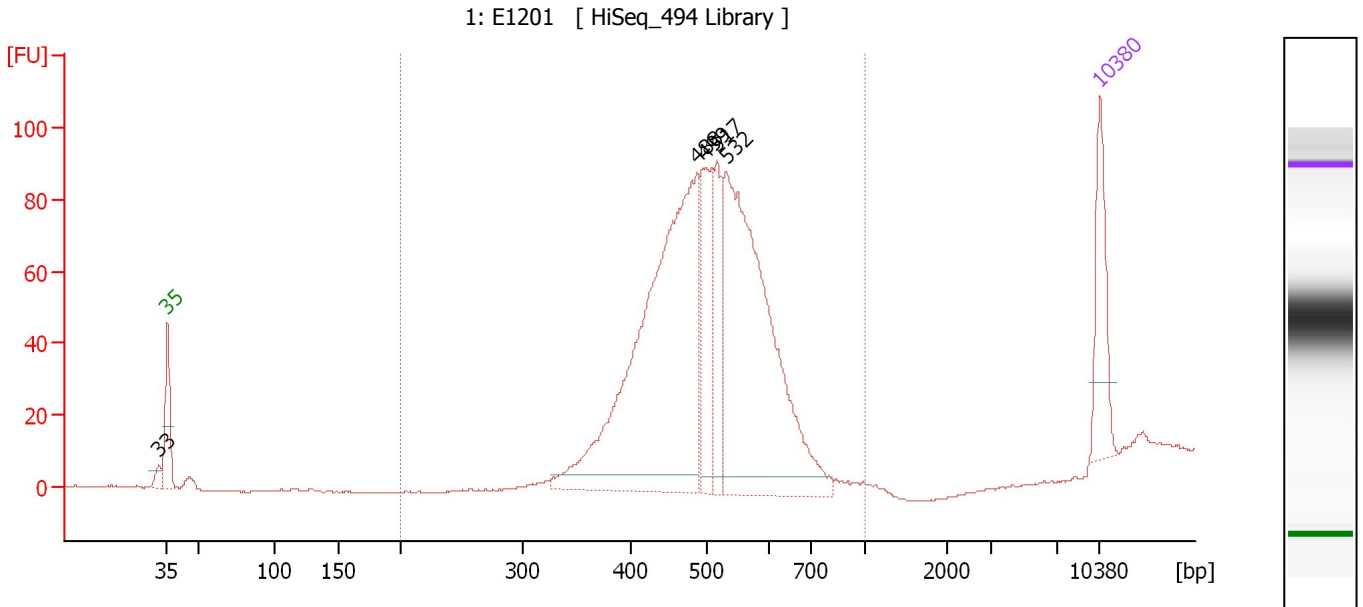
**Peak table for Ladder**

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	45.37
3	100	150.00	2,272.7	Ladder Peak	51.00
4	150	150.00	1,515.2	Ladder Peak	55.79
5	200	150.00	1,136.4	Ladder Peak	60.52
6	300	150.00	757.6	Ladder Peak	69.71
7	400	150.00	568.2	Ladder Peak	77.76
8	500	150.00	454.5	Ladder Peak	83.45
9	600	150.00	378.8	Ladder Peak	88.14
10	700	150.00	324.7	Ladder Peak	91.31
11	1,000	150.00	227.3	Ladder Peak	95.38
12	2,000	150.00	113.6	Ladder Peak	101.59
13	3,000	150.00	75.8	Ladder Peak	104.76
14	7,000	150.00	32.5	Ladder Peak	109.78
15	10,380	75.00	10.9	Upper Marker	113.00

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**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : 1: E1201**

Number of peaks found: 5                      Corr. Area 1: 1,001.2  
 Noise: 0.2

**Peak table for sample 1 : 1: E1201**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	33	0.00	0.0		42.38
2	35	125.00	5,411.3	Lower Marker	43.00
3	488	710.05	2,205.5		82.75
4	499	134.49	408.6		83.38
5	517	96.56	283.0		84.24
6	532	570.53	1,623.9		84.96
7	10,380	75.00	10.9	Upper Marker	113.00

