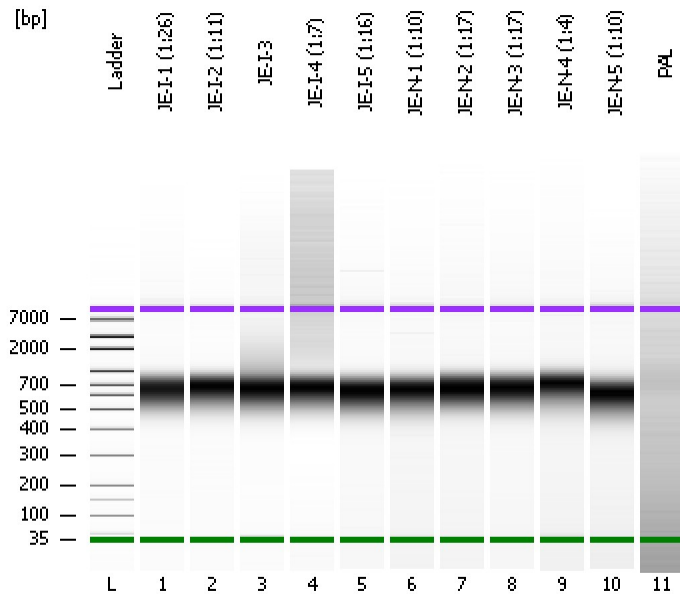


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-24\2015-06-24\_002.xad

Created: 6/24/2015 1:03:56 PM  
Modified: 6/24/2015 1:47:22 PM

**Electrophoresis File Run Summary**



Instrument Information:

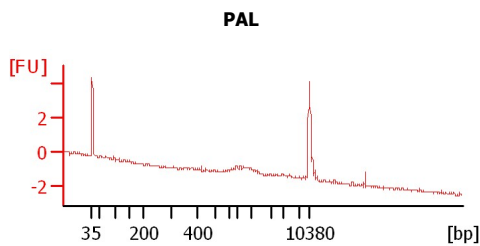
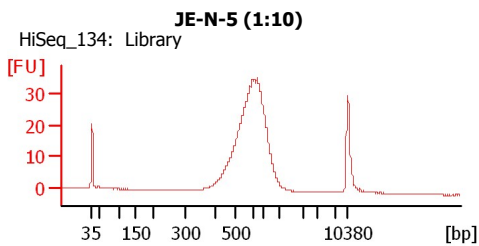
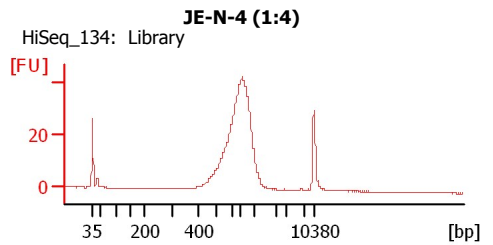
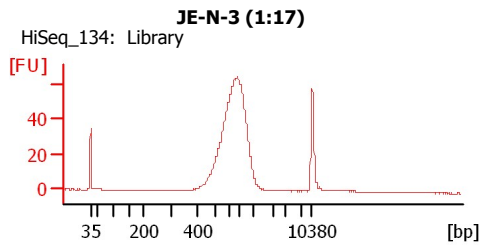
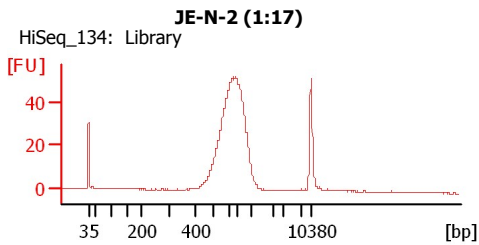
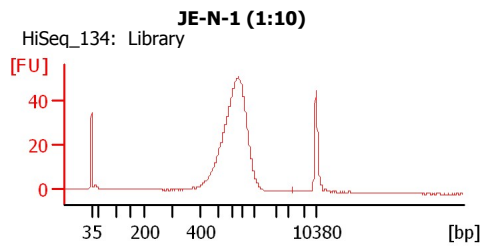
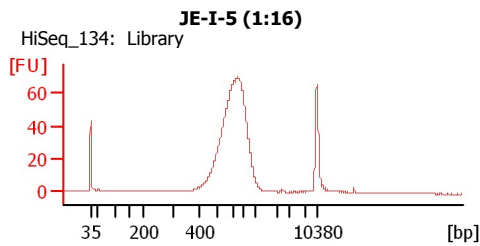
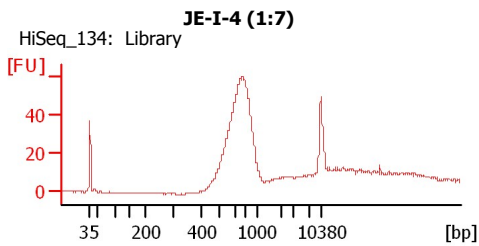
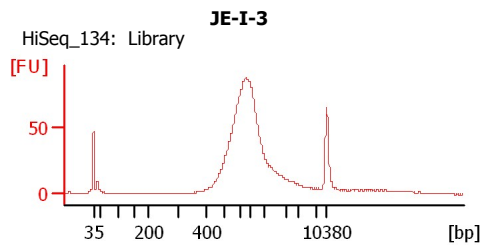
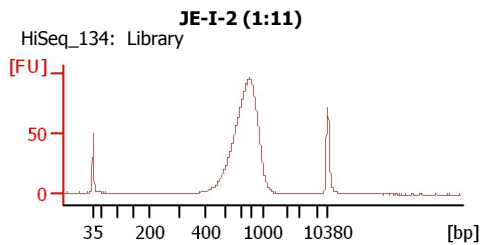
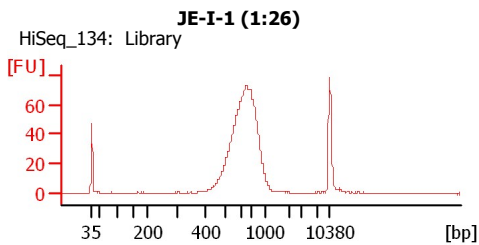
Instrument Name: DE13701086      Firmware: C.01.069  
Serial#: DE13701086      Type: G2938B

