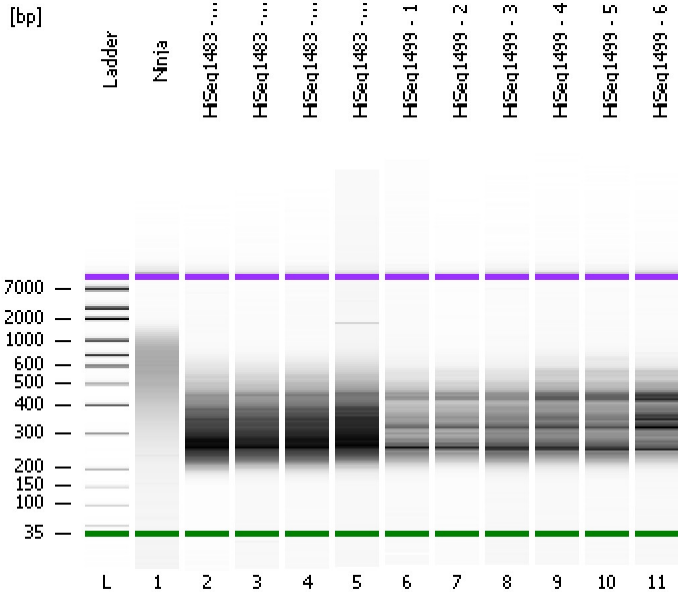


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2018-08-27\2018-08-27_002.xad

Created: 8/27/2018 1:44:00 PM
Modified: 8/27/2018 2:24:29 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

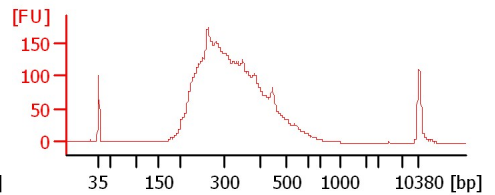
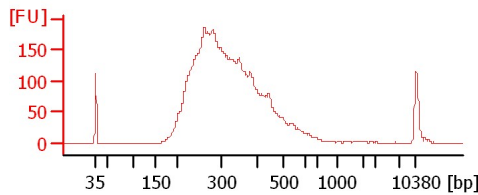
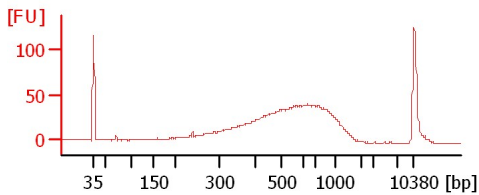
Chip Information:

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

Ninja

HiSeq1483 - 13

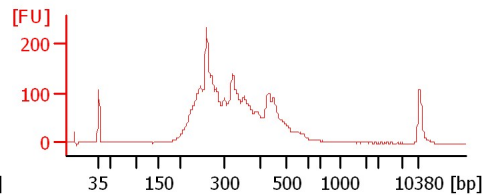
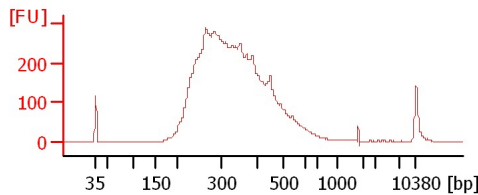
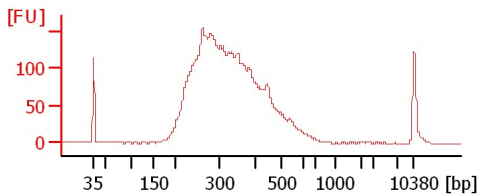
HiSeq1483 - 22



HiSeq1483 - 23

HiSeq1483 - 24

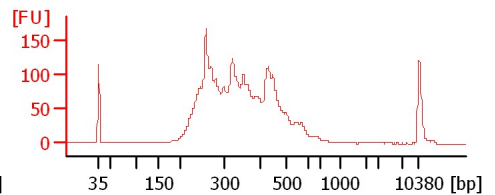
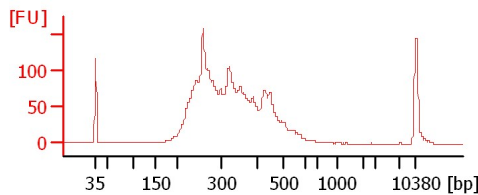
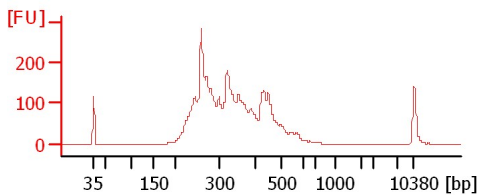
HiSeq1499 - 1



HiSeq1499 - 2

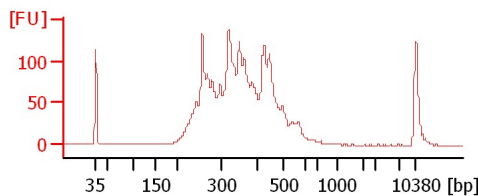
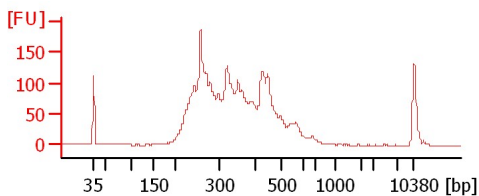
HiSeq1499 - 3

HiSeq1499 - 4



HiSeq1499 - 5

HiSeq1499 - 6



Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2018-08-27\2018-08-27_002.xad

Created: 8/27/2018 1:44:00 PM
Modified: 8/27/2018 2:24:29 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
Ninja		<input type="checkbox"/>	✓			
HiSeq1483 - 13		<input type="checkbox"/>	✓			
HiSeq1483 - 22		<input type="checkbox"/>	✓			
HiSeq1483 - 23		<input type="checkbox"/>	✓			
HiSeq1483 - 24		<input type="checkbox"/>	✓			
HiSeq1499 - 1		<input type="checkbox"/>	✓			
HiSeq1499 - 2		<input type="checkbox"/>	✓			
HiSeq1499 - 3		<input type="checkbox"/>	✓			
HiSeq1499 - 4		<input type="checkbox"/>	✓			
HiSeq1499 - 5		<input type="checkbox"/>	✓			
HiSeq1499 - 6		<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\2018-08-27\2018-08-27_002.xad

Created: 8/27/2018 1:44:00 PM
Modified: 8/27/2018 2:24:29 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