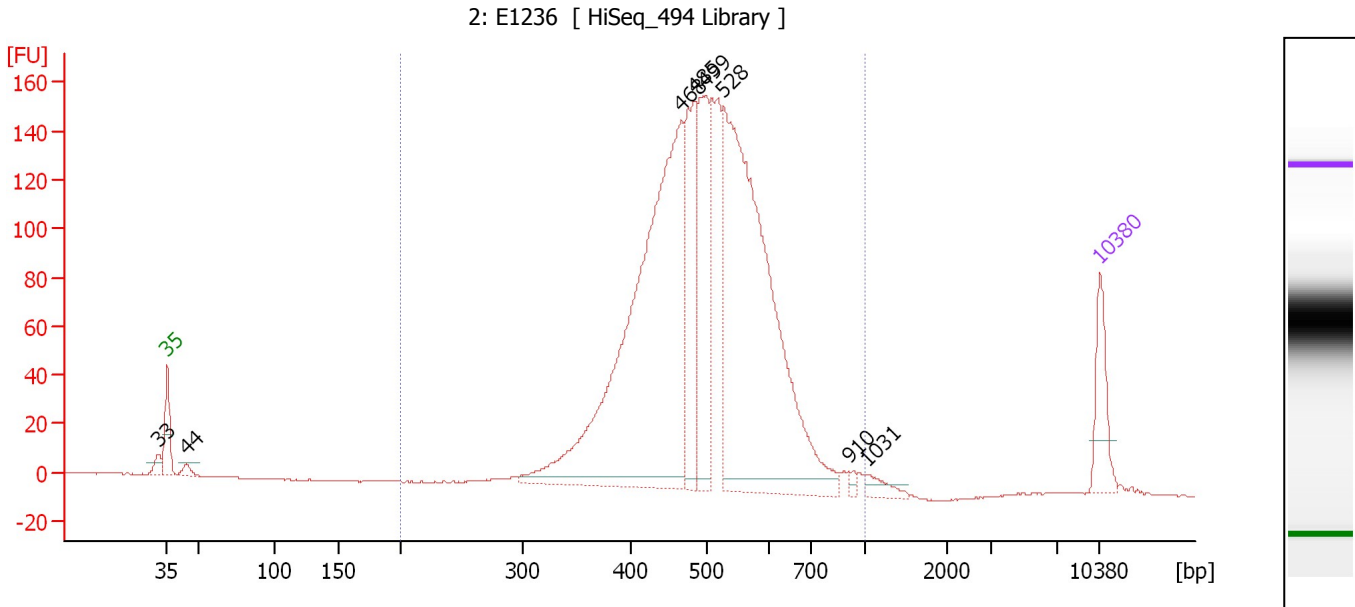
**Region table for sample 1 : 1: E1201**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	503	1,001.2	4,063.7	1,315.33	96	13.9

Assay Class: High Sensitivity DNA Assay  
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**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : 2: E1236**

Number of peaks found: 8                      Corr. Area 1: 2,109.9  
 Noise: 0.2

**Peak table for sample 2 : 2: E1236**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	33	0.00	0.0		42.32
2	35	125.00	5,411.3	Lower Marker	43.00
3	44	18.42	635.3		44.41
4	468	1,191.34	3,860.7		81.60
5	485	270.14	844.5		82.58
6	499	274.70	833.7		83.40
7	528	1,095.63	3,143.1		84.77
8	910	8.68	14.5		94.16
9	1,031	26.24	38.6		95.57
10	10,380	75.00	10.9	Upper Marker	113.00

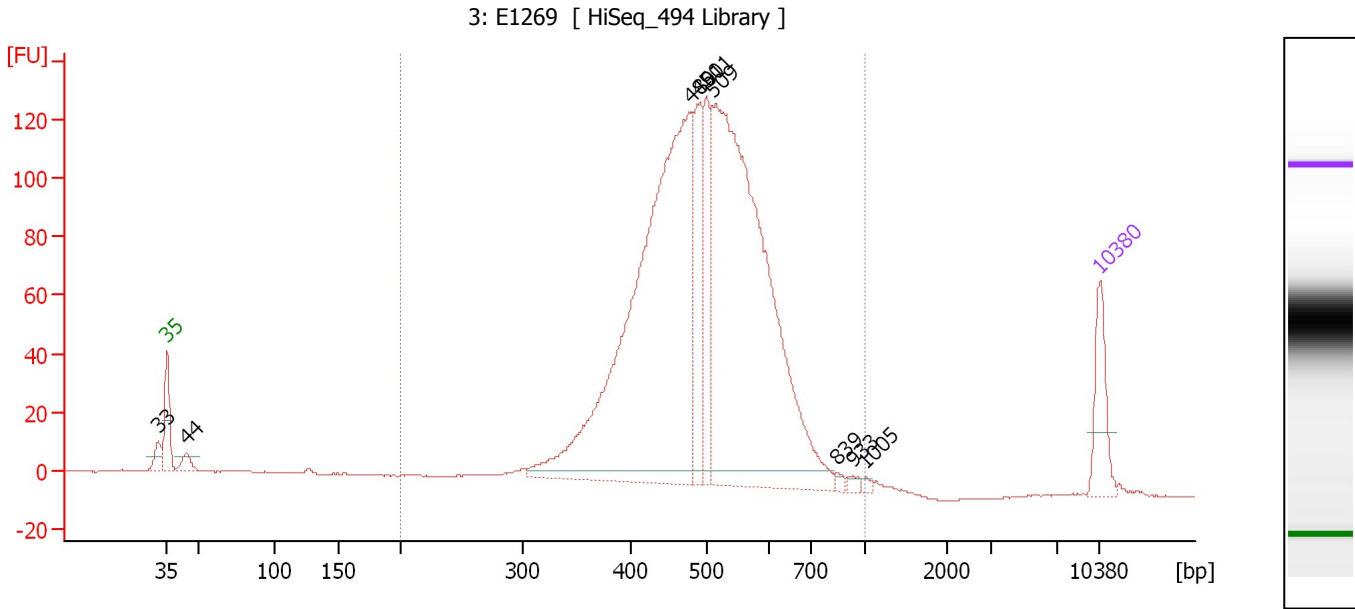
**Region table for sample 2 : 2: E1236**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	503	2,109.9	9,421.0	3,005.72	99	17.7