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  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-24\2015-06-24\_002.xad

Created: 6/24/2015 1:03:56 PM  
 Modified: 6/24/2015 1:47:22 PM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
JE-I-1 (1:26)	HiSeq_134: Library	<input type="checkbox"/>	✓			
JE-I-2 (1:11)	HiSeq_134: Library	<input type="checkbox"/>	✓			
JE-I-3	HiSeq_134: Library	<input type="checkbox"/>	✓			
JE-I-4 (1:7)	HiSeq_134: Library	<input type="checkbox"/>	✓			
JE-I-5 (1:16)	HiSeq_134: Library	<input type="checkbox"/>	✓			
JE-N-1 (1:10)	HiSeq_134: Library	<input type="checkbox"/>	✓			
JE-N-2 (1:17)	HiSeq_134: Library	<input type="checkbox"/>	✓			
JE-N-3 (1:17)	HiSeq_134: Library	<input type="checkbox"/>	✓			
JE-N-4 (1:4)	HiSeq_134: Library	<input type="checkbox"/>	✓			
JE-N-5 (1:10)	HiSeq_134: Library	<input type="checkbox"/>	✓			
PAL		<input type="checkbox"/>	✓			
Ladder		<input type="checkbox"/>	✓			

Chip Lot #

Reagent Kit Lot #

Chip Comments :

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-24\2015-06-24\_002.xad

Created: 6/24/2015 1:03:56 PM  
Modified: 6/24/2015 1:47:22 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

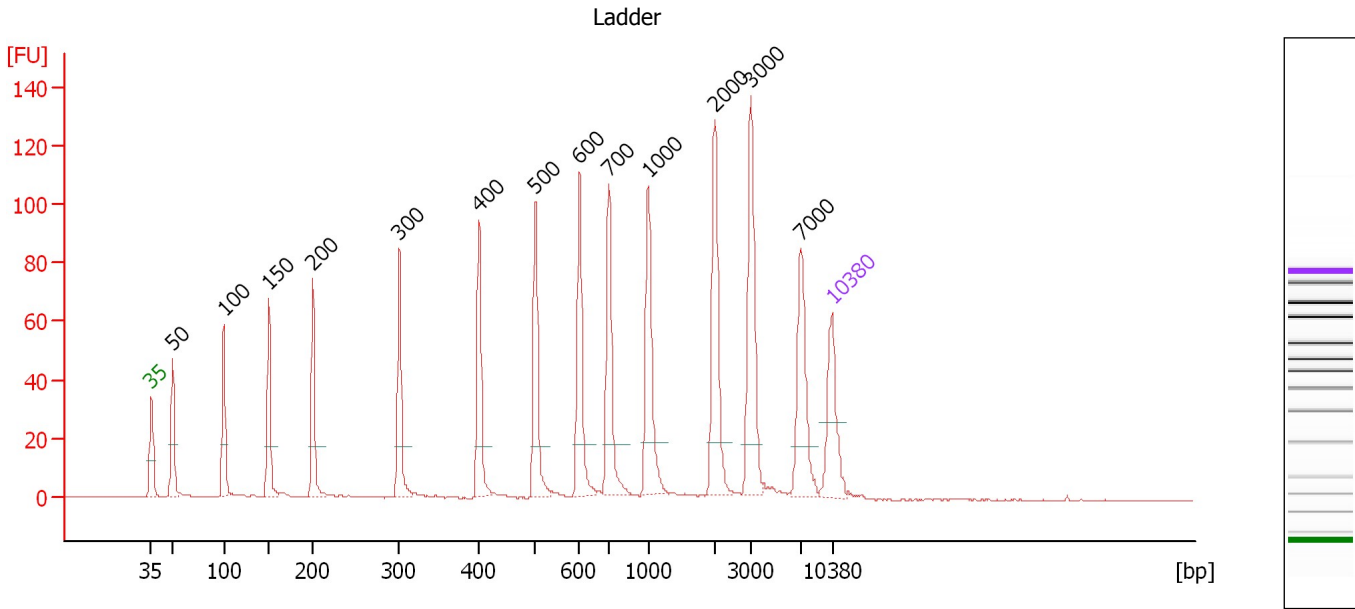
**Ladder**

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:\...ents and Settings\Bioanalyzer\2015-06-24\2015-06-24\_002.xad

Created: 6/24/2015 1:03:56 PM  
 Modified: 6/24/2015 1:47:22 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.1

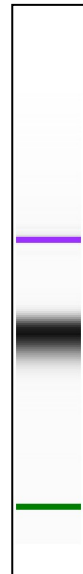
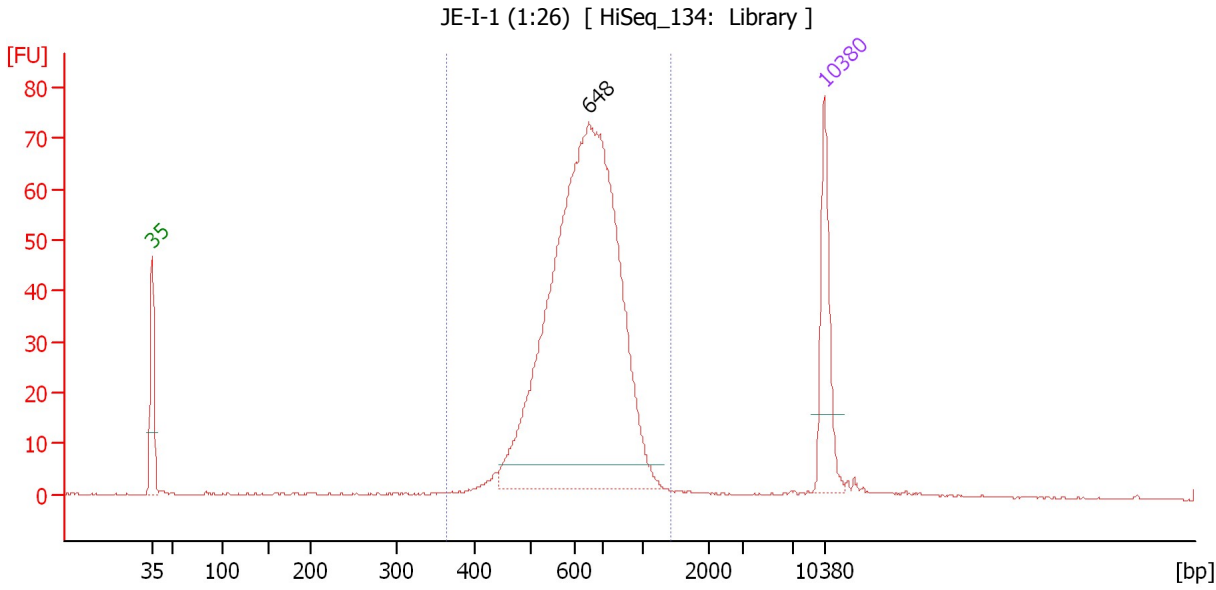
**Peak table for Ladder**

