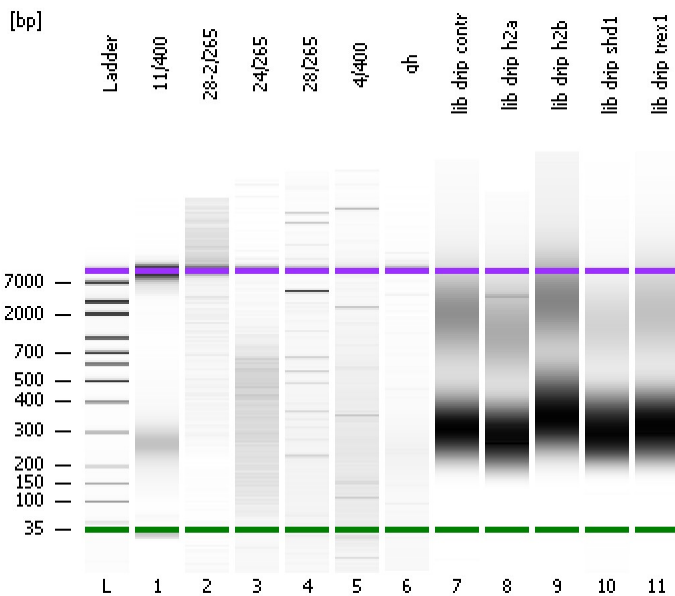


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-25\2013-06-25_002.xad

Created: 6/25/2013 10:07:30 AM
Modified: 6/25/2013 10:48:00 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

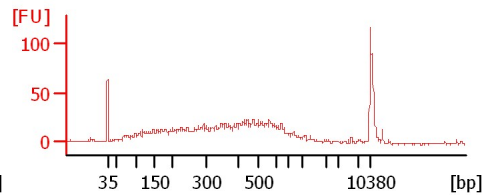
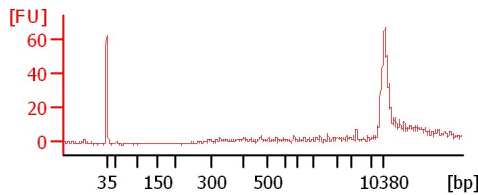
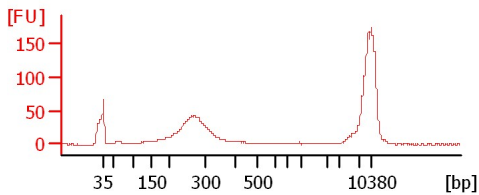
Chip Information:

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

11/400

28-2/265

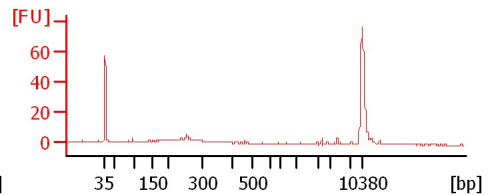
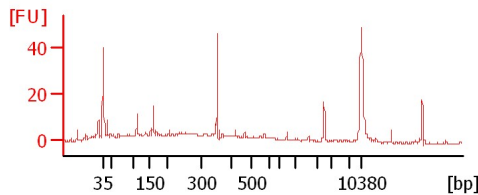
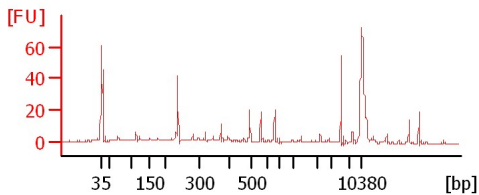
24/265