Assay Class: High Sensitivity DNA Assay  
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**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : 3: E1269**

Number of peaks found: 9                      Corr. Area 1: 1,785.3  
 Noise: 0.2

**Peak table for sample 3 : 3: E1269**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	33	0.00	0.0		42.31
2	35	125.00	5,411.3	Lower Marker	43.00
3	44	29.85	1,026.9		44.43
4	480	1,303.74	4,115.3		82.31
5	491	184.16	568.0		82.95
6	501	171.65	519.1		83.49
7	509	1,259.88	3,747.5		83.89
8	839	8.09	14.6		93.20
9	933	9.46	15.4		94.48
10	1,005	6.15	9.3		95.41
11	10,380	75.00	10.9	Upper Marker	113.00

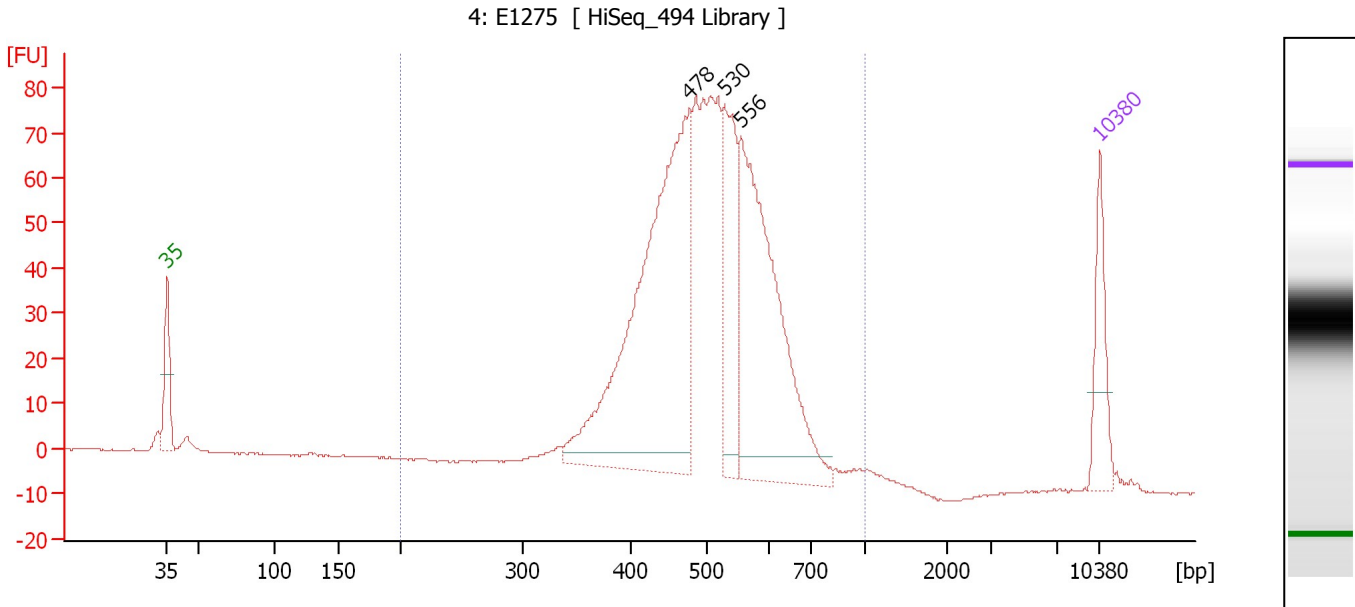
**Region table for sample 3 : 3: E1269**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	498	1,785.3	9,598.7	3,005.24	95	18.3

Assay Class: High Sensitivity DNA Assay  
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**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : 4: E1275**

Number of peaks found: 3                      Corr. Area 1: 1,072.6  
 Noise: 0.2

**Peak table for sample 4 : 4: E1275**

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	478	788.08	2,498.0		82.20
3	530	202.50	578.8		84.86
4	556	511.45	1,394.1		86.07
5	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 4 : 4: E1275**

