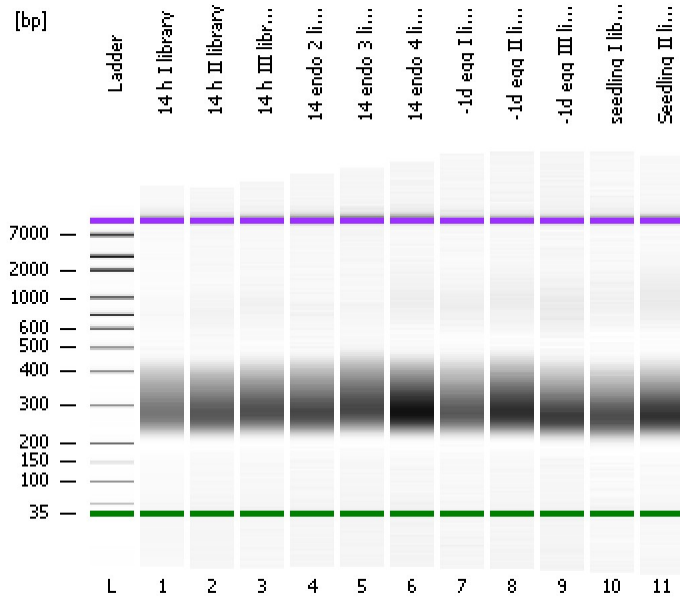


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-04-22\2014-04-22\_001.xad

Created: 4/22/2014 10:26:47 AM  
Modified: 4/22/2014 11:09:25 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

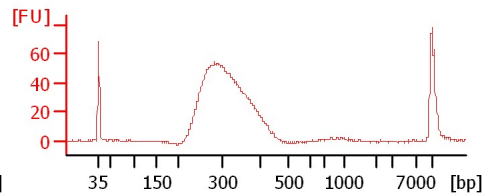
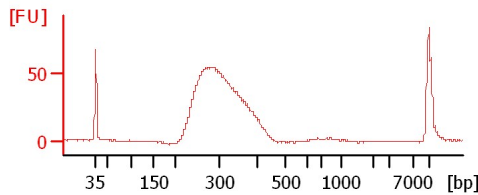
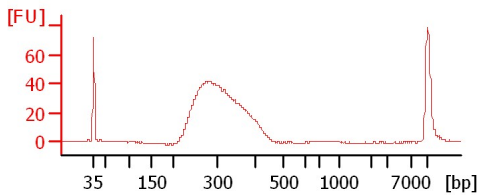
#### Chip Information:

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

14 h I library

14 h II library

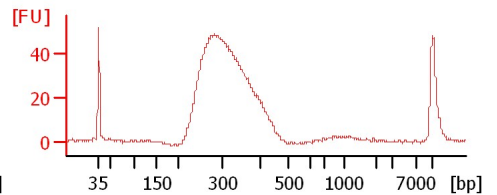
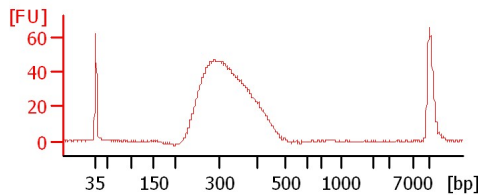
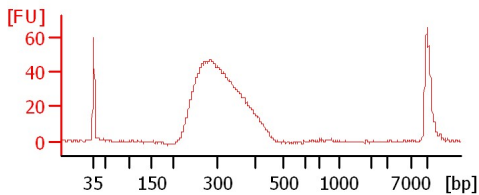
14 h III library



14 endo 2 library

14 endo 3 library

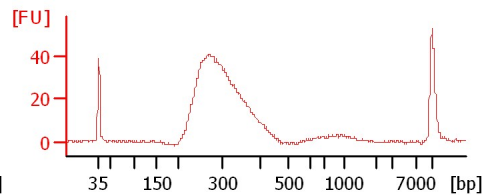
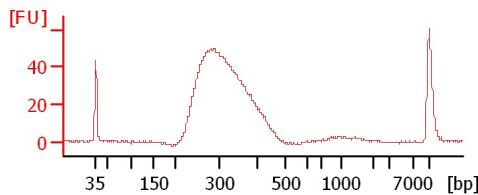
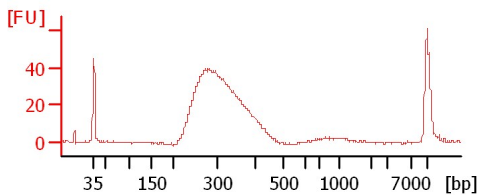
14 endo 4 library



-1d egg I library

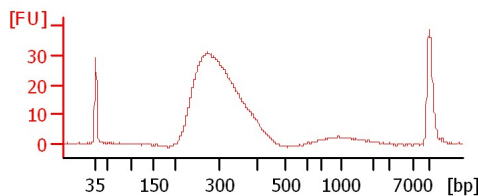
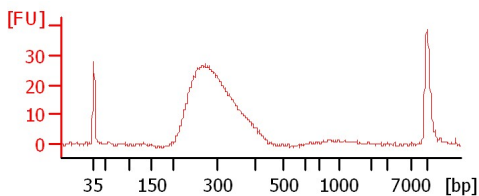
-1d egg II library

-1d egg III library



seedling I library

Seedling II library



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-04-22\2014-04-22\_001.xad

Created: 4/22/2014 10:26:47 AM  
Modified: 4/22/2014 11:09:25 AM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
14 h I library		<input type="checkbox"/>	✓			
14 h II library		<input type="checkbox"/>	✓			
14 h III library		<input type="checkbox"/>	✓			
14 endo 2 library		<input type="checkbox"/>	✓			
14 endo 3 library		<input type="checkbox"/>	✓			
14 endo 4 library		<input type="checkbox"/>	✓			
-1d egg I library		<input type="checkbox"/>	✓			
-1d egg II library		<input type="checkbox"/>	✓			
-1d egg III library		<input type="checkbox"/>	✓			
seedling I library		<input type="checkbox"/>	✓			
Seedling II library		<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\2014-04-22\2014-04-22\_001.xad