28/265

4/400

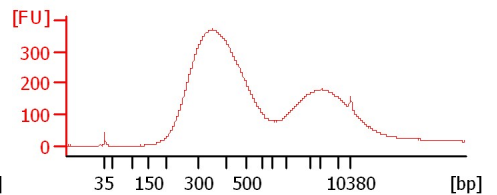
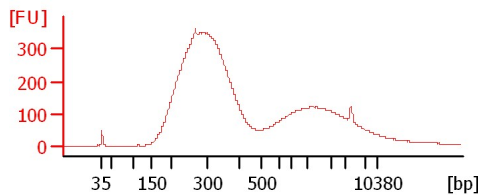
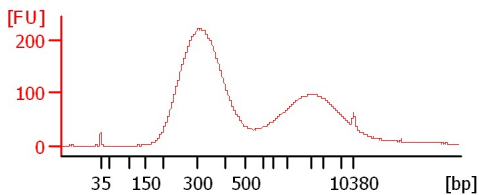
gh



lib drip contr

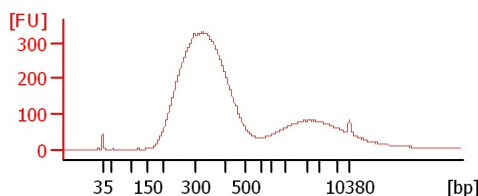
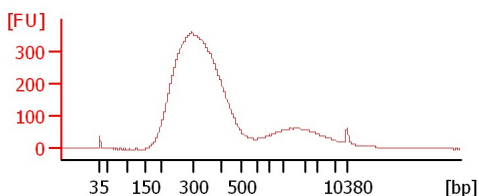
lib drip h2a

lib drip h2b



lib drip shd1

lib drip trex1



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-25\2013-06-25_002.xad

Created: 6/25/2013 10:07:30 AM
Modified: 6/25/2013 10:48:00 AM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
11/400		<input type="checkbox"/>	✓			
28-2/265		<input type="checkbox"/>	✓			
24/265		<input type="checkbox"/>	✓			
28/265		<input type="checkbox"/>	✓			
4/400		<input type="checkbox"/>	✓			
gh		<input type="checkbox"/>	✓			
lib drip contr		<input type="checkbox"/>	✓			
lib drip h2a		<input type="checkbox"/>	✓			
lib drip h2b		<input type="checkbox"/>	✓			
lib drip shd1		<input type="checkbox"/>	✓			
lib drip trex1		<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\2013-06-25\2013-06-25_002.xad

Created: 6/25/2013 10:07:30 AM
Modified: 6/25/2013 10:48:00 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