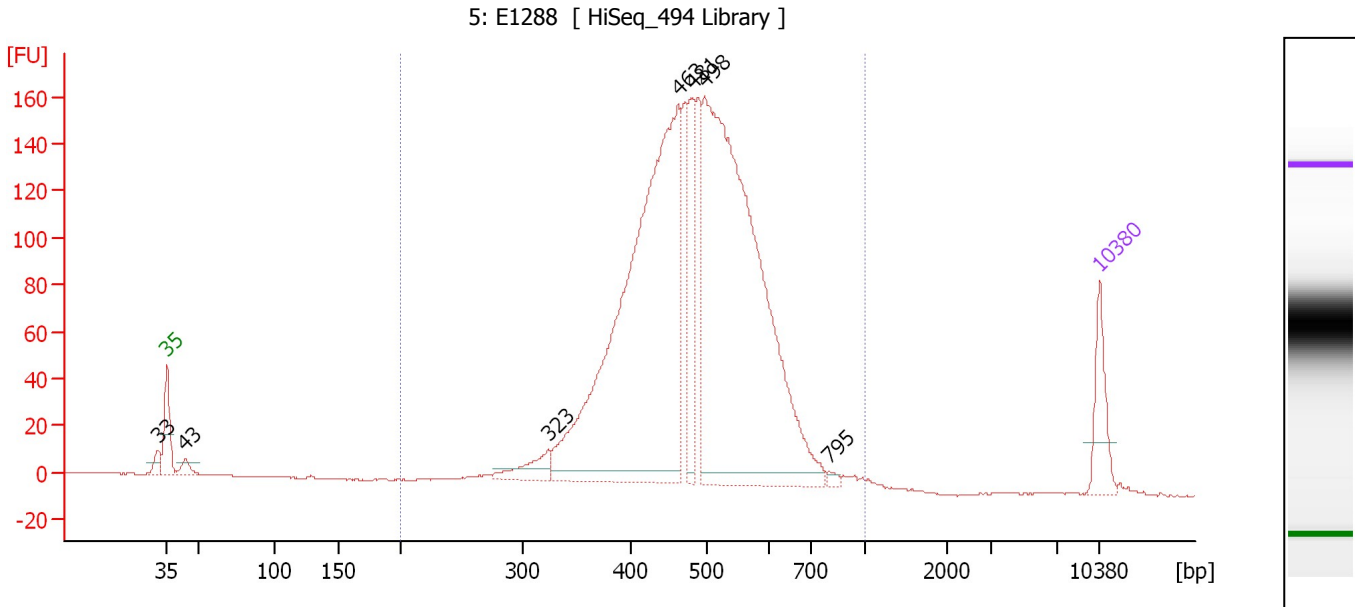
From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	503	1,072.6	6,063.3	1,937.40	97	16.6



Assay Class: High Sensitivity DNA Assay  
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**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : 5: E1288**

Number of peaks found: 7                      Corr. Area 1: 2,303.4  
 Noise: 0.2

**Peak table for sample 5 : 5: E1288**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	33	0.00	0.0		42.29
2	35	125.00	5,411.3	Lower Marker	43.00
3	43	26.81	936.8		44.32
4	323	64.88	304.2		71.58
5	463	1,397.98	4,578.1		81.32
6	481	195.32	614.7		82.39
7	498	1,440.77	4,380.0		83.36
8	795	9.70	18.5		92.59
9	10,380	75.00	10.9	Upper Marker	113.00