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	45.19
3	100	150.00	2,272.7	Ladder Peak	50.45
4	150	150.00	1,515.2	Ladder Peak	55.06
5	200	150.00	1,136.4	Ladder Peak	59.61
6	300	150.00	757.6	Ladder Peak	68.49
7	400	150.00	568.2	Ladder Peak	76.71
8	500	150.00	454.5	Ladder Peak	82.47
9	600	150.00	378.8	Ladder Peak	87.02
10	700	150.00	324.7	Ladder Peak	90.03
11	1,000	150.00	227.3	Ladder Peak	94.09
12	2,000	150.00	113.6	Ladder Peak	100.94
13	3,000	150.00	75.8	Ladder Peak	104.61
14	7,000	150.00	32.5	Ladder Peak	109.71
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-24\2015-06-24\_002.xad

Created: 6/24/2015 1:03:56 PM  
 Modified: 6/24/2015 1:47:22 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : JE-I-1 (1:26)**

Number of peaks found: 1                      Corr. Area 1: 715.4  
 Noise: 0.2

**Peak table for sample 1 : JE-I-1 (1:26)**

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	648	905.17	2,116.5		88.46
3	10,380	75.00	10.9	Upper Marker	113.00

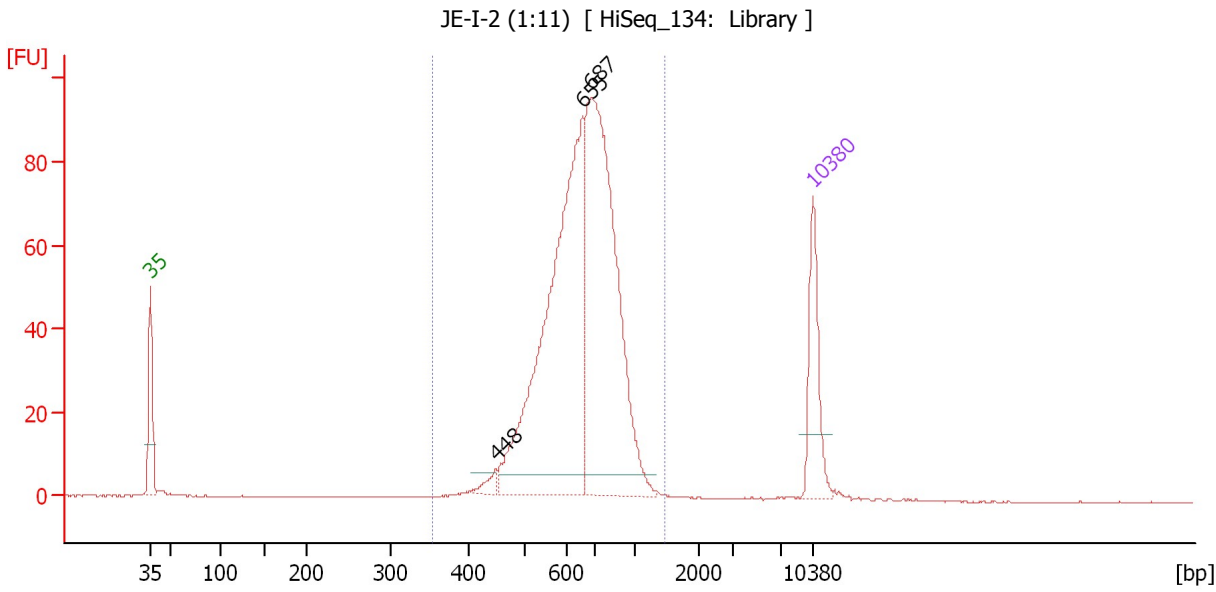
**Region table for sample 1 : JE-I-1 (1:26)**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
362	657	1,429	715.4	2,347.0	95	20.9	971.22

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-24\2015-06-24\_002.xad

Created: 6/24/2015 1:03:56 PM  
 Modified: 6/24/2015 1:47:22 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : JE-I-2 (1:11)**

Number of peaks found: 3                      Corr. Area 1: 863.2  
 Noise: 0.1

**Peak table for sample 2 : JE-I-2 (1:11)**

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	448	13.99	47.3		79.49
3	655	565.50	1,308.4		88.67
4	687	541.89	1,195.8		89.63
5	10,380	75.00	10.9	Upper Marker	113.00