Created: 4/22/2014 10:26:47 AM  
Modified: 4/22/2014 11:09:25 AM

**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

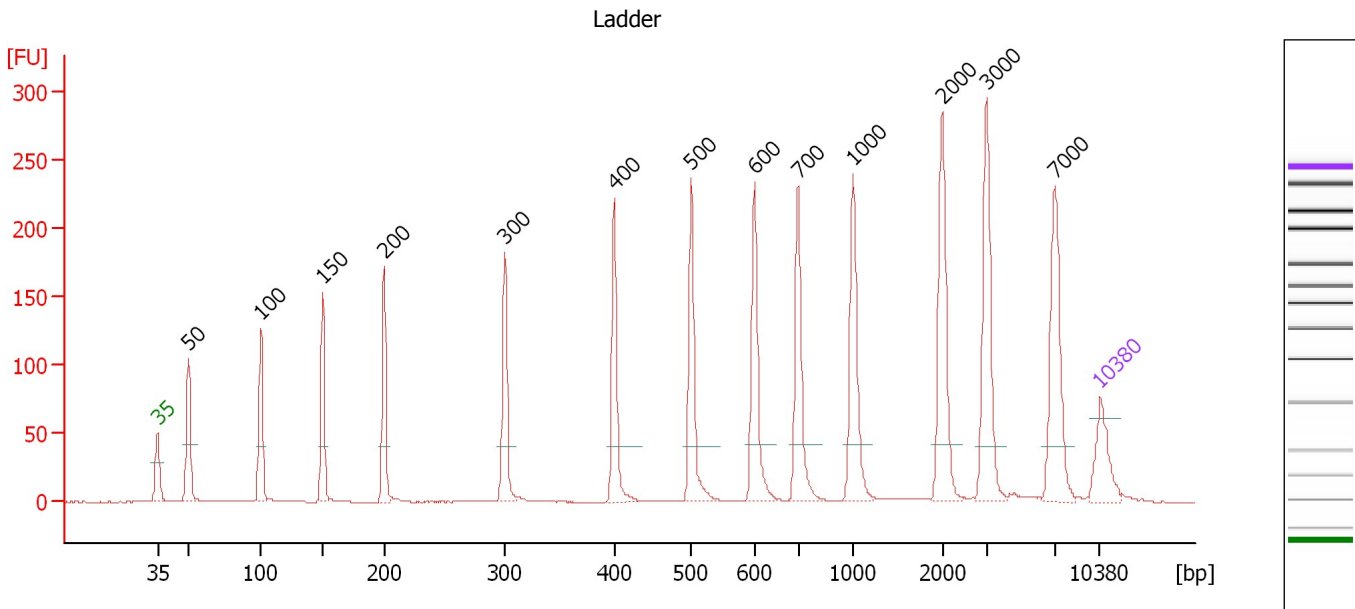
**Ladder**

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\2014-04-22\2014-04-22\_001.xad

Created: 4/22/2014 10:26:47 AM  
 Modified: 4/22/2014 11:09:25 AM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.1

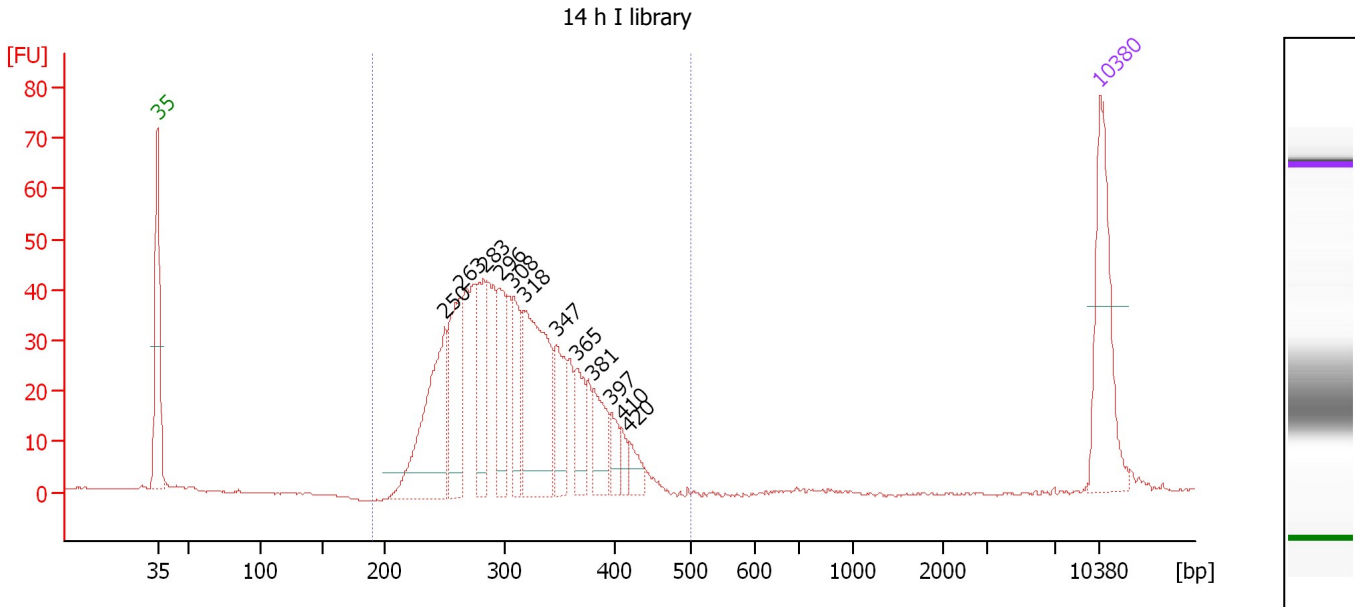
**Peak table for Ladder**

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	45.29	50	150.00	4,545.5	Ladder Peak
3	50.68	100	150.00	2,272.7	Ladder Peak
4	55.25	150	150.00	1,515.2	Ladder Peak
5	59.82	200	150.00	1,136.4	Ladder Peak
6	68.79	300	150.00	757.6	Ladder Peak
7	76.94	400	150.00	568.2	Ladder Peak
8	82.64	500	150.00	454.5	Ladder Peak
9	87.34	600	150.00	378.8	Ladder Peak
10	90.57	700	150.00	324.7	Ladder Peak
11	94.63	1,000	150.00	227.3	Ladder Peak
12	101.27	2,000	150.00	113.6	Ladder Peak
13	104.59	3,000	150.00	75.8	Ladder Peak
14	109.68	7,000	150.00	32.5	Ladder Peak
15	113.00	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-04-22\2014-04-22\_001.xad

Created: 4/22/2014 10:26:47 AM  
 Modified: 4/22/2014 11:09:25 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : 14 h I library**

Number of peaks found: 12                      Corr. Area 1: 708.8  
 Noise: 0.2

**Peak table for sample 1 : 14 h I library**

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	64.34	250	140.53	850.4	
3	65.50	263	86.97	500.4	
4	67.22	283	64.14	344.0	
5	68.43	296	55.95	286.5	
6	69.42	308	44.57	219.5	
7	70.23	318	140.86	671.8	
8	72.60	347	49.28	215.4	
9	74.11	365	34.69	143.9	
10	75.40	381	36.49	145.1	
11	76.69	397	17.13	65.4	
12	77.51	410	10.29	38.0	
13	78.06	420	14.24	51.4	
14	113.00	10,380	75.00	10.9	Upper Marker