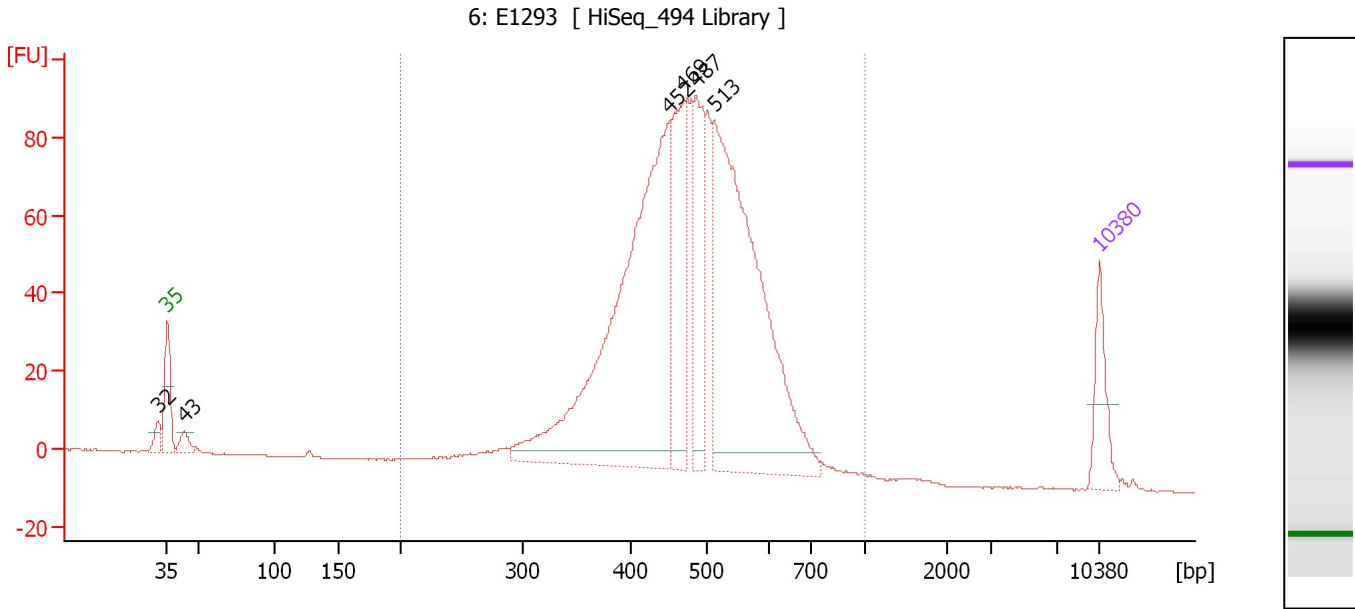
**Region table for sample 5 : 5: E1288**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	487	2,303.4	11,091.0	3,407.23	98	18.5

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-22\2016-05-22\_001.xad

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**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : 6: E1293**

Number of peaks found: 6                      Corr. Area 1: 1,335.3  
 Noise: 0.2

**Peak table for sample 6 : 6: E1293**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	32	0.00	0.0		42.28
2	35	125.00	5,411.3	Lower Marker	43.00
3	43	34.19	1,200.8		44.29
4	452	1,085.13	3,640.1		80.70
5	469	295.89	956.1		81.68
6	487	232.32	722.8		82.71
7	513	940.63	2,779.6		84.04
8	10,380	75.00	10.9	Upper Marker	113.00

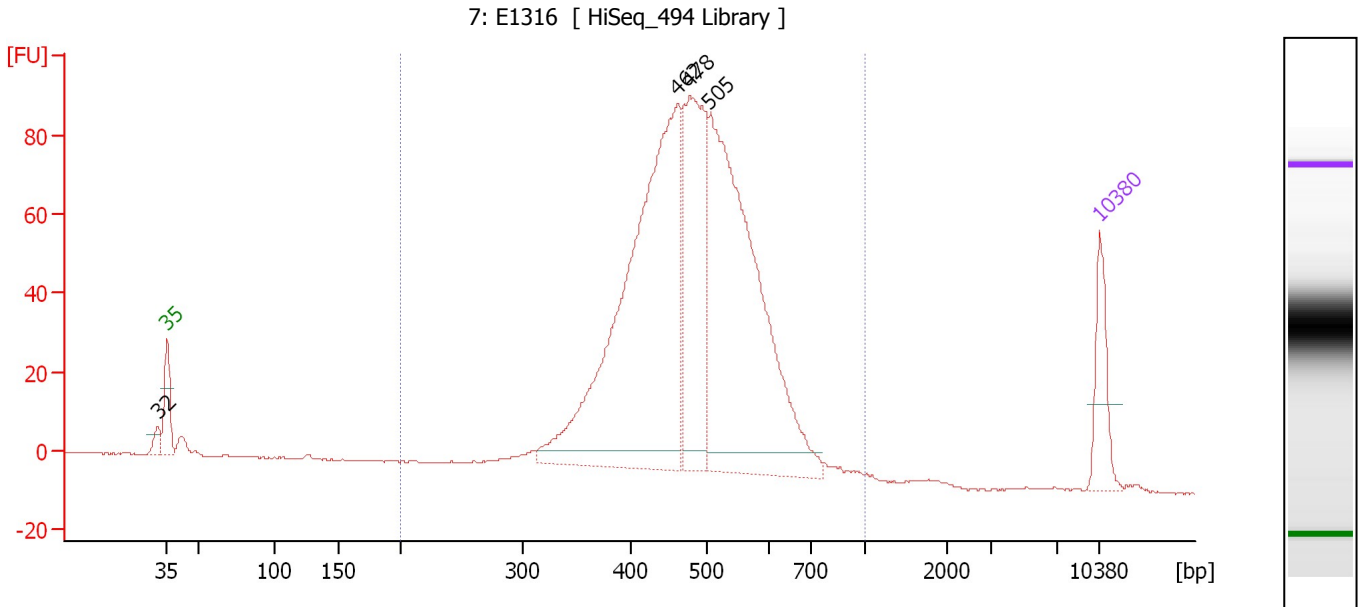
**Region table for sample 6 : 6: E1293**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	478	1,335.3	9,799.6	2,936.98	97	18.5