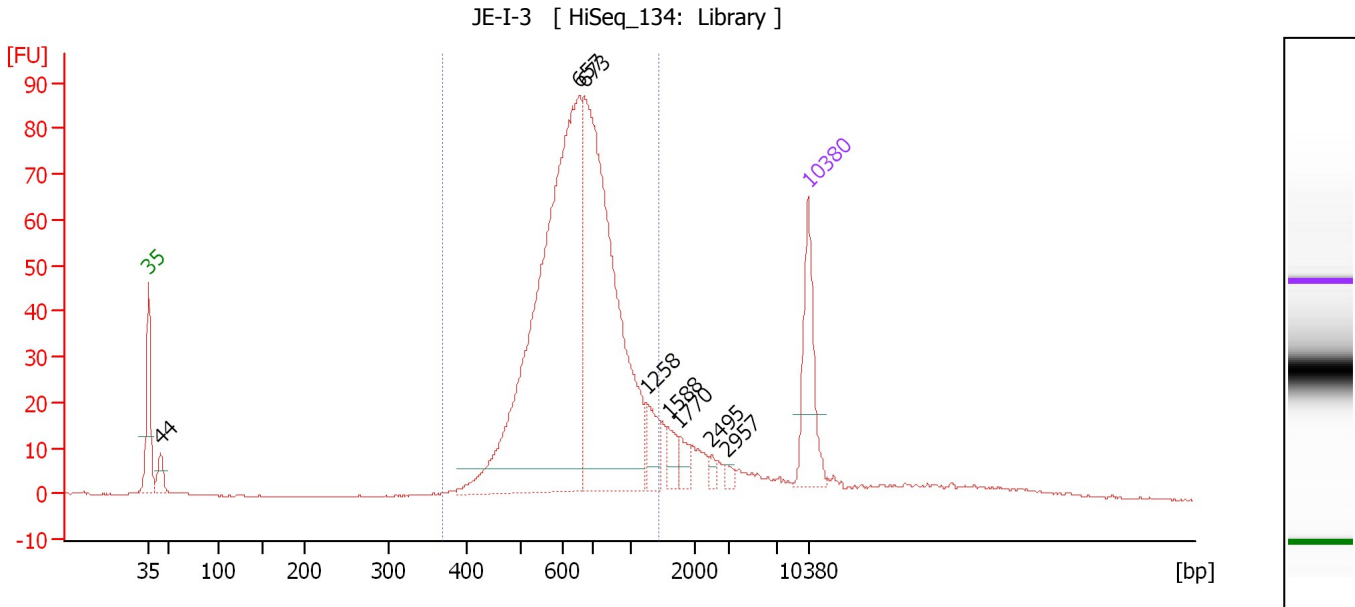
**Region table for sample 2 : JE-I-2 (1:11)**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
353	676	1,464	863.2	2,710.6	97	20.8	1,153.45

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-24\2015-06-24\_002.xad

Created: 6/24/2015 1:03:56 PM  
 Modified: 6/24/2015 1:47:22 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : JE-I-3**

Number of peaks found: 8                      Corr. Area 1: 932.7  
 Noise: 0.1

**Peak table for sample 3 : JE-I-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	44	30.66	1,067.5		44.24
3	657	710.78	1,640.2		88.72
4	673	536.98	1,208.0		89.23
5	1,258	31.83	38.4		95.85
6	1,588	17.90	17.1		98.12
7	1,770	15.80	13.5		99.36
8	2,495	5.43	3.3		102.76
9	2,957	5.39	2.8		104.46
10	10,380	75.00	10.9	Upper Marker	113.00

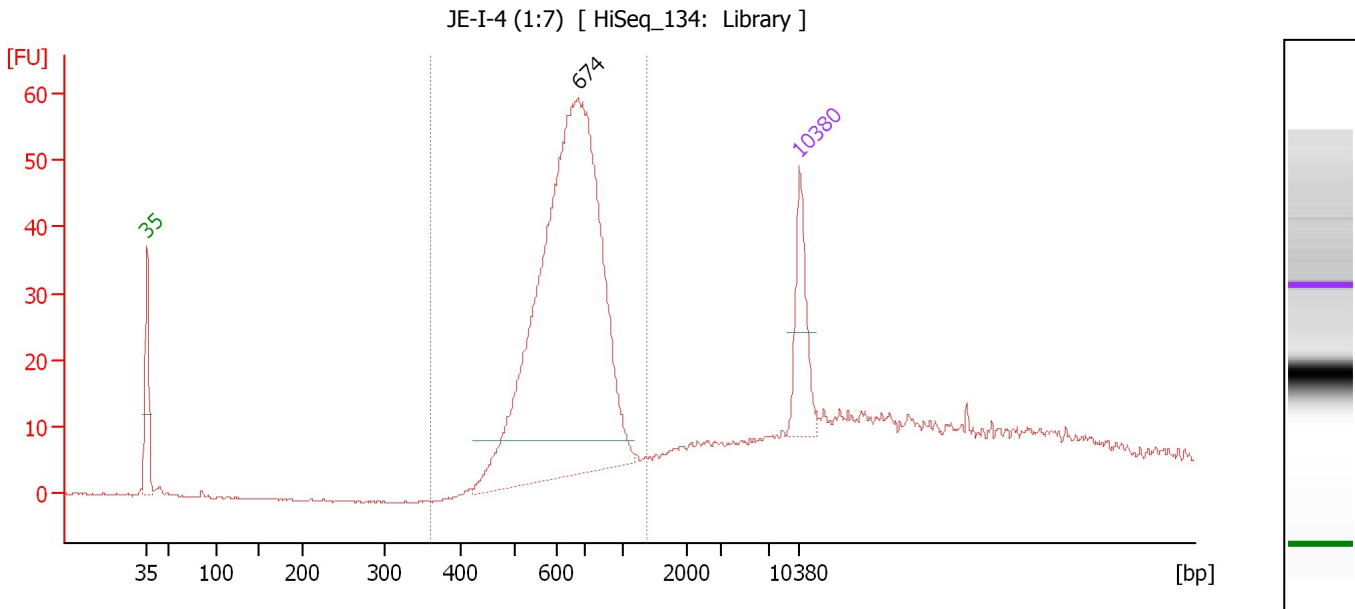
**Region table for sample 3 : JE-I-3**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
368	702	1,461	932.7	3,083.7	84	28.3	1,320.43