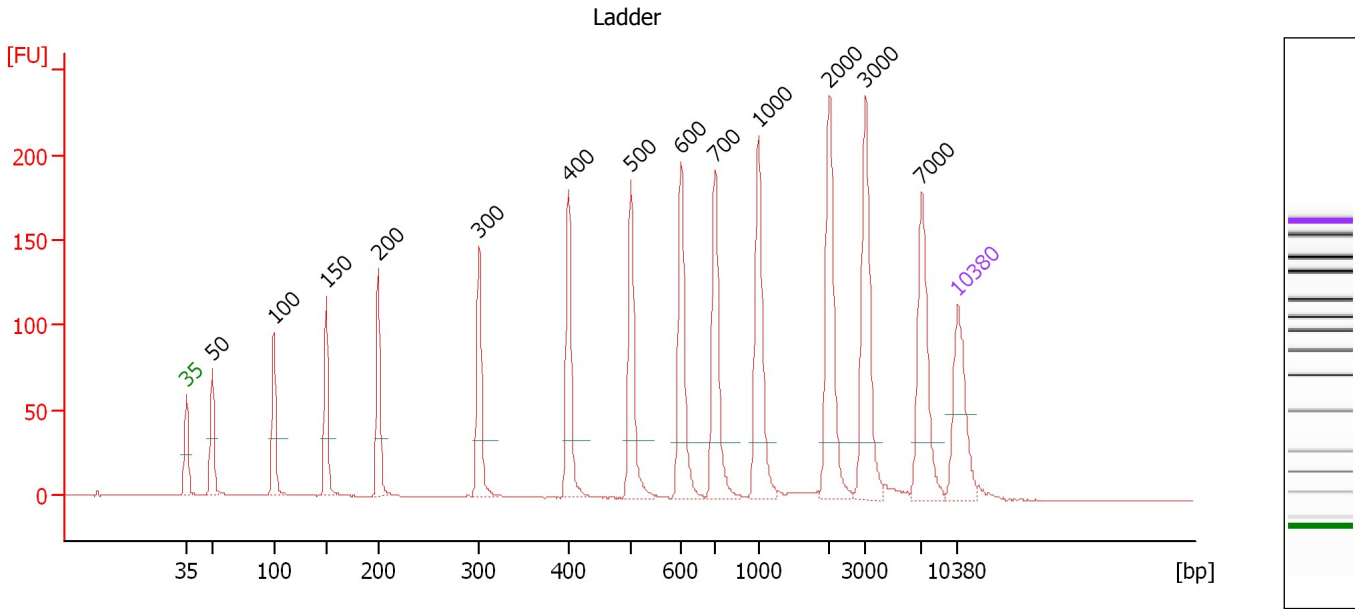
Ladder

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\2013-06-25\2013-06-25_002.xad

Created: 6/25/2013 10:07:30 AM
 Modified: 6/25/2013 10:48:00 AM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

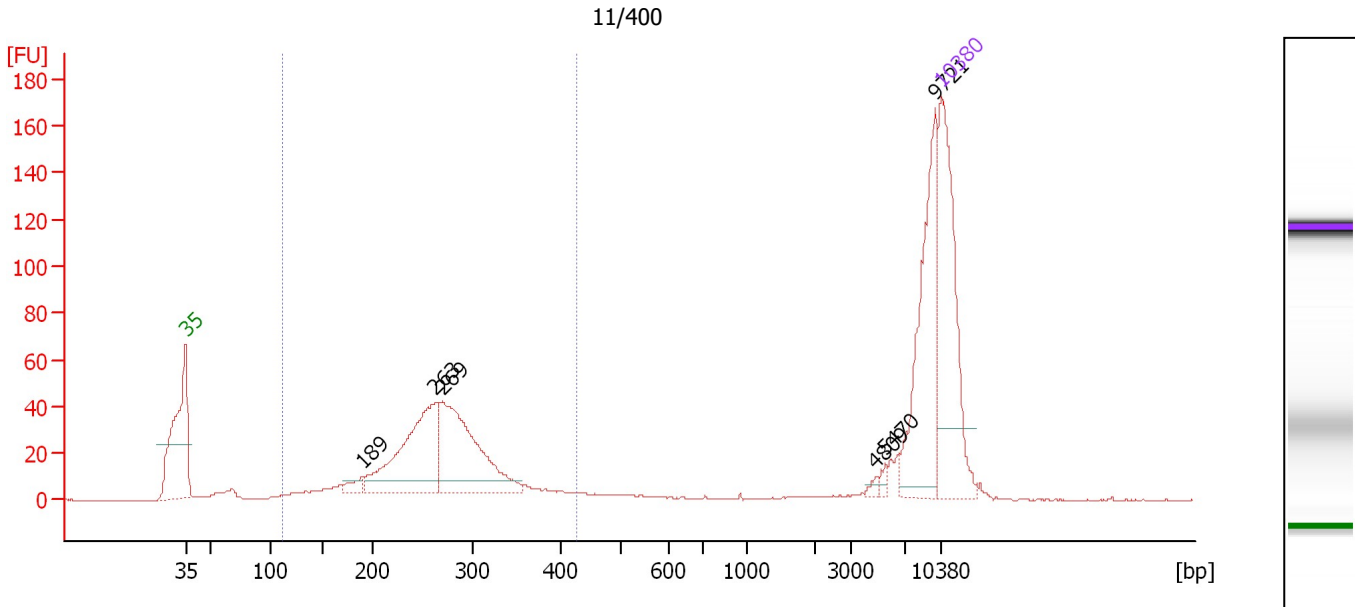
Peak table for Ladder

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	50	150.00	4,545.5	Ladder Peak
3	100	150.00	2,272.7	Ladder Peak
4	150	150.00	1,515.2	Ladder Peak
5	200	150.00	1,136.4	Ladder Peak
6	300	150.00	757.6	Ladder Peak
7	400	150.00	568.2	Ladder Peak
8	500	150.00	454.5	Ladder Peak
9	600	150.00	378.8	Ladder Peak
10	700	150.00	324.7	Ladder Peak
11	1,000	150.00	227.3	Ladder Peak
12	2,000	150.00	113.6	Ladder Peak
13	3,000	150.00	75.8	Ladder Peak
14	7,000	150.00	32.5	Ladder Peak
15	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-25\2013-06-25_002.xad

Created: 6/25/2013 10:07:30 AM
 Modified: 6/25/2013 10:48:00 AM

Electropherogram Summary Continued ...