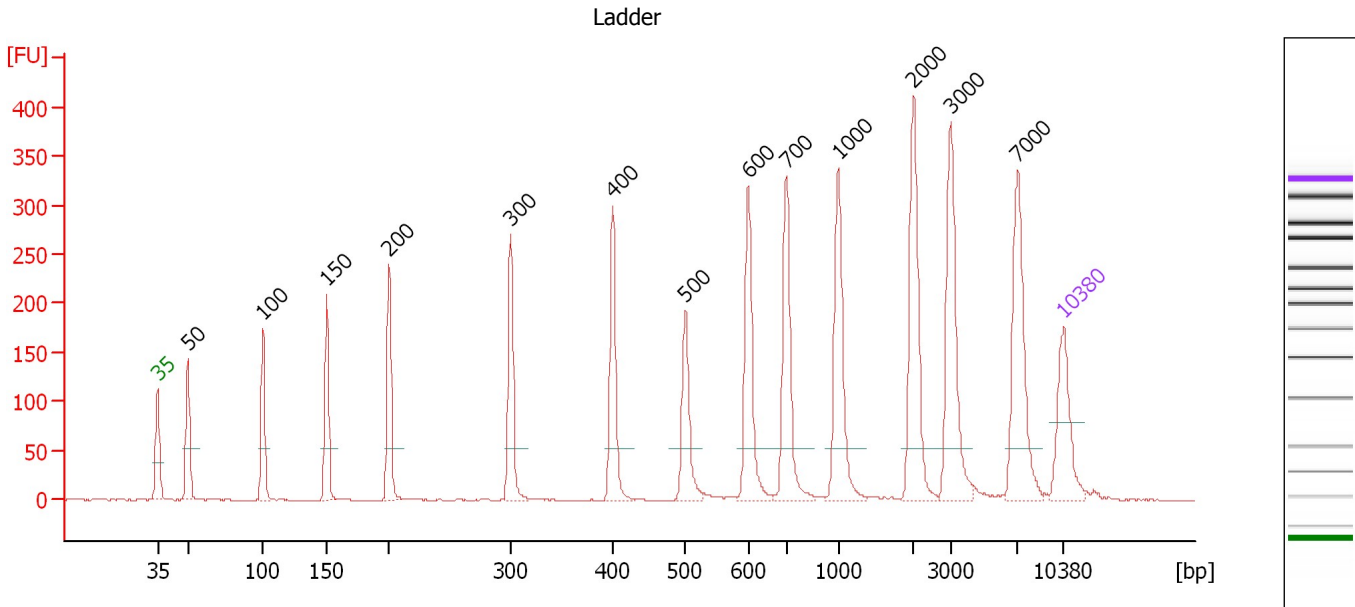
Ladder

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\2018-08-27\2018-08-27_002.xad

Created: 8/27/2018 1:44:00 PM
 Modified: 8/27/2018 2:24:29 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.3

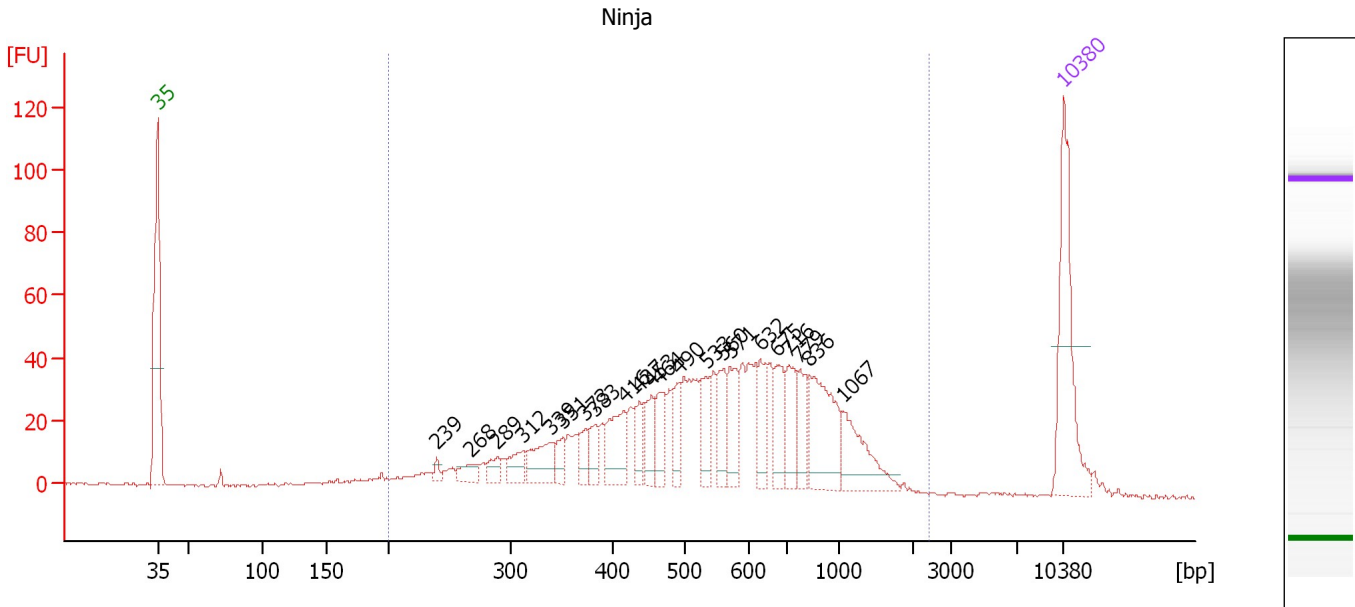
Peak table for Ladder

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	45.37
3	100	150.00	2,272.7	Ladder Peak	51.15
4	150	150.00	1,515.2	Ladder Peak	56.07
5	200	150.00	1,136.4	Ladder Peak	60.90
6	300	150.00	757.6	Ladder Peak	70.28
7	400	150.00	568.2	Ladder Peak	78.16
8	500	150.00	454.5	Ladder Peak	83.76
9	600	150.00	378.8	Ladder Peak	88.63
10	700	150.00	324.7	Ladder Peak	91.55
11	1,000	150.00	227.3	Ladder Peak	95.56
12	2,000	150.00	113.6	Ladder Peak	101.39
13	3,000	150.00	75.8	Ladder Peak	104.26
14	7,000	150.00	32.5	Ladder Peak	109.45
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-08-27\2018-08-27_002.xad

Created: 8/27/2018 1:44:00 PM
 Modified: 8/27/2018 2:24:29 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : Ninja