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-24\2015-06-24\_002.xad

Created: 6/24/2015 1:03:56 PM  
 Modified: 6/24/2015 1:47:22 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : JE-I-4 (1:7)**

Number of peaks found: 1                      Corr. Area 1: 491.4  
 Noise: 0.1

**Peak table for sample 4 : JE-I-4 (1:7)**

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	674	1,022.69	2,299.2		89.25
3	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 4 : JE-I-4 (1:7)**

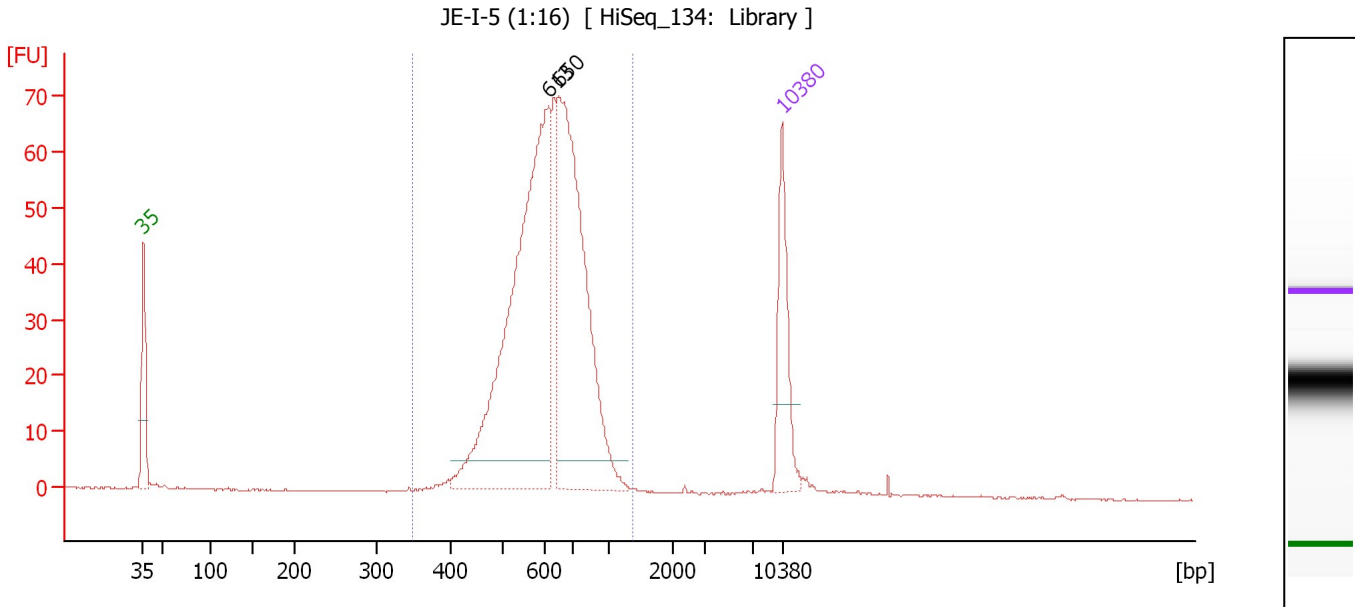
From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
361	674	1,376	491.4	2,408.3	71	20.0	1,028.50



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-24\2015-06-24\_002.xad

Created: 6/24/2015 1:03:56 PM  
 Modified: 6/24/2015 1:47:22 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : JE-I-5 (1:16)**

Number of peaks found: 2                      Corr. Area 1: 702.3  
 Noise: 0.1

**Peak table for sample 5 : JE-I-5 (1:16)**

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	613	512.16	1,266.0		87.41
3	650	401.32	935.8		88.52
4	10,380	75.00	10.9	Upper Marker	113.00

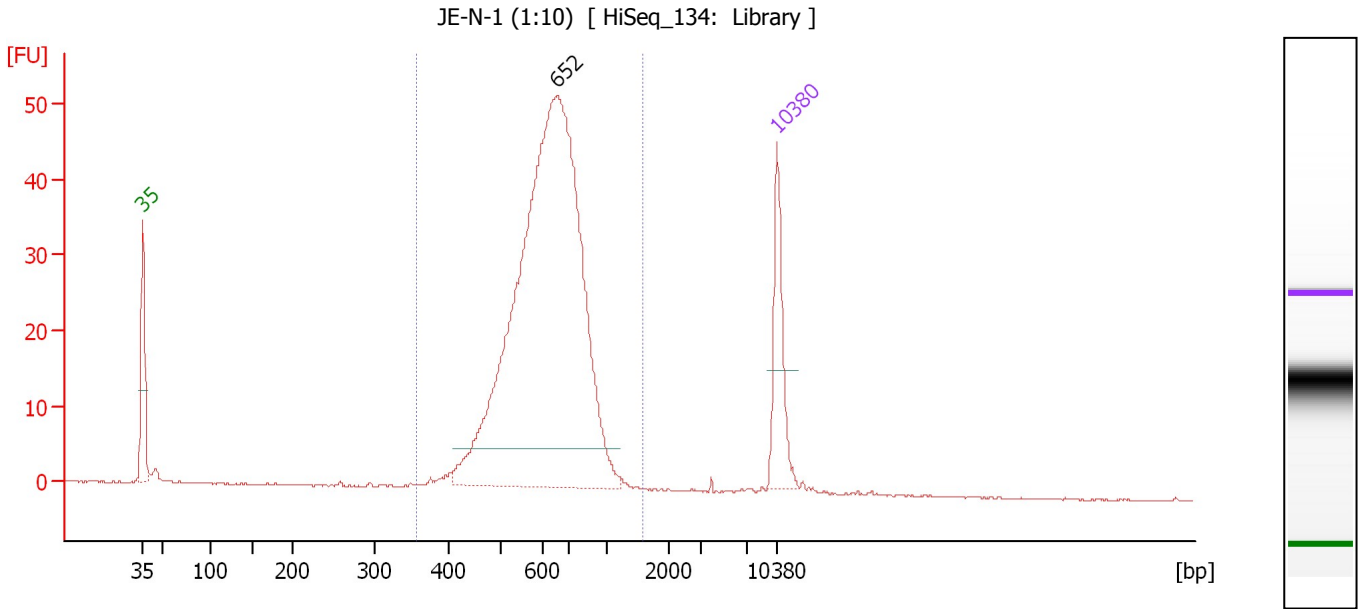
**Region table for sample 5 : JE-I-5 (1:16)**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
348	634	1,360	702.3	2,605.5	96	19.9	1,043.59