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**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : 7: E1316**

Number of peaks found: 4                      Corr. Area 1: 1,248.1  
 Noise: 0.1

**Peak table for sample 7 : 7: E1316**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	32	0.00	0.0		42.27
2	35	125.00	5,411.3	Lower Marker	43.00
3	462	1,017.16	3,333.4		81.31
4	478	410.44	1,300.9		82.20
5	505	874.42	2,625.1		83.67
6	10,380	75.00	10.9	Upper Marker	113.00

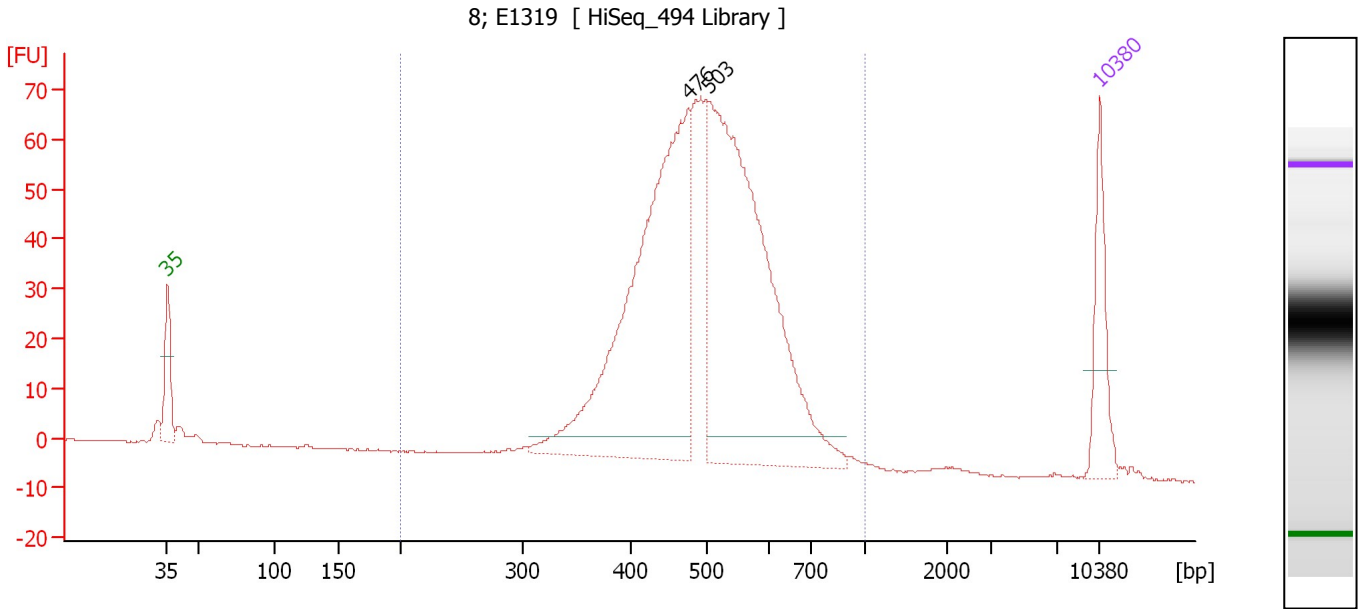
**Region table for sample 7 : 7: E1316**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	484	1,248.1	7,875.5	2,407.87	98	17.7

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**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : 8; E1319**

Number of peaks found: 2                      Corr. Area 1: 954.0  
 Noise: 0.1

**Peak table for sample 8 : 8; E1319**

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	476	724.15	2,305.4		82.08
3	503	764.80	2,305.3		83.57
4	10,380	75.00	10.9	Upper Marker	113.00