Number of peaks found: 22 Corr. Area 1: 1,083.2
 Noise: 0.4

Peak table for sample 1 : Ninja

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	239	5.05	32.0		64.56
3	268	13.02	73.7		67.24
4	289	11.07	58.0		69.26
5	312	18.58	90.3		71.19
6	339	32.85	146.8		73.35
7	351	14.18	61.2		74.29
8	373	16.48	66.9		76.03
9	383	16.69	66.0		76.83
10	416	41.75	152.2		79.03
11	437	20.38	70.7		80.21
12	453	25.76	86.1		81.15
13	464	24.25	79.1		81.76
14	490	21.17	65.4		83.21
15	533	26.45	75.2		85.38
16	560	27.17	73.5		86.69
17	571	32.30	85.8		87.21
18	632	27.55	66.1		89.56
19	675	30.29	68.0		90.83
20	716	34.79	73.6		91.77
21	779	21.62	42.0		92.61
22	836	66.23	120.1		93.36
23	1,067	43.52	61.8		95.95
24	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2018-08-27\2018-08-27_002.xad

Created: 8/27/2018 1:44:00 PM
Modified: 8/27/2018 2:24:29 PM

Electropherogram Summary Continued ...

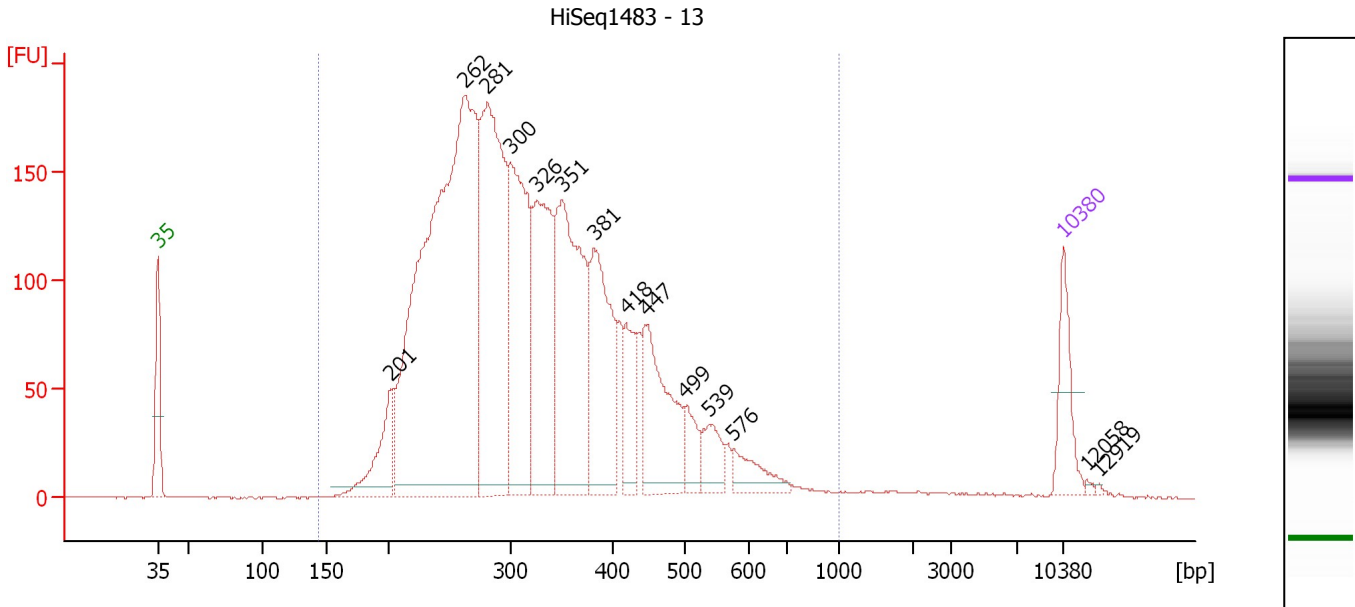
... Region table for sample 1 : Ninja

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/ μ l]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	2,430	607	908.01	1,083.2	2,907.8	 96	46.4

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-08-27\2018-08-27_002.xad

Created: 8/27/2018 1:44:00 PM
 Modified: 8/27/2018 2:24:29 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : HiSeq1483 - 13

Number of peaks found: 14 Corr. Area 1: 4,236.1
 Noise: 0.4

Peak table for sample 2 : HiSeq1483 - 13

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	201	147.16	1,108.2		61.01
3	262	1,584.87	9,159.7		66.73
4	281	655.30	3,533.9		68.49
5	300	430.28	2,175.0		70.26
6	326	372.03	1,730.7		72.31
7	351	474.02	2,049.1		74.26
8	381	299.56	1,190.2		76.69
9	418	100.36	363.8		79.17
10	447	230.68	782.1		80.79
11	499	56.32	171.1		83.69
12	539	61.65	173.4		85.65
13	576	57.03	150.0		87.46
14	10,380	75.00	10.9	Upper Marker	113.00
15	12,058	0.00	0.0		114.76
16	12,919	0.00	0.0		115.67

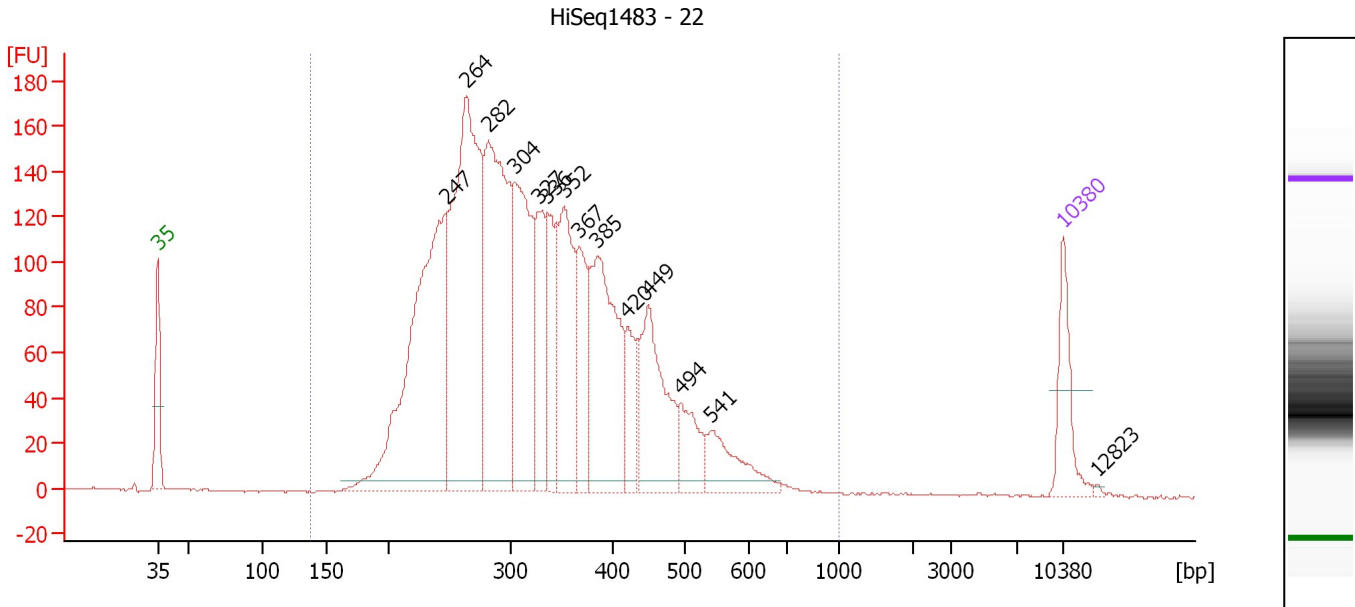
Region table for sample 2 : HiSeq1483 - 13