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-24\2015-06-24\_002.xad

Created: 6/24/2015 1:03:56 PM  
 Modified: 6/24/2015 1:47:22 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : JE-N-1 (1:10)**

Number of peaks found: 1                      Corr. Area 1: 487.5  
 Noise: 0.1

**Peak table for sample 6 : JE-N-1 (1:10)**

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	652	1,046.80	2,432.2		88.59
3	10,380	75.00	10.9	Upper Marker	113.00

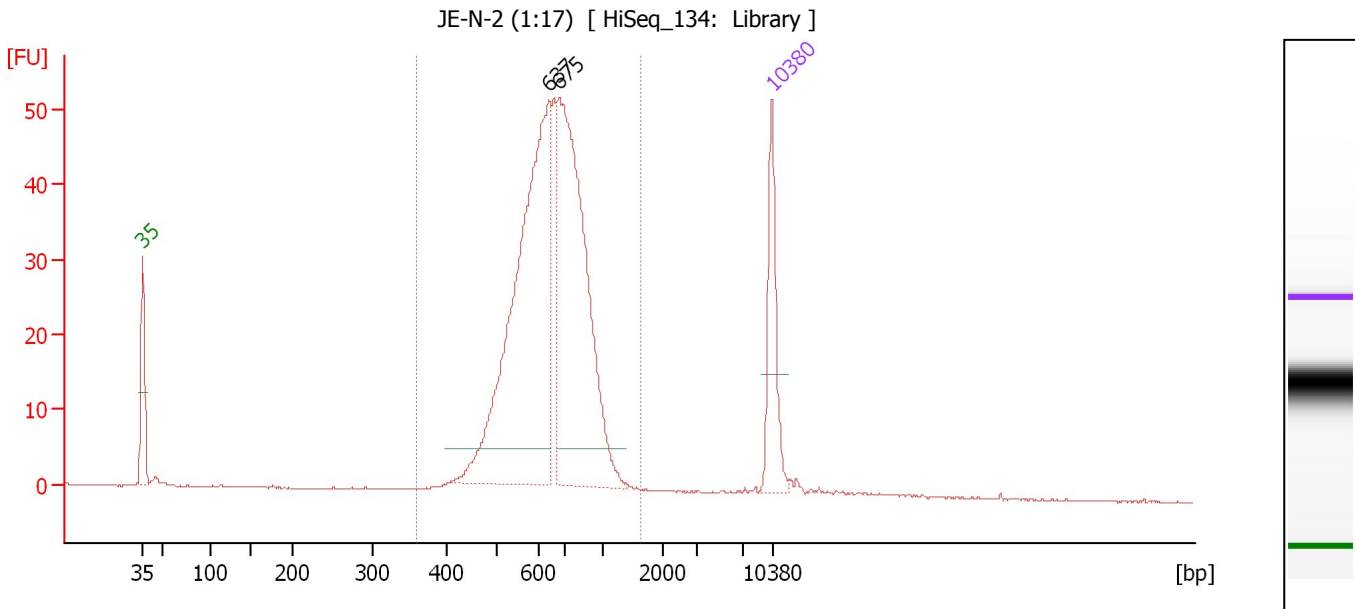
**Region table for sample 6 : JE-N-1 (1:10)**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
357	645	1,593	487.5	2,701.1	97	20.8	1,097.19

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-24\2015-06-24\_002.xad

Created: 6/24/2015 1:03:56 PM  
 Modified: 6/24/2015 1:47:22 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : JE-N-2 (1:17)**

Number of peaks found: 2                      Corr. Area 1: 514.3  
 Noise: 0.1

**Peak table for sample 7 : JE-N-2 (1:17)**

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	637	519.25	1,234.4		88.14
3	675	443.16	995.1		89.27
4	10,380	75.00	10.9	Upper Marker	113.00

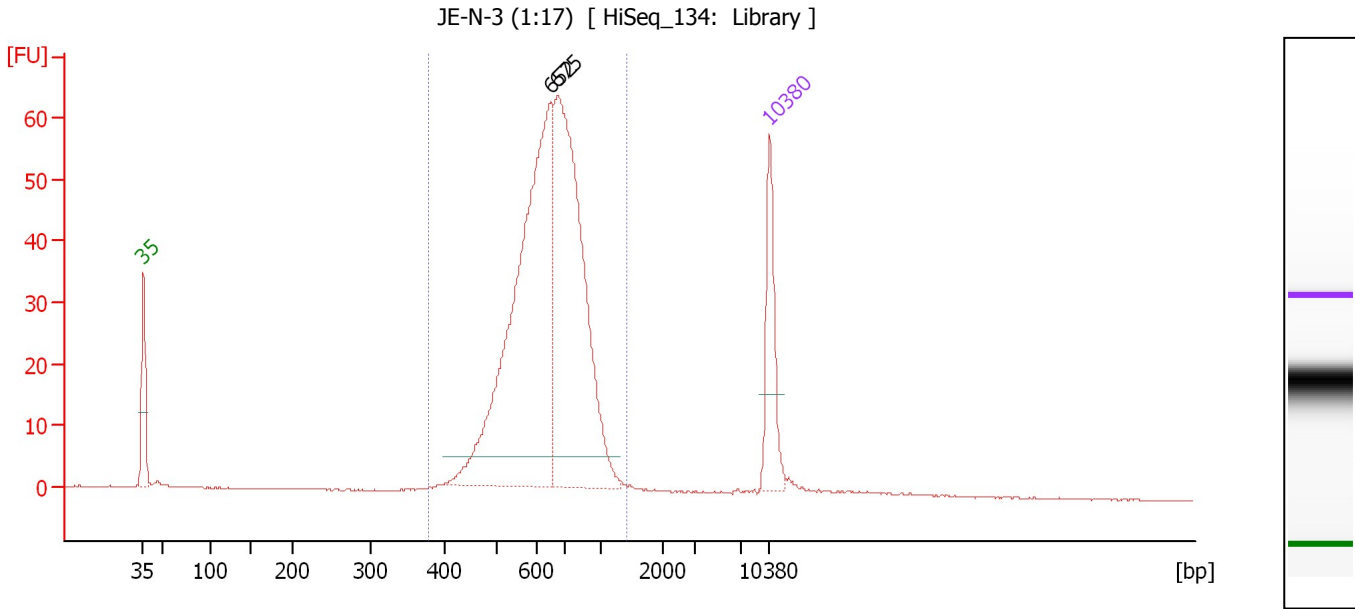
**Region table for sample 7 : JE-N-2 (1:17)**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
360	674	1,626	514.3	2,576.1	95	22.3	1,088.88