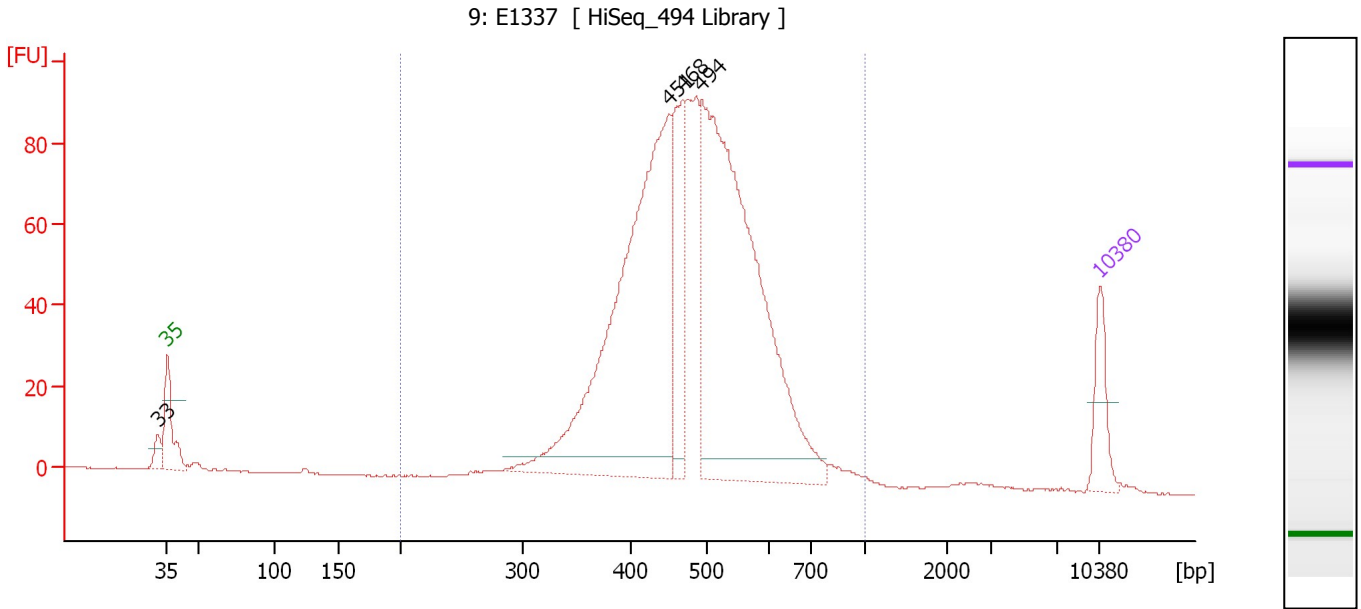
**Region table for sample 8 : 8; E1319**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	501	954.0	5,252.1	1,665.30	98	17.8

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**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : 9: E1337**

Number of peaks found: 4                      Corr. Area 1: 1,296.3  
 Noise: 0.1

**Peak table for sample 9 : 9: E1337**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	33	0.00	0.0		42.30
2	35	125.00	5,411.3	Lower Marker	43.00
3	451	1,169.17	3,926.4		80.67
4	468	254.75	824.3		81.64
5	494	1,252.06	3,840.9		83.10
6	10,380	75.00	10.9	Upper Marker	113.00

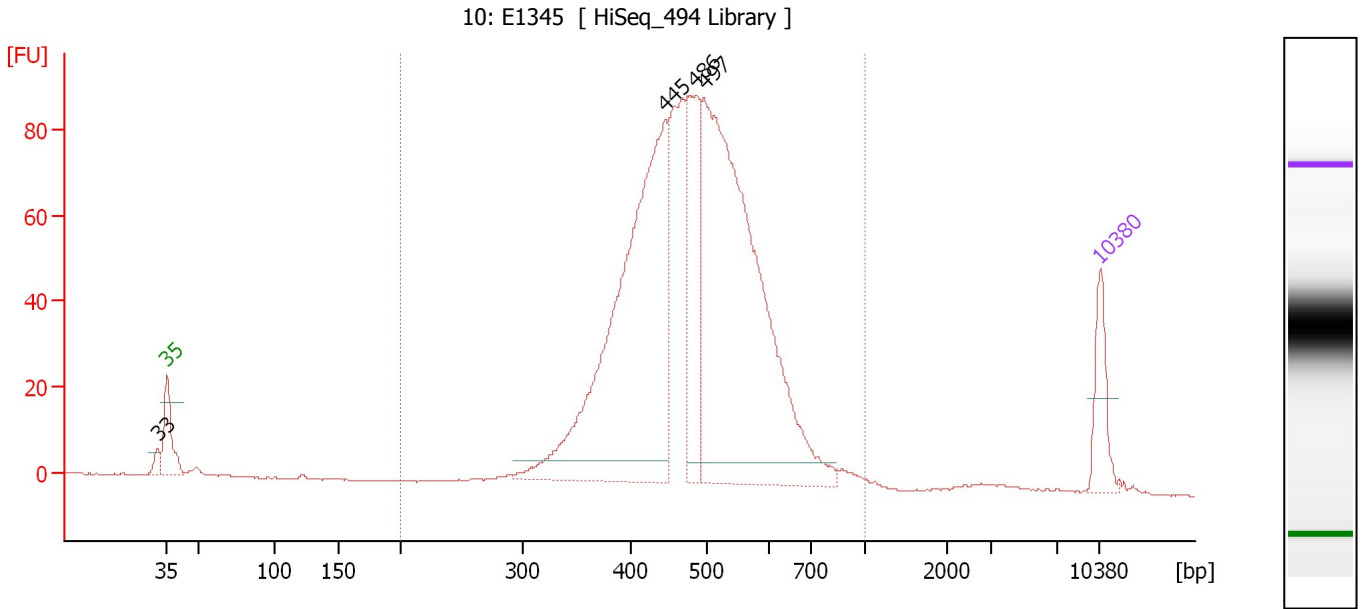
**Region table for sample 9 : 9: E1337**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	485	1,296.3	10,043.9	3,074.53	98	18.7