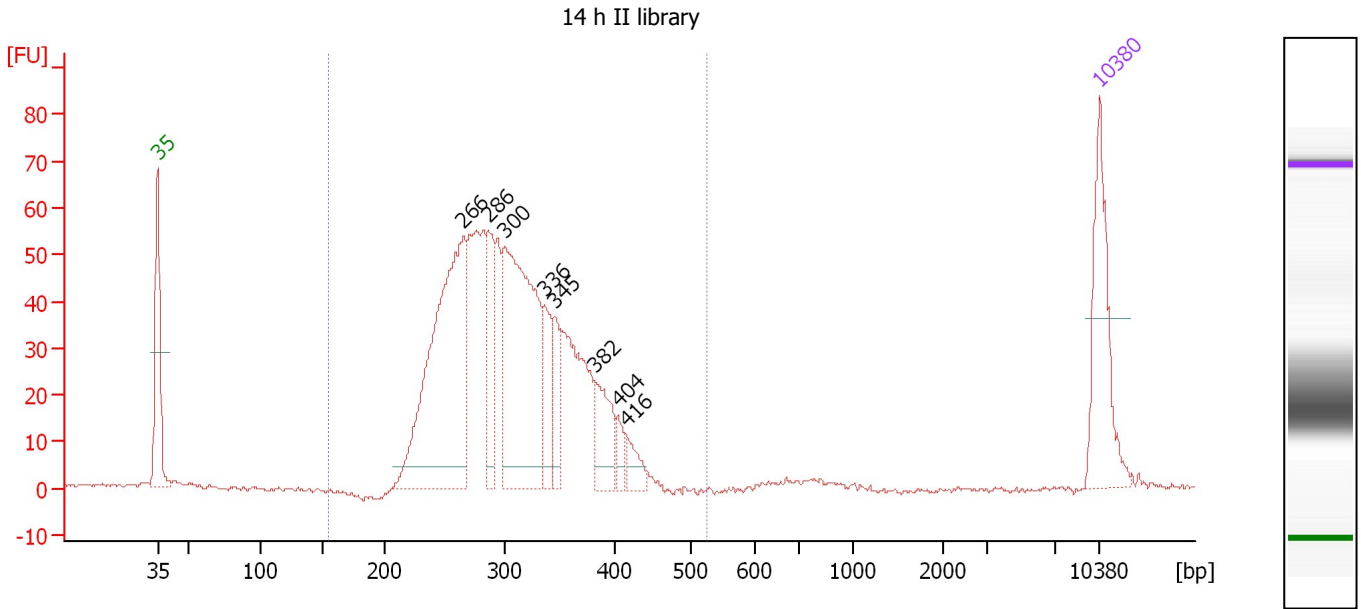
**Region table for sample 1 : 14 h I library**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
190	500	311	4,620.6	916.28	708.8	96	16.4

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-04-22\2014-04-22\_001.xad

Created: 4/22/2014 10:26:47 AM  
 Modified: 4/22/2014 11:09:25 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : 14 h II library**

Number of peaks found: 8                      Corr. Area 1: 911.8  
 Noise: 0.5

**Peak table for sample 2 : 14 h II library**

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	65.73	266	327.65	1,867.0	
3	67.58	286	75.09	397.1	
4	68.82	300	270.63	1,365.2	
5	71.74	336	49.51	223.2	
6	72.47	345	37.49	164.6	
7	75.47	382	51.48	204.2	
8	77.19	404	14.01	52.5	
9	77.83	416	18.44	67.3	
10	113.00	10,380	75.00	10.9	Upper Marker

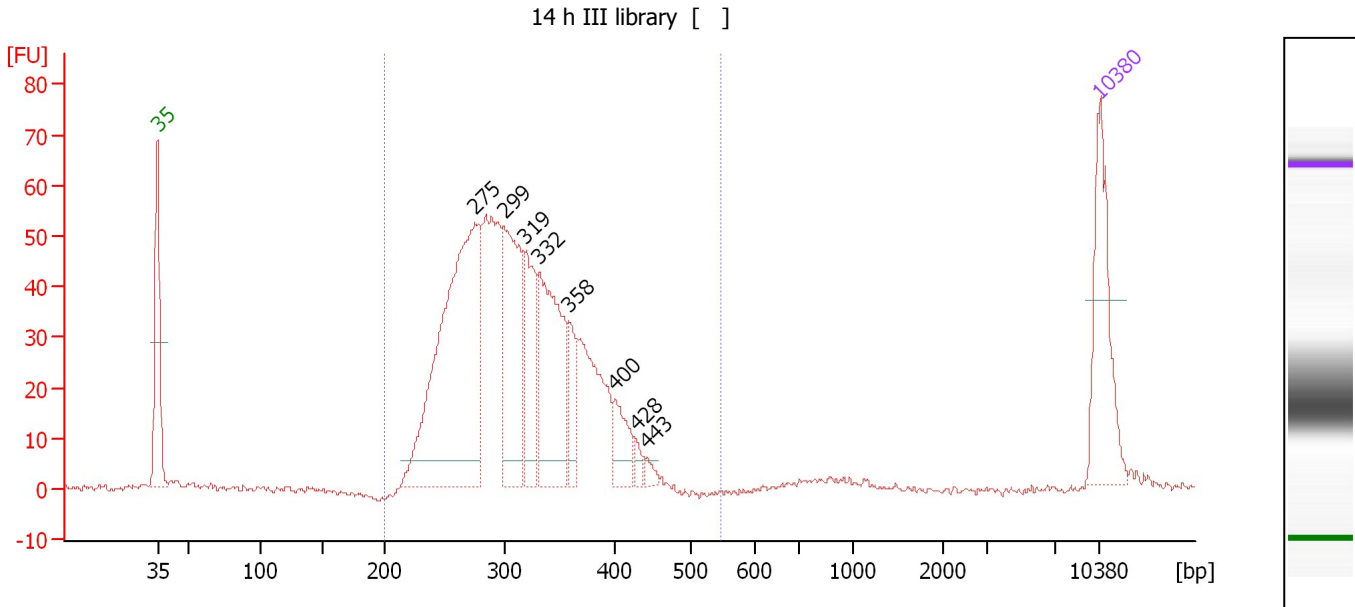
**Region table for sample 2 : 14 h II library**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
155	526	307	5,942.7	1,165.86	911.8	98	16.1

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-04-22\2014-04-22\_001.xad

Created: 4/22/2014 10:26:47 AM  
 Modified: 4/22/2014 11:09:25 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : 14 h III library**

Number of peaks found: 8                      Corr. Area 1: 867.0  
 Noise: 0.6

**Peak table for sample 3 : 14 h III library**

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	66.54	275	383.43	2,113.6	
3	68.72	299	157.59	798.2	
4	70.33	319	86.50	411.0	
5	71.37	332	153.74	702.3	
6	73.51	358	40.82	172.8	
7	76.95	400	33.85	128.1	
8	78.52	428	7.52	26.6	
9	79.39	443	6.75	23.1	
10	113.00	10,380	75.00	10.9	Upper Marker