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
144	1,000	333	4,727.78	4,236.1	23,924.1	98	30.4

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-08-27\2018-08-27_002.xad

Created: 8/27/2018 1:44:00 PM
 Modified: 8/27/2018 2:24:29 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : HiSeq1483 - 22

Number of peaks found: 14 Corr. Area 1: 3,665.7
 Noise: 0.4

Peak table for sample 3 : HiSeq1483 - 22

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	247	734.50	4,500.9		65.33
3	264	741.57	4,259.6		66.88
4	282	556.73	2,992.8		68.58
5	304	357.72	1,781.6		70.61
6	327	164.98	764.5		72.40
7	336	132.23	595.9		73.13
8	352	263.58	1,134.0		74.39
9	367	142.31	587.7		75.55
10	385	339.32	1,336.2		76.96
11	420	74.21	267.7		79.28
12	449	220.41	743.0		80.93
13	494	84.18	258.4		83.40
14	541	94.27	263.9		85.78
15	10,380	75.00	10.9	Upper Marker	113.00
16	12,823	0.00	0.0		115.57

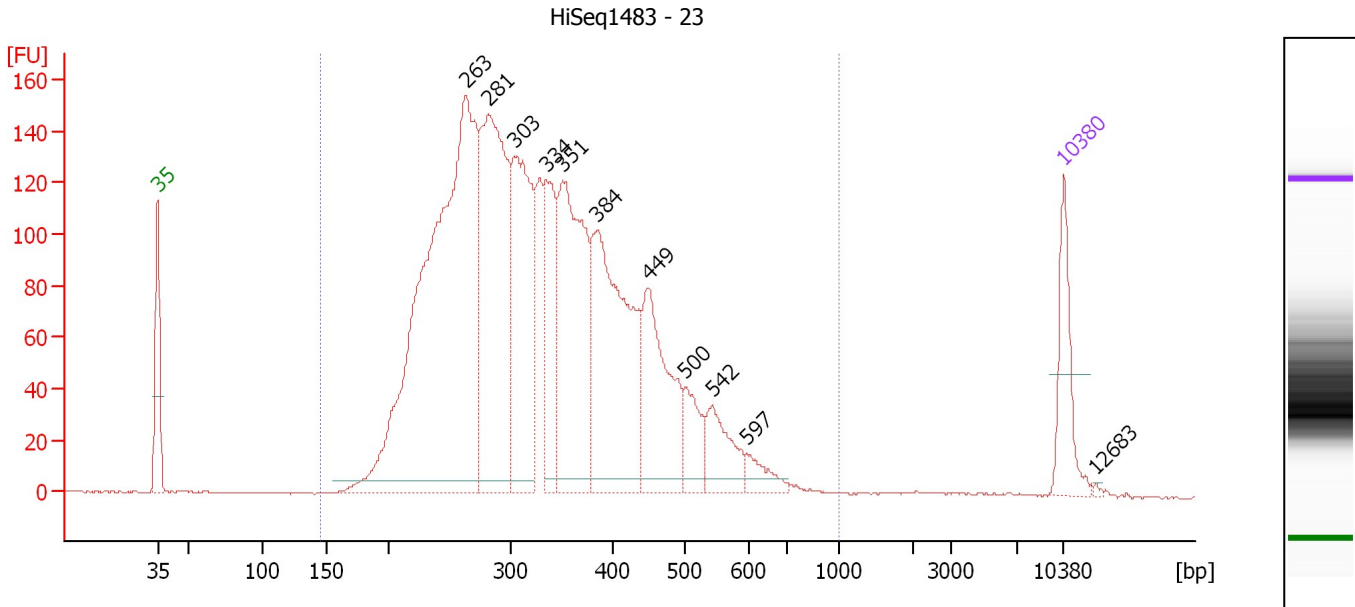
Region table for sample 3 : HiSeq1483 - 22

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
136	1,000	334	3,989.79	3,665.7	19,905.7	99	28.1

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-08-27\2018-08-27_002.xad

Created: 8/27/2018 1:44:00 PM
 Modified: 8/27/2018 2:24:29 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : HiSeq1483 - 23

Number of peaks found: 11 Corr. Area 1: 3,547.7
 Noise: 0.4

Peak table for sample 4 : HiSeq1483 - 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	263	1,196.08	6,890.1		66.81
3	281	538.95	2,901.4		68.54
4	303	363.58	1,818.1		70.52
5	334	168.79	764.9		72.99
6	351	389.79	1,684.3		74.27
7	384	412.82	1,626.7		76.94
8	449	216.70	731.7		80.89
9	500	67.86	205.7		83.76
10	542	77.33	216.0		85.83
11	597	29.23	74.1		88.50
12	10,380	75.00	10.9	Upper Marker	113.00
13	12,683	0.00	0.0		115.42