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**Overall Results for sample 10 : 10: E1345**

Number of peaks found: 4                      Corr. Area 1: 1,217.6  
 Noise: 0.1

**Peak table for sample 10 : 10: E1345**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	33	0.00	0.0		42.29
2	35	125.00	5,411.3	Lower Marker	43.00
3	445	1,049.09	3,573.3		80.31
4	486	277.76	866.0		82.65
5	497	1,218.62	3,711.5		83.30
6	10,380	75.00	10.9	Upper Marker	113.00

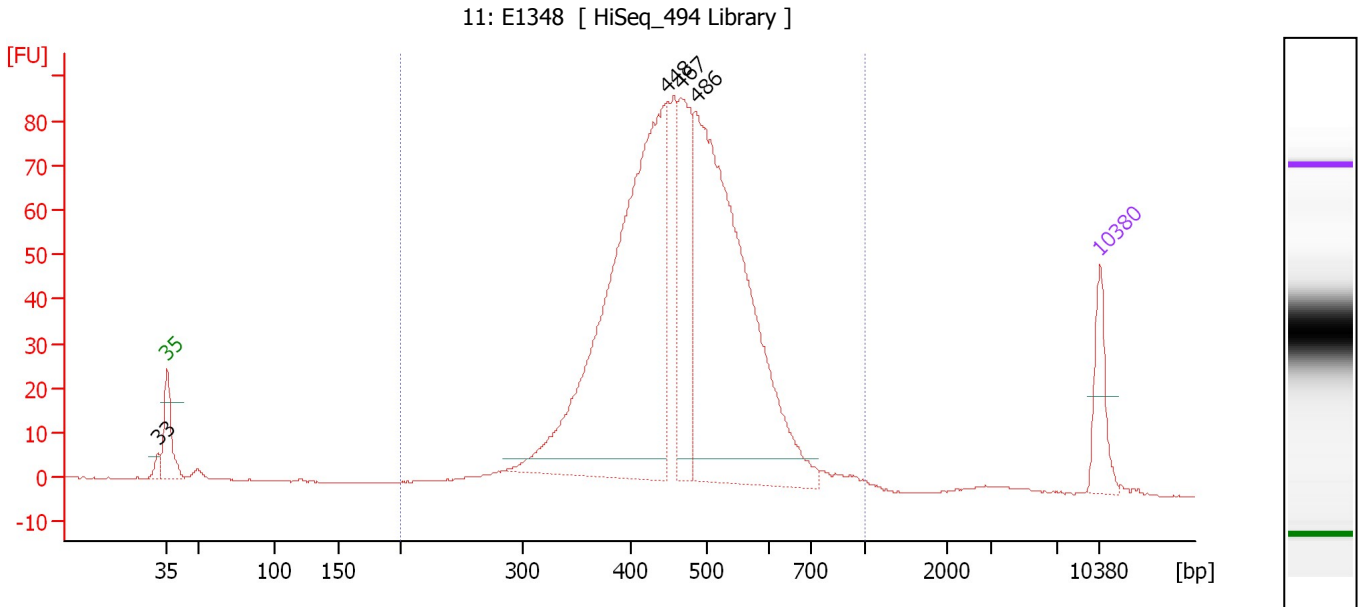
**Region table for sample 10 : 10: E1345**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	487	1,217.6	9,501.5	2,929.83	98	18.5

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**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : 11: E1348**

Number of peaks found: 4                      Corr. Area 1: 1,196.7  
 Noise: 0.2

**Peak table for sample 11 : 11: E1348**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	33	0.00	0.0		42.34
2	35	125.00	5,411.3	Lower Marker	43.00
3	448	1,228.80	4,156.6		80.49
4	467	301.35	977.4		81.58
5	486	1,101.33	3,430.9		82.67
6	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 11 : 11: E1348**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	468	1,196.7	10,251.9	3,017.65	98	19.3

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Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-22\2016-05-22\_001.xad

Created: 5/22/2016 9:41:53 AM  
Modified: 5/22/2016 10:41:50 AM

**Gel Image**



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-05-22\2016-05-22\_001.xad

Created: 5/22/2016 9:41:53 AM  
 Modified: 5/22/2016 10:41:50 AM

**Run Logbook**

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 12)		Instrument	Run		5/22/2016 10:23:11 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\data\2016-05-22\2016-05-22_001.xad)		Instrument	Run		5/22/2016 9:41:59 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		5/22/2016 9:41:59 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		5/22/2016 9:41:59 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		5/22/2016 9:41:59 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		5/22/2016 9:41:59 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		5/22/2016 9:41:59 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		5/22/2016 9:41:59 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1