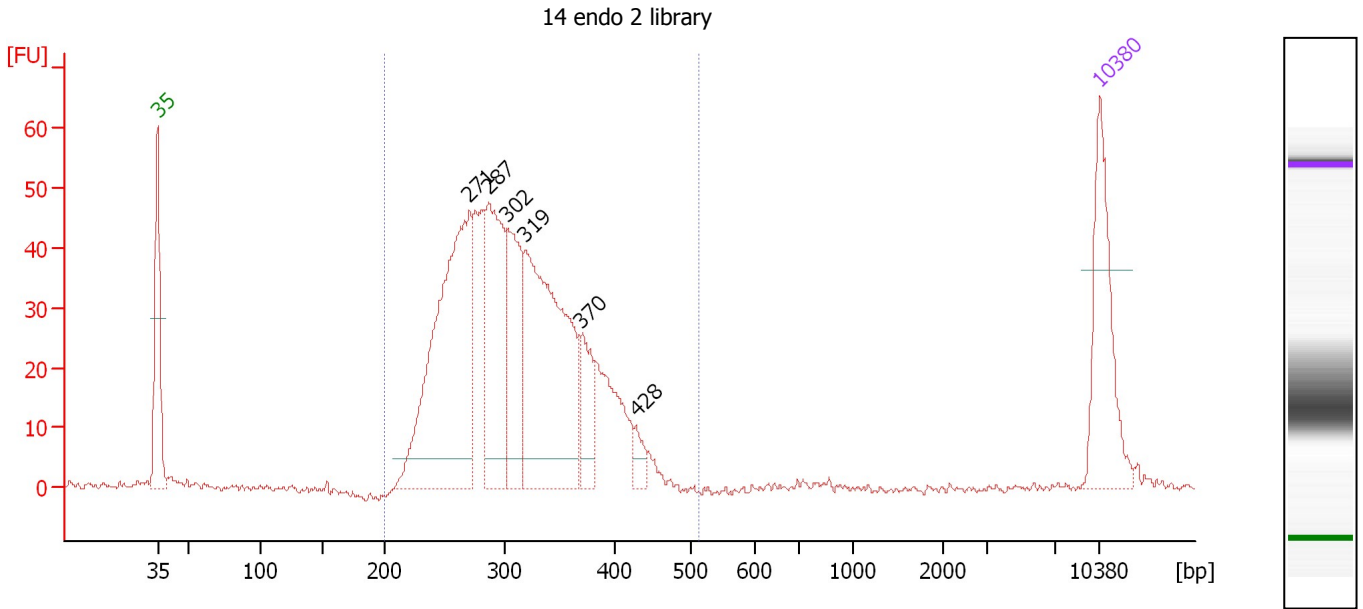
**Region table for sample 3 : 14 h III library**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
200	547	313	5,845.0	1,168.89	867.0	98	15.9

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-04-22\2014-04-22\_001.xad

Created: 4/22/2014 10:26:47 AM  
 Modified: 4/22/2014 11:09:25 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : 14 endo 2 library**

Number of peaks found: 6                      Corr. Area 1: 776.6  
 Noise: 0.7

**Peak table for sample 4 : 14 endo 2 library**

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	66.16	271	318.83	1,785.1	
3	67.62	287	148.33	783.3	
4	68.99	302	107.79	539.9	
5	70.33	319	269.35	1,280.0	
6	74.50	370	44.54	182.4	
7	78.53	428	12.99	46.0	
8	113.00	10,380	75.00	10.9	Upper Marker

**Region table for sample 4 : 14 endo 2 library**

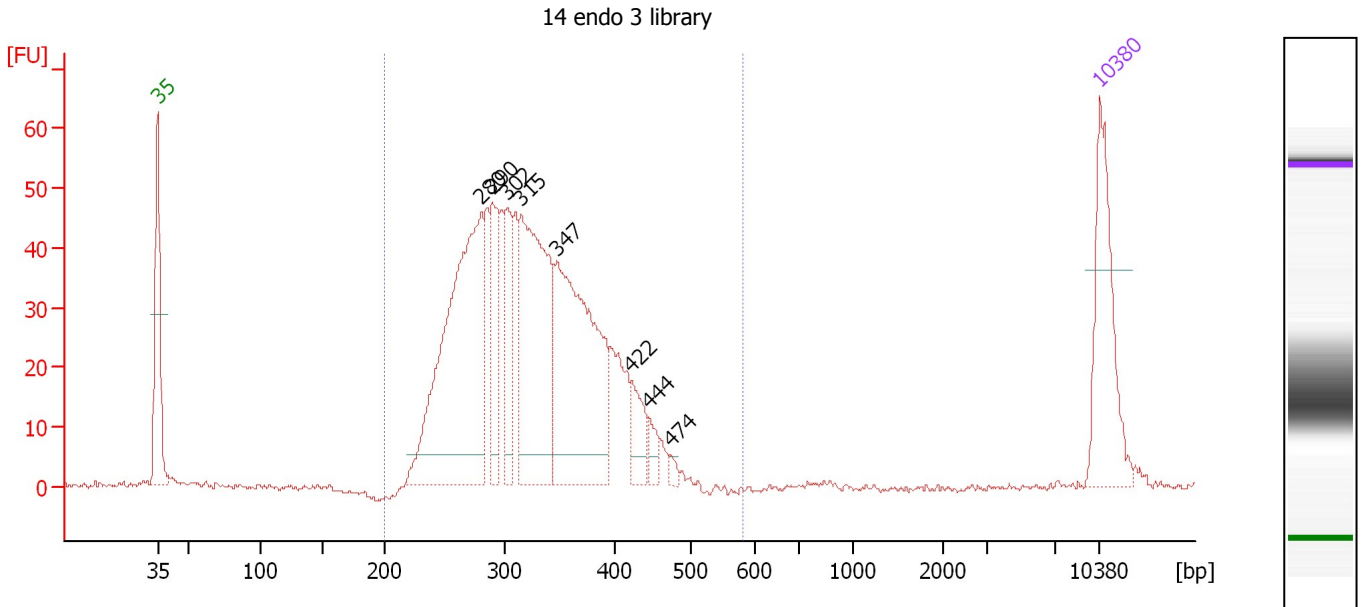
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
200	513	312	5,417.3	1,076.11	776.6	98	16.6



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-04-22\2014-04-22\_001.xad

Created: 4/22/2014 10:26:47 AM  
 Modified: 4/22/2014 11:09:25 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : 14 endo 3 library**

Number of peaks found: 8                      Corr. Area 1: 828.3  
 Noise: 0.5

**Peak table for sample 5 : 14 endo 3 library**

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	67.04	280	313.73	1,694.7	
3	67.90	290	71.43	373.1	
4	68.98	302	59.86	299.9	
5	70.02	315	208.76	1,003.8	
6	72.60	347	233.96	1,022.4	
7	78.20	422	29.29	105.1	
8	79.47	444	12.81	43.7	
9	81.14	474	5.31	17.0	
10	113.00	10,380	75.00	10.9	Upper Marker