Overall Results for sample 1 : 11/400

Number of peaks found: 6 Corr. Area 1: 623.8
 Noise: 0.2

Peak table for sample 1 : 11/400

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	189	7.03	56.3	
3	263	98.52	568.1	
4	269	103.33	581.5	
5	4,809	2.07	0.7	
6	5,470	2.62	0.7	
7	9,721	74.45	11.6	
8	10,380	75.00	10.9	Upper Marker

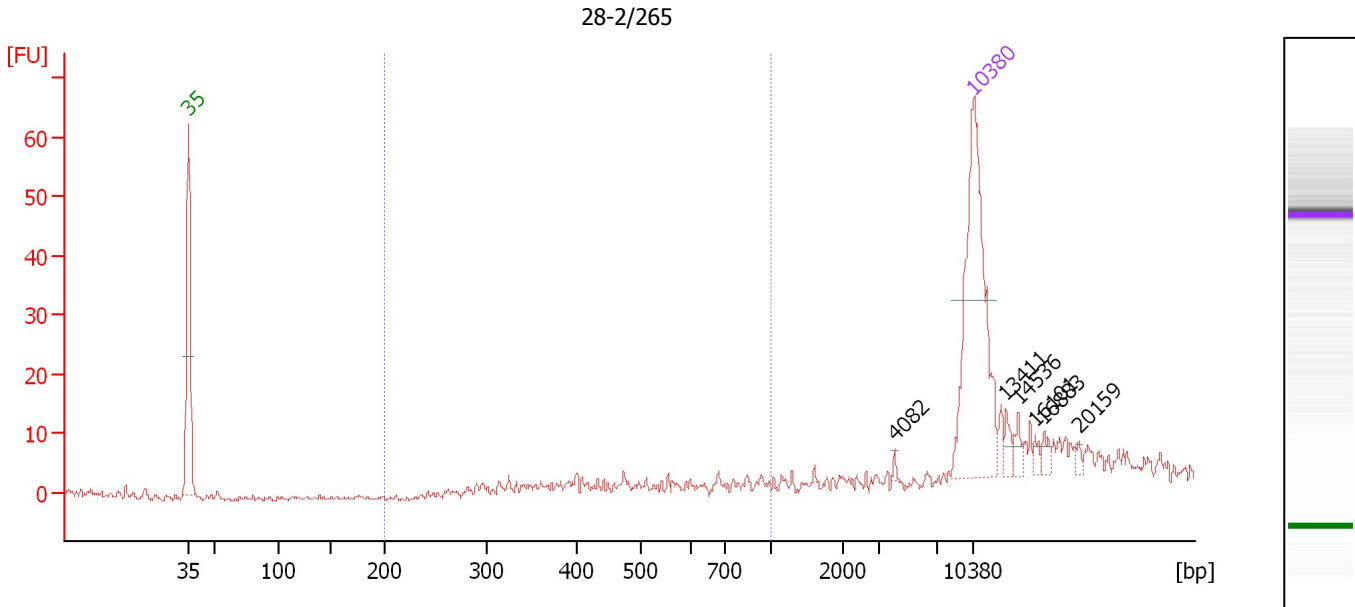
Region table for sample 1 : 11/400

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
112	428	265	1,747.0	284.34	623.8	62	20.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-25\2013-06-25_002.xad

Created: 6/25/2013 10:07:30 AM
 Modified: 6/25/2013 10:48:00 AM

Electropherogram Summary Continued ...