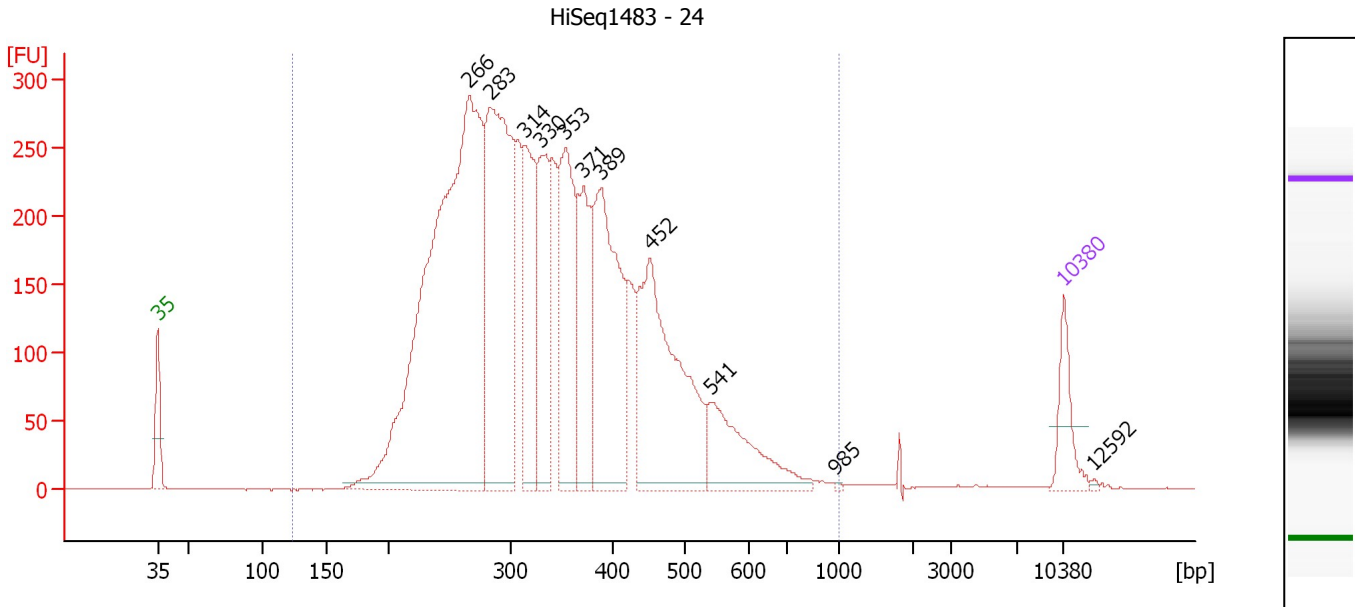
Region table for sample 4 : HiSeq1483 - 23

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
145	1,000	339	3,664.44	3,547.7	18,100.6	99	28.8

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-08-27\2018-08-27_002.xad

Created: 8/27/2018 1:44:00 PM
 Modified: 8/27/2018 2:24:29 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : HiSeq1483 - 24

Number of peaks found: 11 Corr. Area 1: 6,916.6
 Noise: 0.3

Peak table for sample 5 : HiSeq1483 - 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	266	1,961.01	11,184.7		67.06
3	283	874.30	4,673.9		68.73
4	314	354.48	1,712.5		71.35
5	330	306.09	1,404.1		72.67
6	353	406.77	1,744.0		74.49
7	371	270.05	1,101.8		75.90
8	389	536.54	2,091.6		77.27
9	452	609.12	2,043.0		81.06
10	541	237.55	665.3		85.76
11	985	2.38	3.7		95.36
12	10,380	75.00	10.9	Upper Marker	113.00
13	12,592	0.00	0.0		115.32

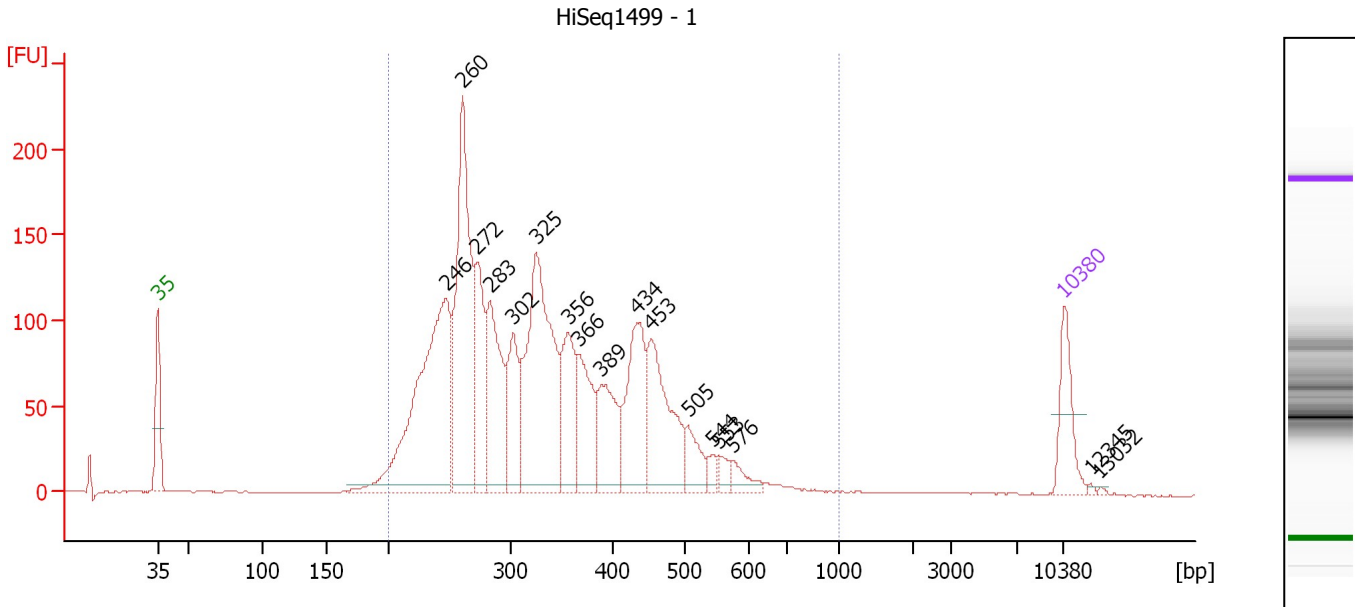
Region table for sample 5 : HiSeq1483 - 24

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
123	1,000	347	6,133.17	6,916.6	29,629.0	99	29.3

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-08-27\2018-08-27_002.xad

Created: 8/27/2018 1:44:00 PM
 Modified: 8/27/2018 2:24:29 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : HiSeq1499 - 1

Number of peaks found: 17 Corr. Area 1: 2,961.3
 Noise: 0.4

Peak table for sample 6 : HiSeq1499 - 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	246	618.58	3,804.2		65.25
3	260	506.92	2,952.6		66.54
4	272	189.45	1,054.4		67.68
5	283	245.90	1,318.0		68.66
6	302	146.70	735.2		70.46
7	325	487.09	2,273.7		72.22
8	356	160.57	683.3		74.70
9	366	145.69	603.3		75.47
10	389	142.90	556.9		77.28
11	434	199.86	697.7		80.06
12	453	223.29	746.2		81.15
13	505	60.96	183.0		83.99
14	544	19.84	55.3		85.90
15	553	20.89	57.2		86.36
16	576	28.99	76.3		87.45
17	10,380	75.00	10.9	Upper Marker	113.00
18	12,345	0.00	0.0		115.06
19	13,032	0.00	0.0		115.79