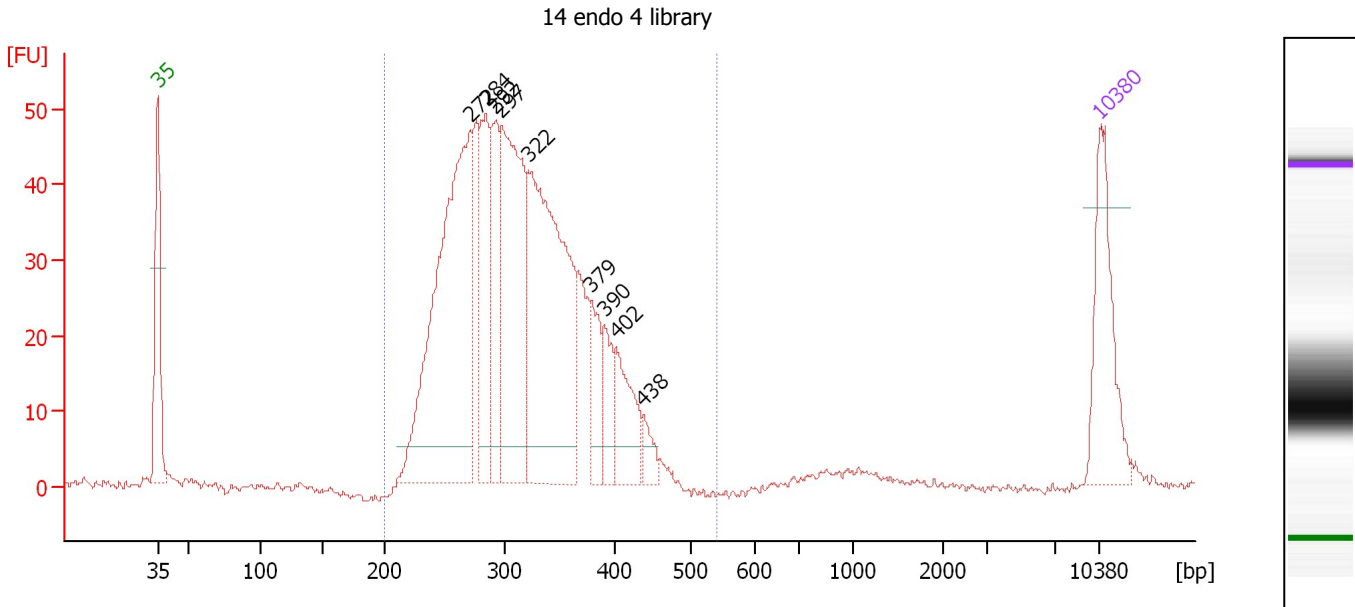
**Region table for sample 5 : 14 endo 3 library**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
200	582	326	5,476.7	1,132.83	828.3	98	17.3

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-04-22\2014-04-22\_001.xad

Created: 4/22/2014 10:26:47 AM  
 Modified: 4/22/2014 11:09:25 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : 14 endo 4 library**

Number of peaks found: 9      Corr. Area 1: 819.4  
 Noise: 0.6

**Peak table for sample 6 : 14 endo 4 library**

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	66.27	272	407.51	2,270.7	
3	67.37	284	112.14	597.9	
4	68.06	292	91.01	472.5	
5	68.52	297	240.52	1,227.3	
6	70.58	322	331.83	1,561.8	
7	75.21	379	46.68	186.8	
8	76.17	390	36.94	143.3	
9	77.04	402	57.03	215.1	
10	79.10	438	16.26	56.3	
11	113.00	10,380	75.00	10.9	Upper Marker

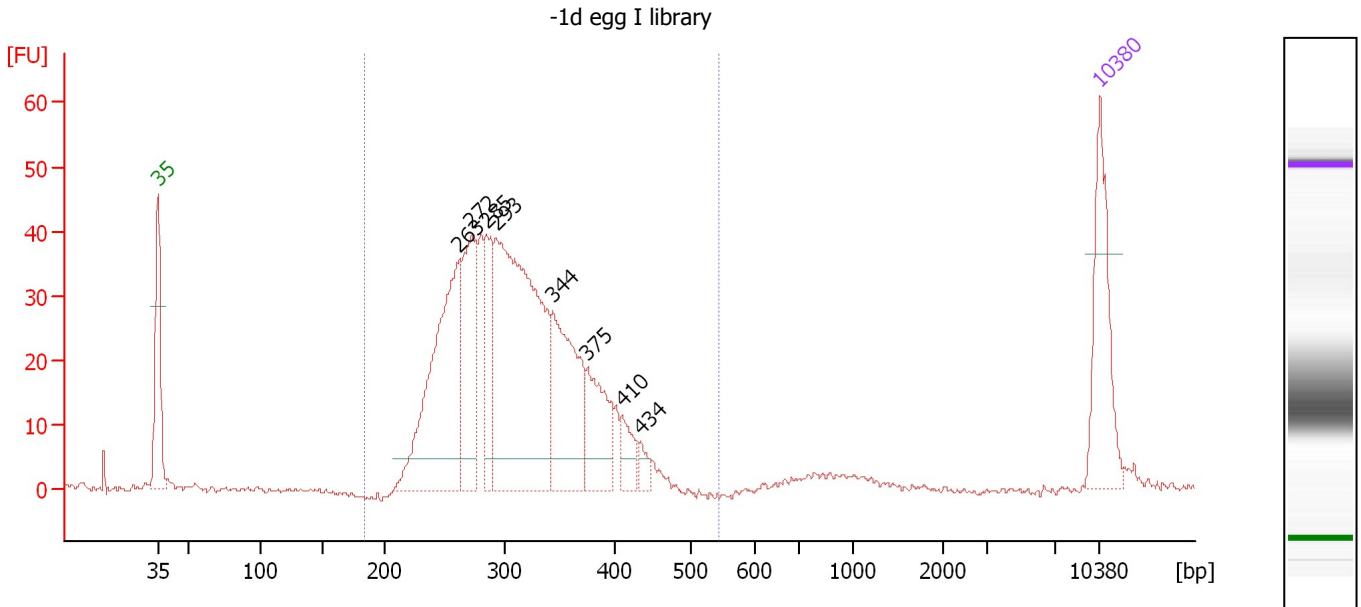
**Region table for sample 6 : 14 endo 4 library**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
200	541	315	7,473.9	1,497.28	819.4	96	16.8

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-04-22\2014-04-22\_001.xad

Created: 4/22/2014 10:26:47 AM  
 Modified: 4/22/2014 11:09:25 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : -1d egg I library**

Number of peaks found: 8                      Corr. Area 1: 618.6  
 Noise: 0.4

**Peak table for sample 7 : -1d egg I library**

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	65.43	263	244.03	1,408.5	
3	66.32	272	125.44	697.7	
4	67.44	285	65.32	347.3	
5	68.14	293	383.44	1,984.3	
6	72.36	344	141.24	622.6	
7	74.93	375	73.53	296.8	
8	77.51	410	22.82	84.3	
9	78.87	434	11.04	38.6	
10	113.00	10,380	75.00	10.9	Upper Marker