Overall Results for sample 2 : 28-2/265

Number of peaks found: 6 Corr. Area 1: 15.2
 Noise: 0.5

Peak table for sample 2 : 28-2/265

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	4,082	0.92	0.3	
3	10,380	75.00	10.9	Upper Marker
4	13,411	0.00	0.0	
5	14,536	0.00	0.0	
6	16,101	0.00	0.0	
7	16,883	0.00	0.0	
8	20,159	0.00	0.0	

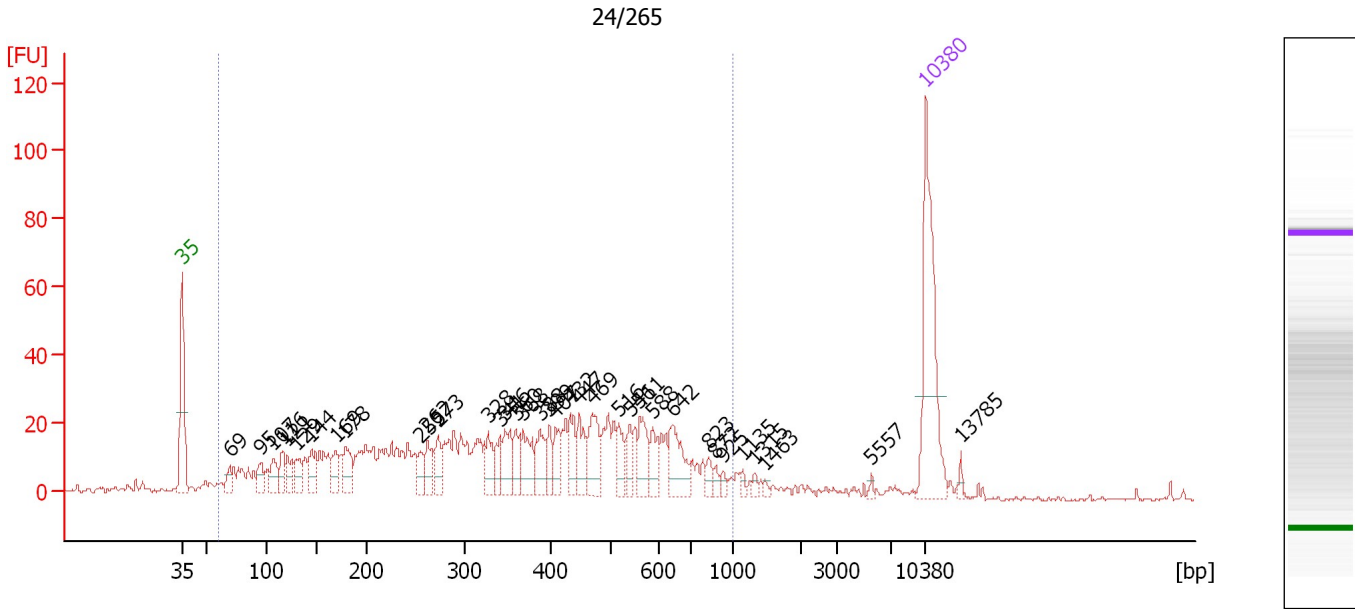
Region table for sample 2 : 28-2/265

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	494	50.3	14.16	15.2	16	36.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-25\2013-06-25_002.xad

Created: 6/25/2013 10:07:30 AM
 Modified: 6/25/2013 10:48:00 AM

Electropherogram Summary Continued ...



Overall Results for sample 3 : 24/265

Number of peaks found: 36 Corr. Area 1: 902.6
 Noise: 0.3

Peak table for sample 3 : 24/265

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	69	11.70	256.5	
3	95	16.46	263.5	
4	107	18.47	261.9	
5	116	16.15	211.2	
6	121	16.98	213.3	
7	129	16.33	191.6	
8	144	20.16	211.4	
9	169	17.90	160.7	
10	178	25.75	218.7	
11	255	13.13	78.0	
12	262	15.67	90.5	
13	273	16.83	93.3	
14	328	19.56	90.4	
15	341	14.74	65.4	
16	346	24.80	108.5	
17	360	16.29	68.5	
18	368	28.74	118.3	
19	388	21.05	82.2	
20	399	13.63	51.8	
21	407	17.54	65.3	
22	432	18.76	65.8	
23	447	21.47	72.7	
24	469	30.98	100.0	
25	516	17.37	51.0	
26	541	13.00	36.4	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-25\2013-06-25_002.xad


Created: 6/25/2013 10:07:30 AM
 Modified: 6/25/2013 10:48:00 AM

Electropherogram Summary Continued ...