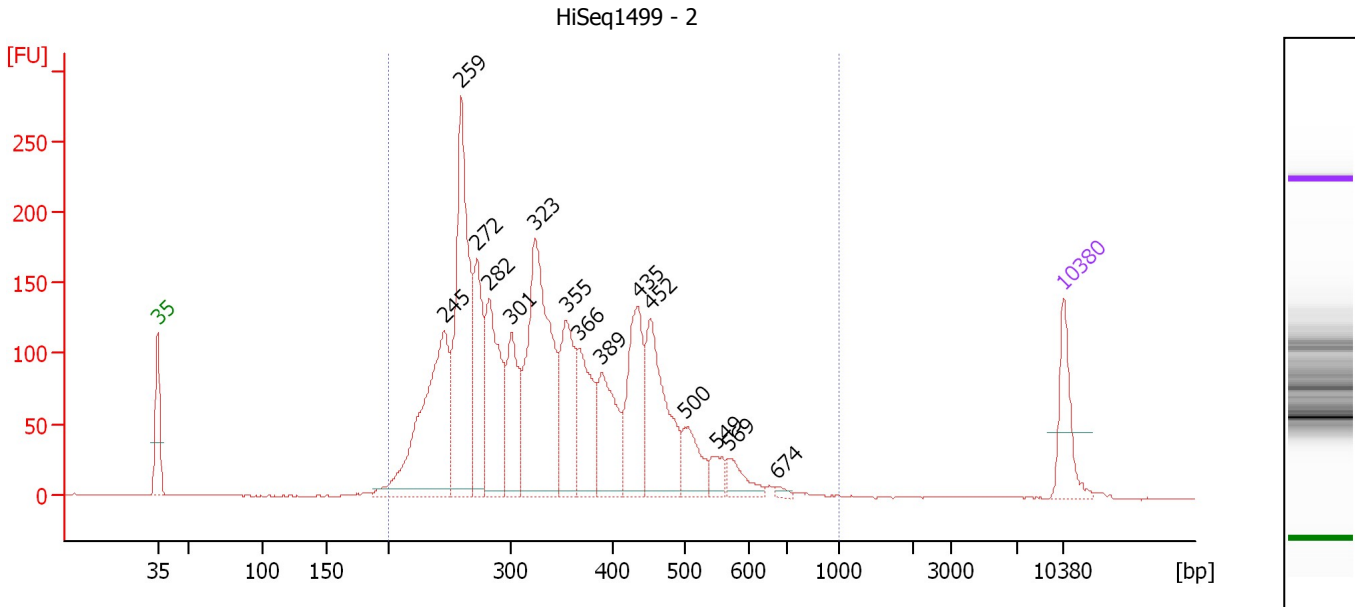
Region table for sample 6 : HiSeq1499 - 1

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	342	3,232.97	2,961.3	15,833.5	97	29.0

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-08-27\2018-08-27_002.xad

Created: 8/27/2018 1:44:00 PM
 Modified: 8/27/2018 2:24:29 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : HiSeq1499 - 2

Number of peaks found: 15 Corr. Area 1: 3,484.0
 Noise: 0.4

Peak table for sample 7 : HiSeq1499 - 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	245	455.70	2,819.0		65.11
3	259	482.30	2,817.0		66.47
4	272	195.51	1,088.1		67.68
5	282	266.89	1,432.6		68.62
6	301	159.06	801.3		70.34
7	323	482.42	2,260.6		72.12
8	355	177.32	757.8		74.58
9	366	174.62	722.0		75.52
10	389	160.51	625.1		77.29
11	435	197.54	688.1		80.12
12	452	236.20	792.2		81.06
13	500	81.94	248.2		83.78
14	549	34.23	94.5		86.13
15	569	44.09	117.4		87.12
16	674	7.56	17.0		90.78
17	10,380	75.00	10.9	Upper Marker	113.00

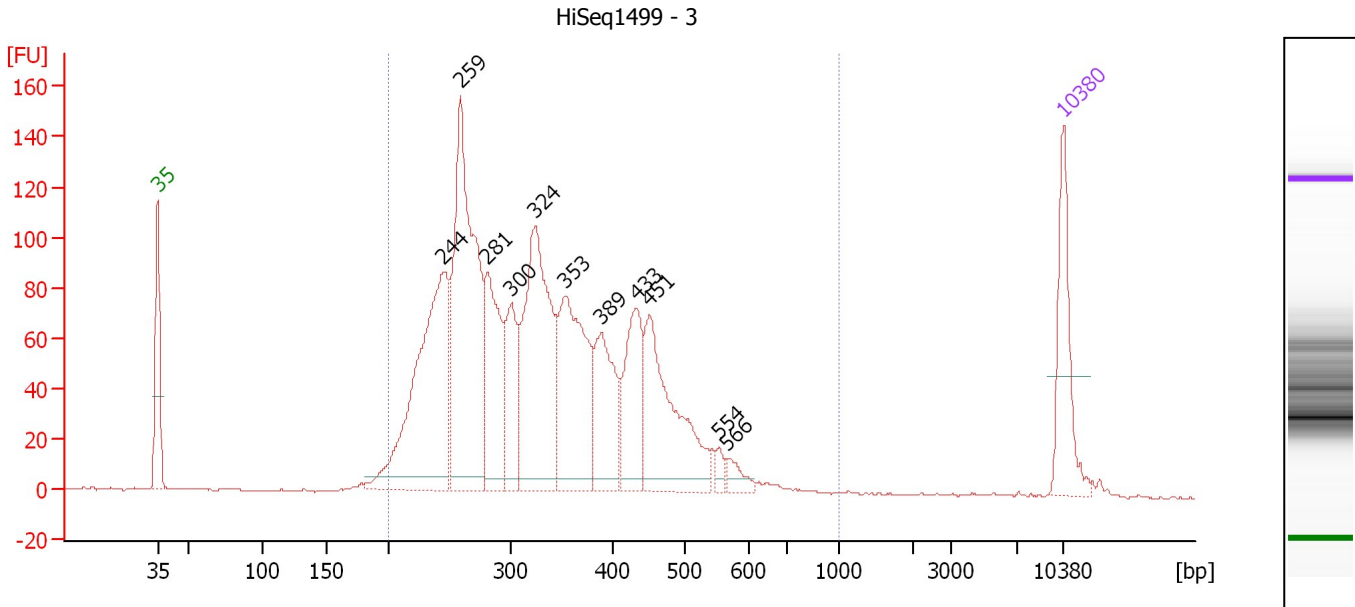
Region table for sample 7 : HiSeq1499 - 2