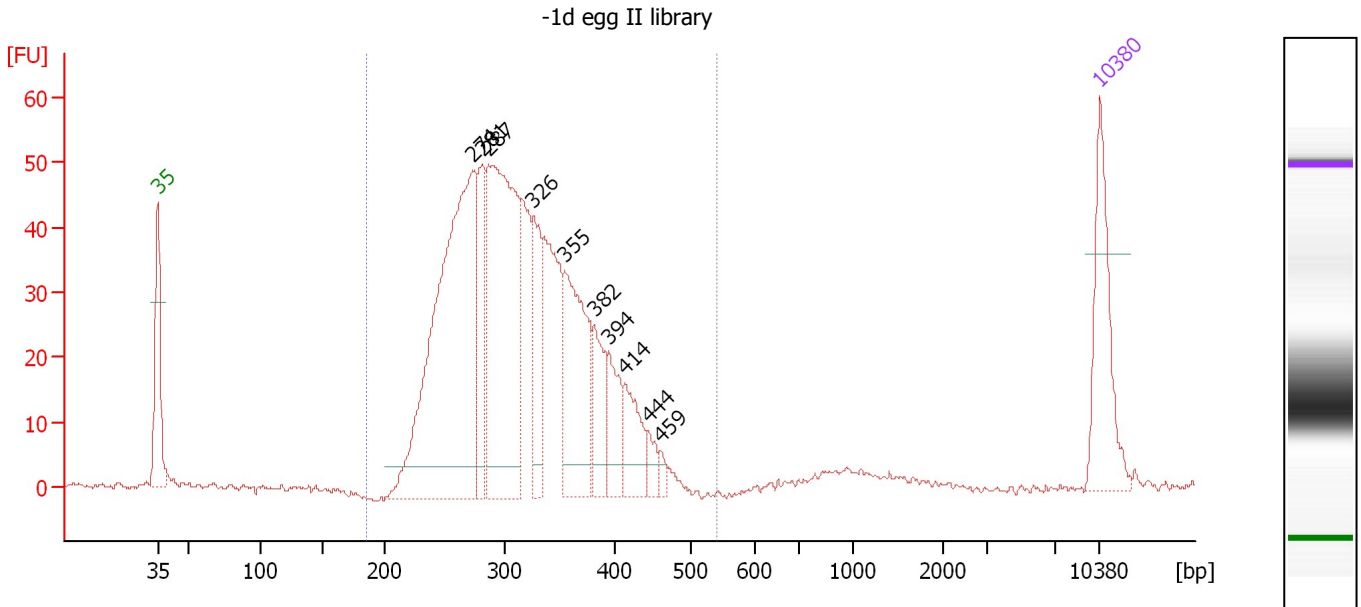
**Region table for sample 7 : -1d egg I library**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
184	542	311	5,605.1	1,113.06	618.6	97	16.4

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-04-22\2014-04-22\_001.xad

Created: 4/22/2014 10:26:47 AM  
 Modified: 4/22/2014 11:09:25 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : -1d egg II library**

Number of peaks found: 10      Corr. Area 1: 817.7  
 Noise: 0.5

**Peak table for sample 8 : -1d egg II library**

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	66.43	274	476.75	2,639.7	
3	67.09	281	84.98	458.1	
4	67.61	287	337.93	1,784.9	
5	70.93	326	77.31	359.0	
6	73.26	355	150.07	640.9	
7	75.44	382	51.50	204.5	
8	76.48	394	52.59	202.1	
9	77.72	414	49.19	180.2	
10	79.42	444	14.38	49.1	
11	80.32	459	7.31	24.1	
12	113.00	10,380	75.00	10.9	Upper Marker

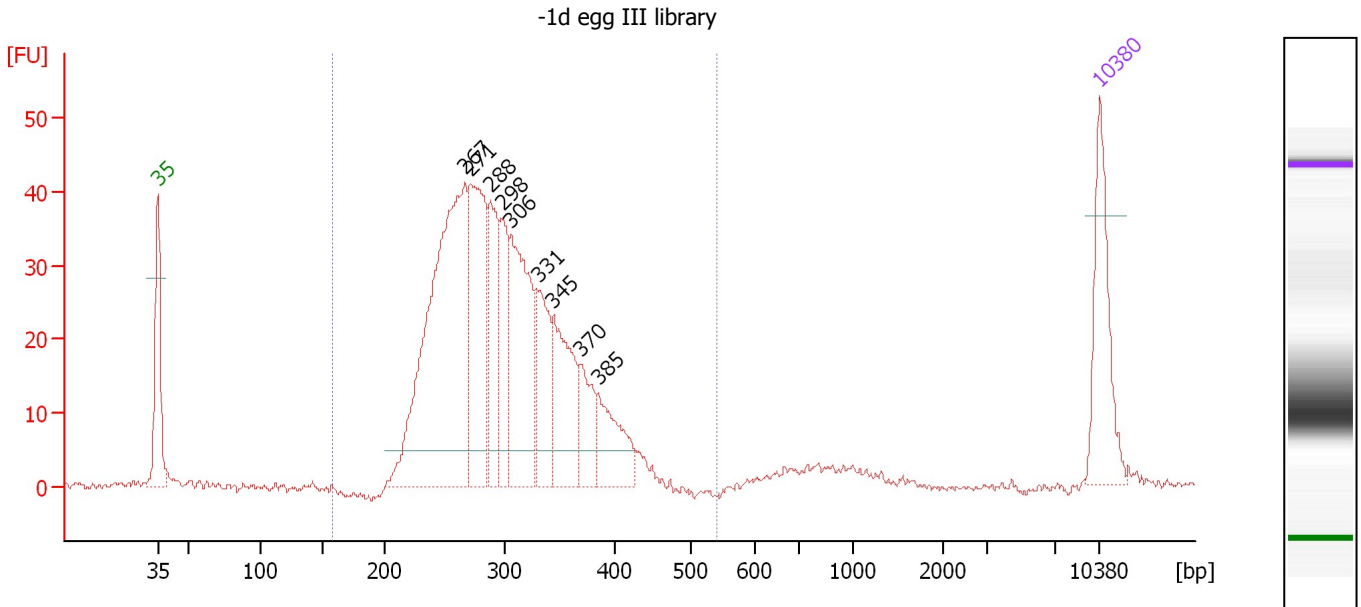
**Region table for sample 8 : -1d egg II library**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
185	541	315	7,234.9	1,450.99	817.7	98	17.0

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-04-22\2014-04-22\_001.xad

Created: 4/22/2014 10:26:47 AM  
 Modified: 4/22/2014 11:09:25 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : -1d egg III library**

Number of peaks found: 9                      Corr. Area 1: 618.1  
 Noise: 0.5

**Peak table for sample 9 : -1d egg III library**

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	65.83	267	445.65	2,529.4	
3	66.21	271	181.80	1,015.7	
4	67.73	288	101.48	533.7	
5	68.63	298	77.98	396.3	
6	69.24	306	180.50	895.1	
7	71.33	331	81.32	372.0	
8	72.42	345	106.10	466.5	
9	74.46	370	49.12	201.4	
10	75.75	385	65.94	259.3	
11	113.00	10,380	75.00	10.9	Upper Marker