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-24\2015-06-24\_002.xad

Created: 6/24/2015 1:03:56 PM  
 Modified: 6/24/2015 1:47:22 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : JE-N-3 (1:17)**

Number of peaks found: 2                      Corr. Area 1: 606.1  
 Noise: 0.1

**Peak table for sample 8 : JE-N-3 (1:17)**

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	652	565.23	1,314.2		88.57
3	675	474.57	1,064.7		89.29
4	10,380	75.00	10.9	Upper Marker	113.00

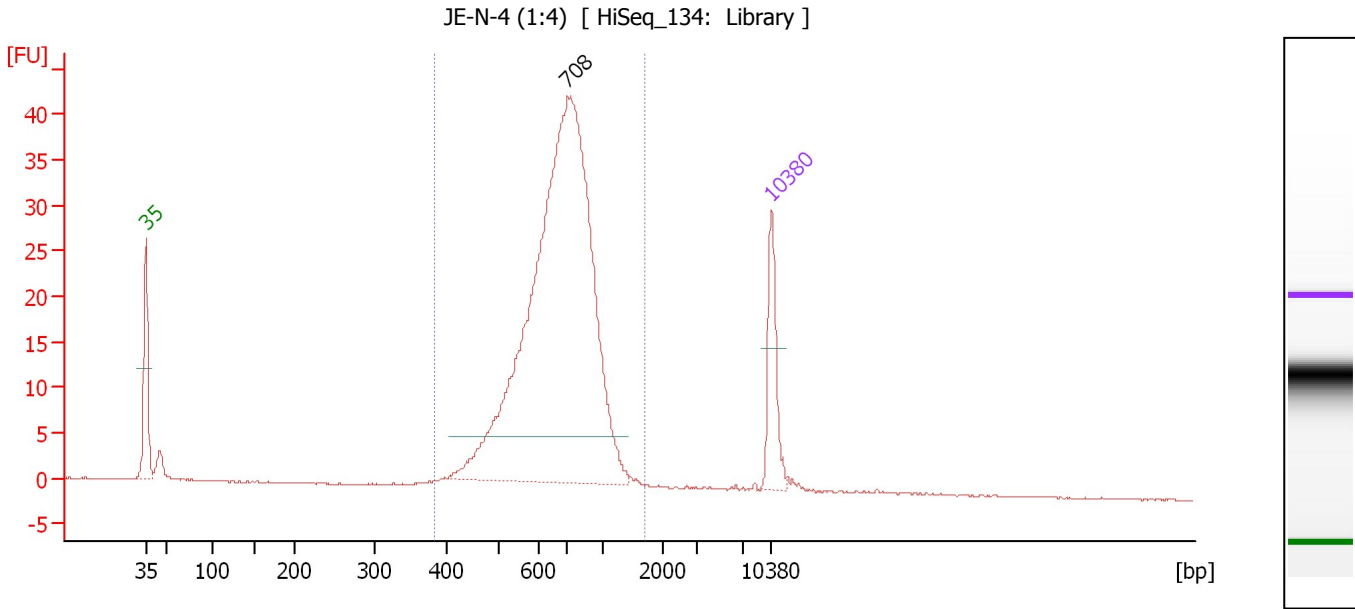
**Region table for sample 8 : JE-N-3 (1:17)**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
378	669	1,443	606.1	2,613.0	96	21.4	1,098.96

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-24\2015-06-24\_002.xad

Created: 6/24/2015 1:03:56 PM  
 Modified: 6/24/2015 1:47:22 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : JE-N-4 (1:4)**

Number of peaks found: 1                      Corr. Area 1: 374.7  
 Noise: 0.1

**Peak table for sample 9 : JE-N-4 (1:4)**

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	708	1,220.78	2,611.5		90.14
3	10,380	75.00	10.9	Upper Marker	113.00