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	348	3,161.58	3,484.0	15,144.8	99	27.8

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-08-27\2018-08-27_002.xad

Created: 8/27/2018 1:44:00 PM
 Modified: 8/27/2018 2:24:29 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : HiSeq1499 - 3

Number of peaks found: 11 Corr. Area 1: 2,335.5
 Noise: 0.3

Peak table for sample 8 : HiSeq1499 - 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	244	365.35	2,266.1		65.05
3	259	405.12	2,371.2		66.42
4	281	151.51	817.7		68.47
5	300	98.49	496.7		70.32
6	324	289.00	1,352.2		72.16
7	353	213.16	916.1		74.42
8	389	113.92	444.2		77.26
9	433	109.92	384.8		80.00
10	451	185.95	625.1		81.00
11	554	10.15	27.8		86.37
12	566	16.84	45.1		87.00
13	10,380	75.00	10.9	Upper Marker	113.00

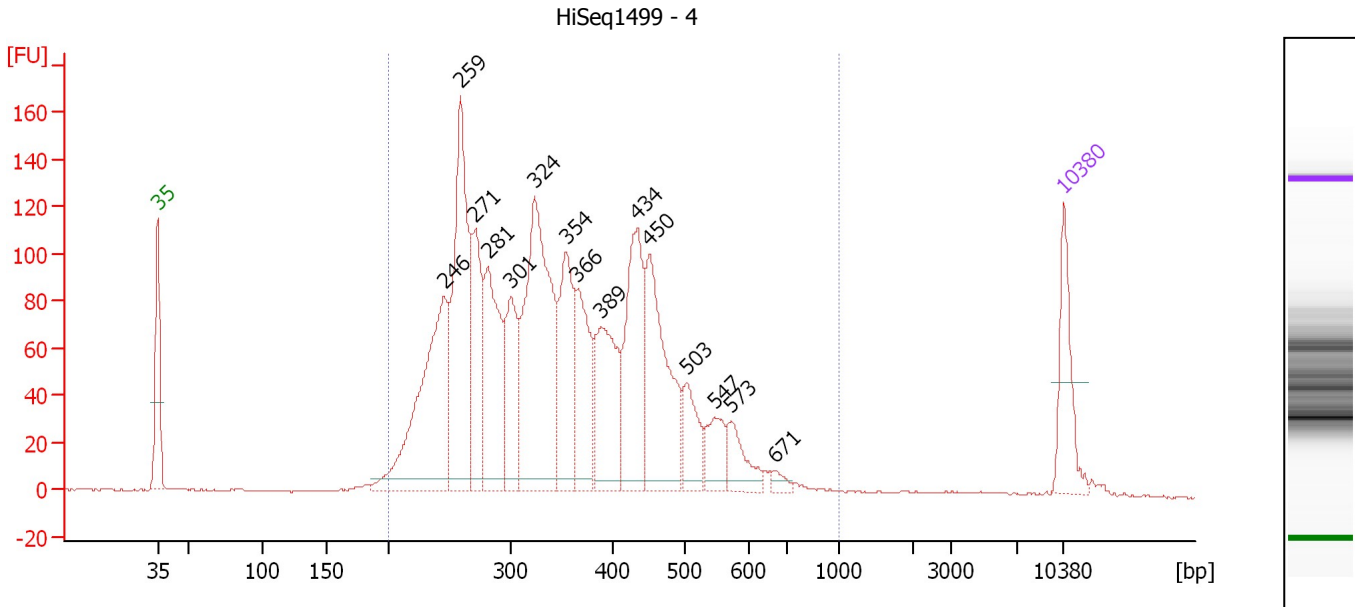
Region table for sample 8 : HiSeq1499 - 3

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	340	2,003.82	2,335.5	9,813.9	98	27.8

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-08-27\2018-08-27_002.xad

Created: 8/27/2018 1:44:00 PM
 Modified: 8/27/2018 2:24:29 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : HiSeq1499 - 4

Number of peaks found: 15 Corr. Area 1: 2,709.7
 Noise: 0.3

Peak table for sample 9 : HiSeq1499 - 4

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	246	377.73	2,329.9		65.18
3	259	370.39	2,169.4		66.40
4	271	158.21	885.9		67.52
5	281	220.14	1,185.5		68.53
6	301	135.96	684.9		70.34
7	324	424.87	1,988.6		72.15
8	354	170.10	727.8		74.54
9	366	142.30	589.8		75.45
10	389	174.85	681.9		77.26
11	434	206.88	721.9		80.07
12	450	236.57	795.9		80.98
13	503	71.42	215.1		83.90
14	547	54.70	151.6		86.03
15	573	50.08	132.5		87.31
16	671	11.51	26.0		90.71
17	10,380	75.00	10.9	Upper Marker	113.00

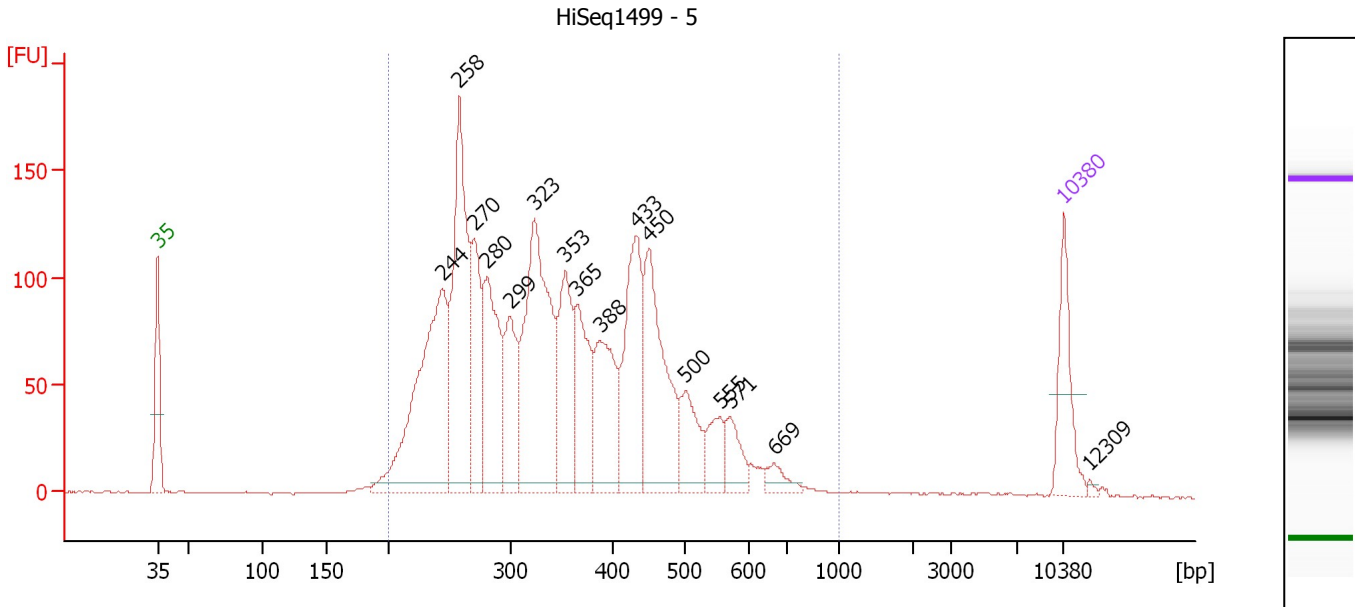
Region table for sample 9 : HiSeq1499 - 4