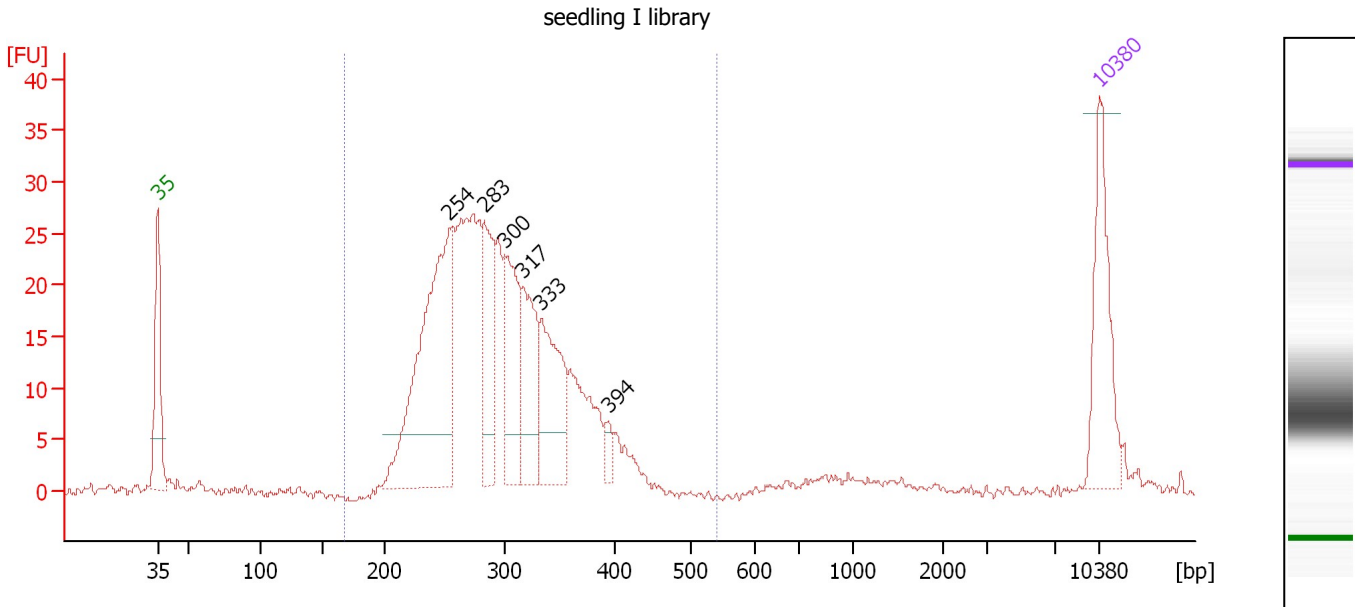
**Region table for sample 9 : -1d egg III library**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
159	541	301	6,883.9	1,322.92	618.1	94	16.6

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-04-22\2014-04-22\_001.xad

Created: 4/22/2014 10:26:47 AM  
 Modified: 4/22/2014 11:09:25 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : seedling I library**

Number of peaks found: 6                      Corr. Area 1: 402.6  
 Noise: 0.5

**Peak table for sample 10 : seedling I library**

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	64.69	254	303.81	1,810.2	
3	67.30	283	87.44	467.6	
4	68.81	300	103.41	521.8	
5	70.19	317	87.61	418.6	
6	71.51	333	105.20	478.1	
7	76.48	394	12.05	46.3	
8	113.00	10,380	75.00	10.9	Upper Marker

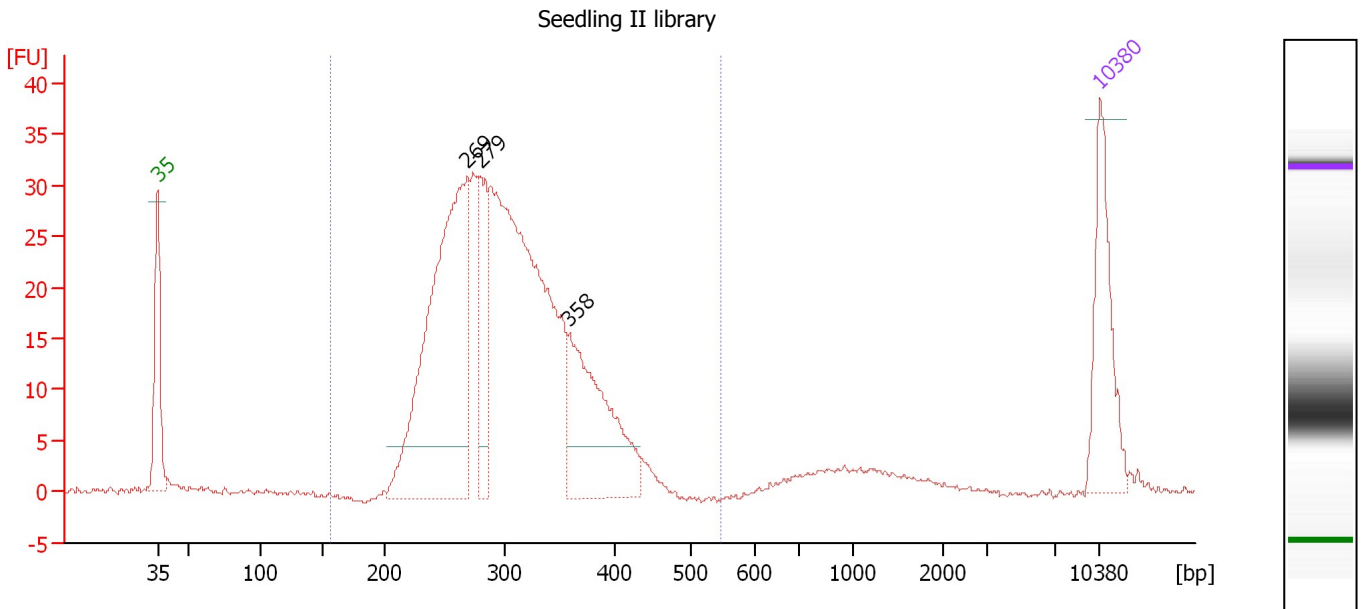
**Region table for sample 10 : seedling I library**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
168	539	296	6,006.2	1,136.44	402.6	97	16.5

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-04-22\2014-04-22\_001.xad

Created: 4/22/2014 10:26:47 AM  
 Modified: 4/22/2014 11:09:25 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : Seedling II library**

Number of peaks found: 3                      Corr. Area 1: 473.7  
 Noise: 0.3

**Peak table for sample 11 : Seedling II library**

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	65.99	269	420.92	2,373.3	
3	66.93	279	96.95	526.0	
4	73.55	358	171.79	726.2	
5	113.00	10,380	75.00	10.9	Upper Marker