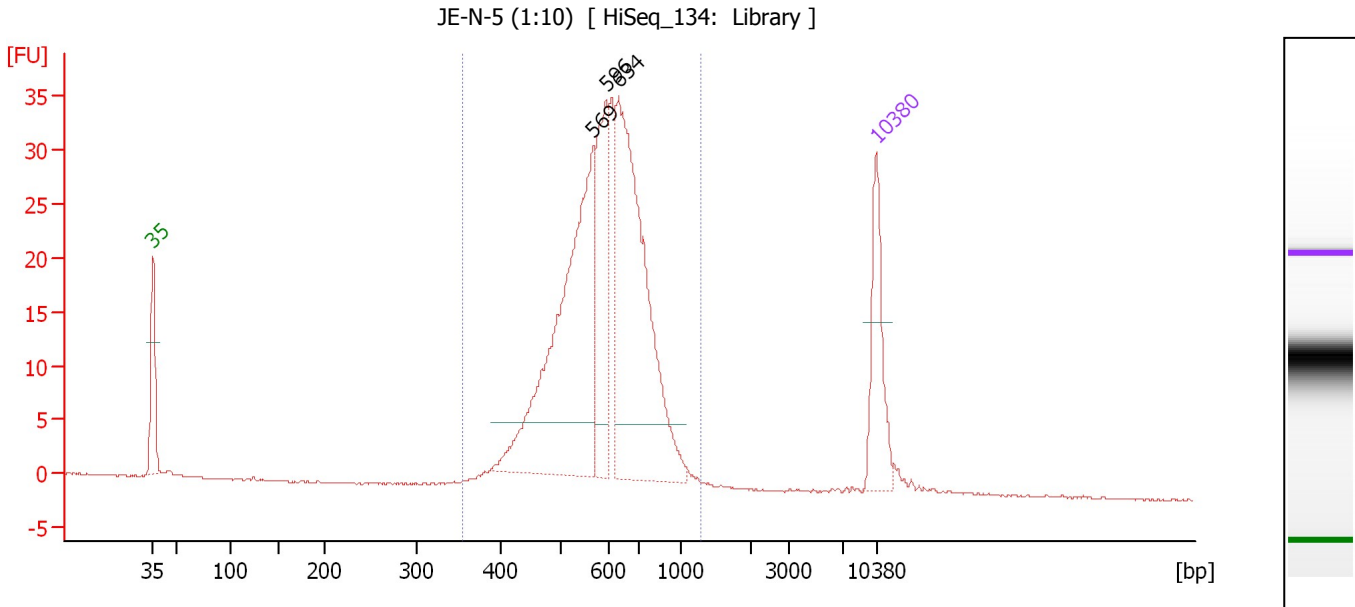
**Region table for sample 9 : JE-N-4 (1:4)**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
384	715	1,692	374.7	2,858.8	95	24.4	1,265.64

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-24\2015-06-24\_002.xad

Created: 6/24/2015 1:03:56 PM  
 Modified: 6/24/2015 1:47:22 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : JE-N-5 (1:10)**

Number of peaks found: 3                      Corr. Area 1: 378.6  
 Noise: 0.1

**Peak table for sample 10 : JE-N-5 (1:10)**

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	569	412.93	1,099.5		85.61
3	596	143.70	365.2		86.85
4	634	396.15	947.2		88.03
5	10,380	75.00	10.9	Upper Marker	113.00

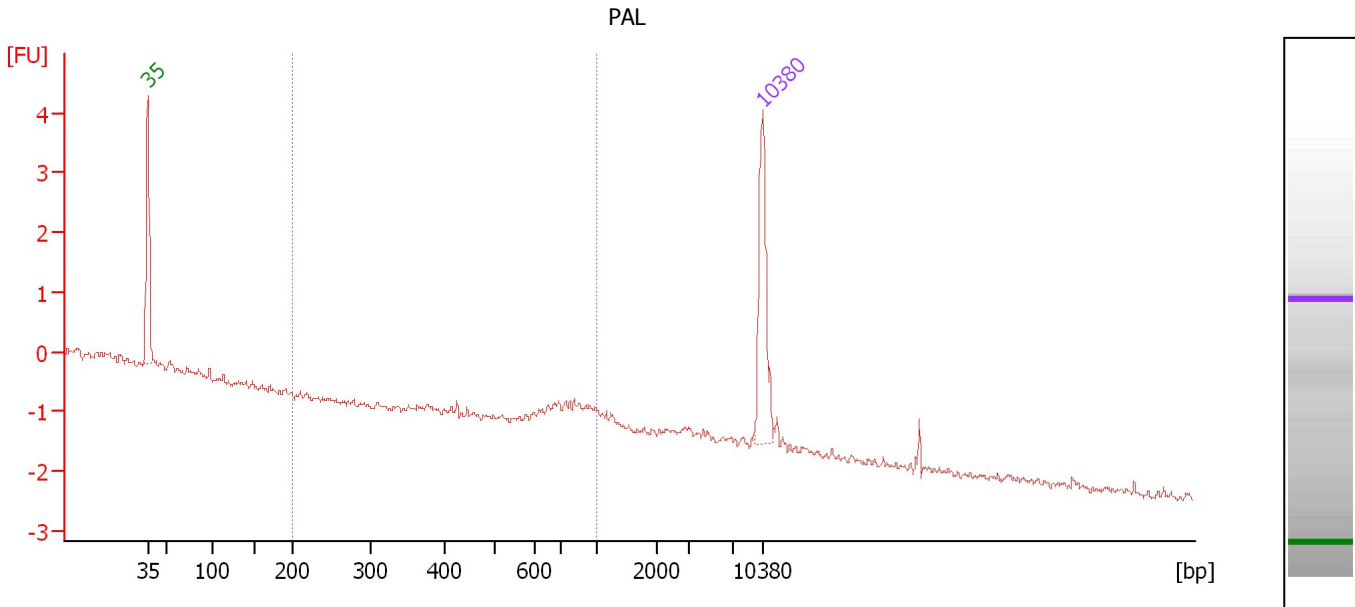
**Region table for sample 10 : JE-N-5 (1:10)**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
355	610	1,274	378.6	2,927.7	98	19.6	1,128.12

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-24\2015-06-24\_002.xad

Created: 6/24/2015 1:03:56 PM  
 Modified: 6/24/2015 1:47:22 PM

**Electropherogram Summary Continued ...**



**Setpoint Deviations for sample 11 : PAL**

Height Threshold [FU] : 2

**Overall Results for sample 11 : PAL**

Number of peaks found: 0                      Corr. Area 1: 0.9  
 Noise: 0.1

**Peak table for sample 11 : PAL**

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 11 : PAL**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
200	812	1,000	0.9	34.0	59	12.8	17.96

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-24\2015-06-24\_002.xad

Created: 6/24/2015 1:03:56 PM  
Modified: 6/24/2015 1:47:22 PM

**Gel Image**