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	360	2,858.11	2,709.7	13,372.6	98	29.0

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-08-27\2018-08-27_002.xad

Created: 8/27/2018 1:44:00 PM
 Modified: 8/27/2018 2:24:29 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : HiSeq1499 - 5

Number of peaks found: 16 Corr. Area 1: 2,912.7
 Noise: 0.3

Peak table for sample 10 : HiSeq1499 - 5

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	244	428.29	2,658.6		65.04
3	258	362.10	2,128.7		66.32
4	270	154.16	866.1		67.44
5	280	206.22	1,114.0		68.45
6	299	135.42	685.7		70.21
7	323	388.21	1,818.3		72.13
8	353	156.87	672.8		74.48
9	365	142.58	591.1		75.44
10	388	150.93	589.7		77.20
11	433	202.24	707.1		80.03
12	450	231.40	779.9		80.93
13	500	80.98	245.4		83.76
14	555	50.16	137.0		86.43
15	571	47.25	125.3		87.23
16	669	23.78	53.9		90.64
17	10,380	75.00	10.9	Upper Marker	113.00
18	12,309	0.00	0.0		115.03

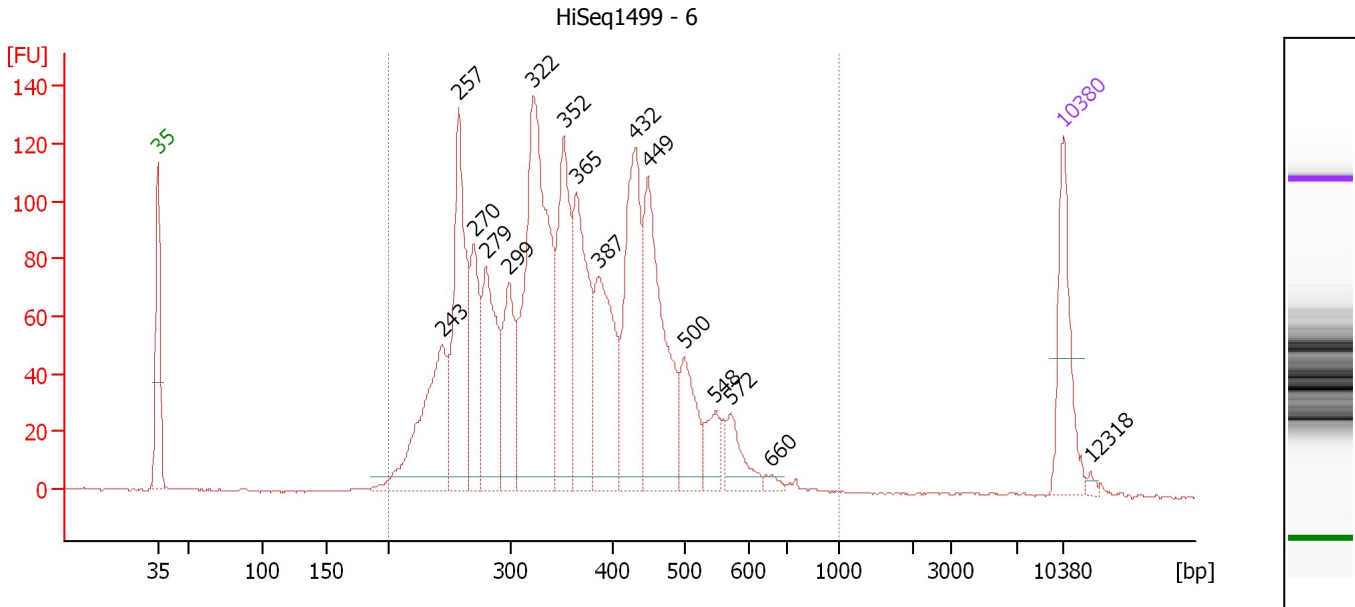
Region table for sample 10 : HiSeq1499 - 5

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	360	2,815.79	2,912.7	13,295.8	98	30.1

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-08-27\2018-08-27_002.xad

Created: 8/27/2018 1:44:00 PM
 Modified: 8/27/2018 2:24:29 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : HiSeq1499 - 6

Number of peaks found: 16 Corr. Area 1: 2,396.4
 Noise: 0.3

Peak table for sample 11 : HiSeq1499 - 6

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	243	198.91	1,237.9		64.98
3	257	224.32	1,321.6		66.26
4	270	109.61	615.7		67.44
5	279	150.13	814.0		68.35
6	299	108.09	548.0		70.17
7	322	385.27	1,810.2		72.05
8	352	175.60	755.0		74.41
9	365	177.41	737.2		75.37
10	387	156.44	612.3		77.14
11	432	181.85	638.4		79.93
12	449	216.31	730.2		80.89
13	500	71.72	217.5		83.74
14	548	36.21	100.1		86.09
15	572	39.45	104.5		87.27
16	660	6.96	16.0		90.38
17	10,380	75.00	10.9	Upper Marker	113.00
18	12,318	0.00	0.0		115.04

Region table for sample 11 : HiSeq1499 - 6

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	367	2,269.43	2,396.4	10,263.5	99	26.2

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2018-08-27\2018-08-27_002.xad

Created: 8/27/2018 1:44:00 PM
Modified: 8/27/2018 2:24:29 PM

Gel Image