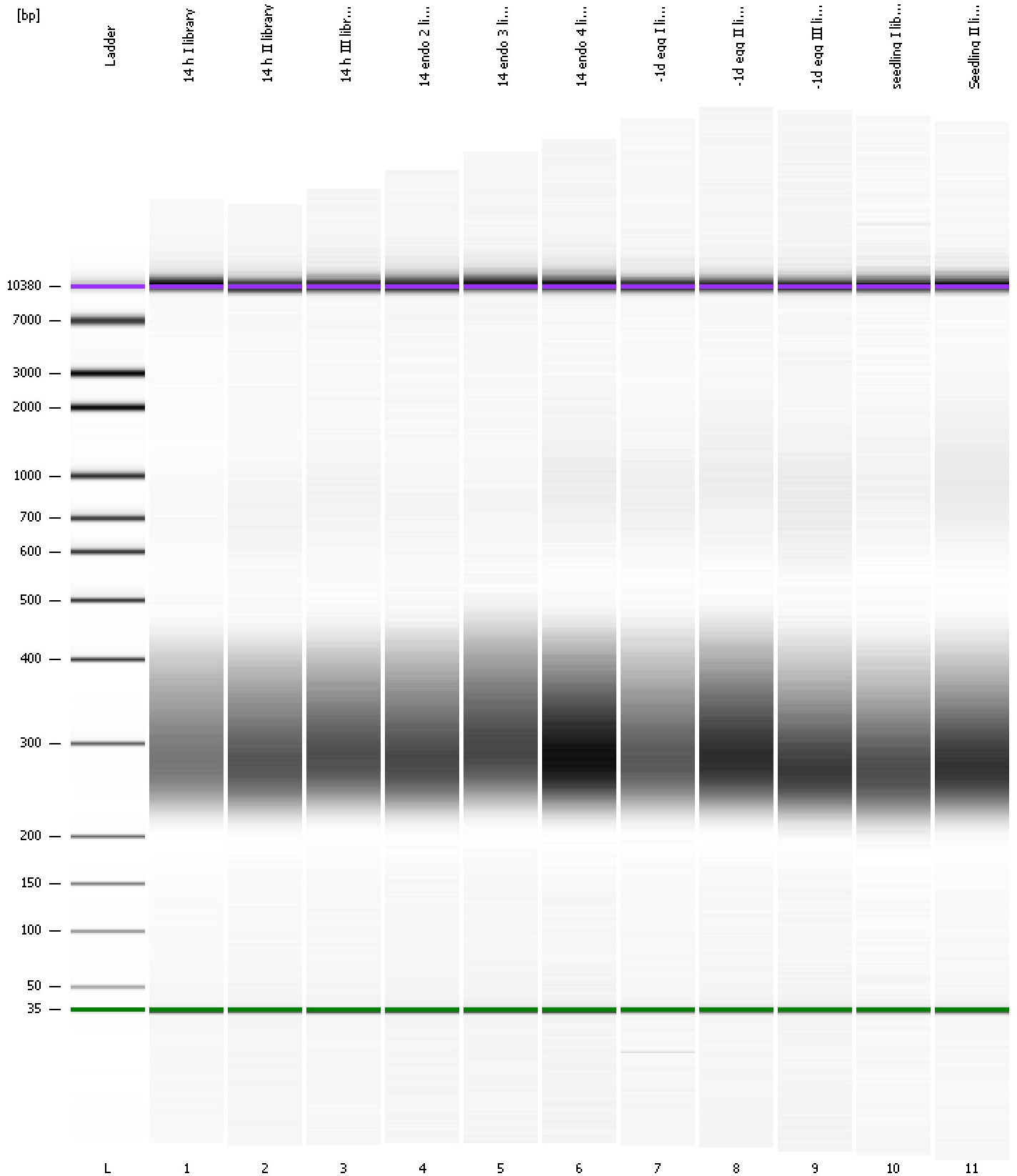
**Region table for sample 11 : Seedling II library**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
157	546	303	6,371.1	1,233.38	473.7	94	16.6

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-04-22\2014-04-22\_001.xad

Created: 4/22/2014 10:26:47 AM  
Modified: 4/22/2014 11:09:25 AM

**Gel Image**



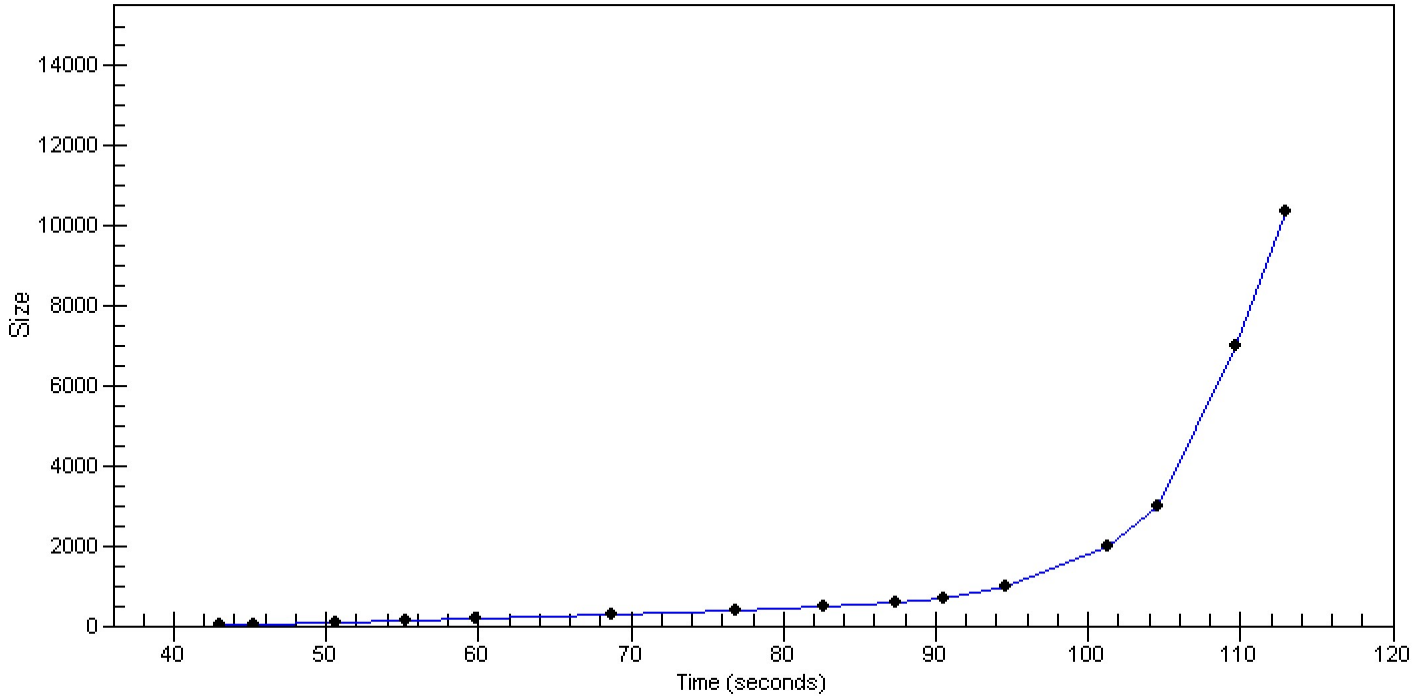


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-04-22\2014-04-22\_001.xad

Created: 4/22/2014 10:26:47 AM  
Modified: 4/22/2014 11:09:25 AM

**Curves**

**Standard Curve**



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-04-22\2014-04-22\_001.xad

Created: 4/22/2014 10:26:47 AM  
 Modified: 4/22/2014 11:09:25 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		4/22/2014 11:08:05 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2014-04-22\2014-04-22_001.xad)		Instrument	Run		4/22/2014 10:26:53 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		4/22/2014 10:26:53 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		4/22/2014 10:26:53 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		4/22/2014 10:26:53 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		4/22/2014 10:26:53 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		4/22/2014 10:26:53 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		4/22/2014 10:26:53 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1