... Peak table for sample 3 : 24/265

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	561	23.65	63.9	
28	588	16.40	42.3	
29	642	29.59	69.8	
30	823	6.29	11.6	
31	872	4.35	7.6	
32	925	3.58	5.9	
33	1,135	3.18	4.2	
34	1,315	2.66	3.1	
35	1,463	1.93	2.0	
36	5,557	1.80	0.5	
37	▶ 10,380	75.00	10.9	Upper Marker
38	13,785	0.00	0.0	

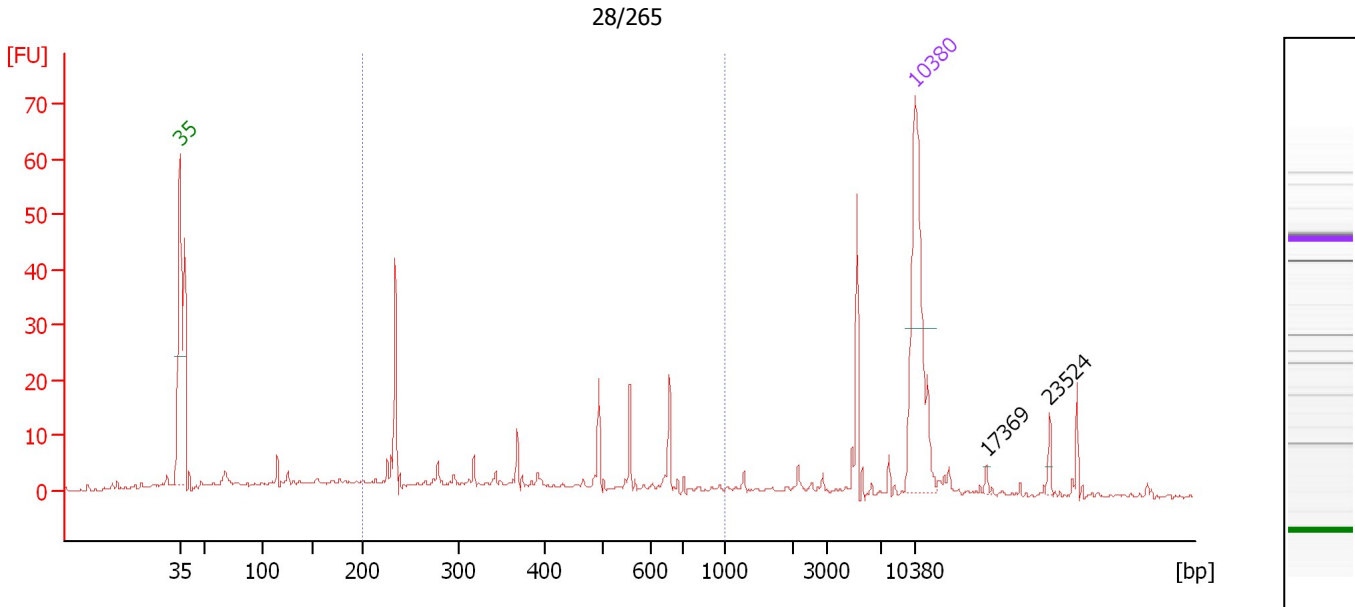
Region table for sample 3 : 24/265

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
60	1,000	380	6,323.1	951.74	902.6	92	49.1	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-25\2013-06-25_002.xad

Created: 6/25/2013 10:07:30 AM
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Electropherogram Summary Continued ...



Overall Results for sample 4 : 28/265

Number of peaks found: 2 Corr. Area 1: 112.9
 Noise: 0.4

Peak table for sample 4 : 28/265

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	10,380	75.00	10.9	Upper Marker
3	17,369	0.00	0.0	
4	23,524	0.00	0.0	

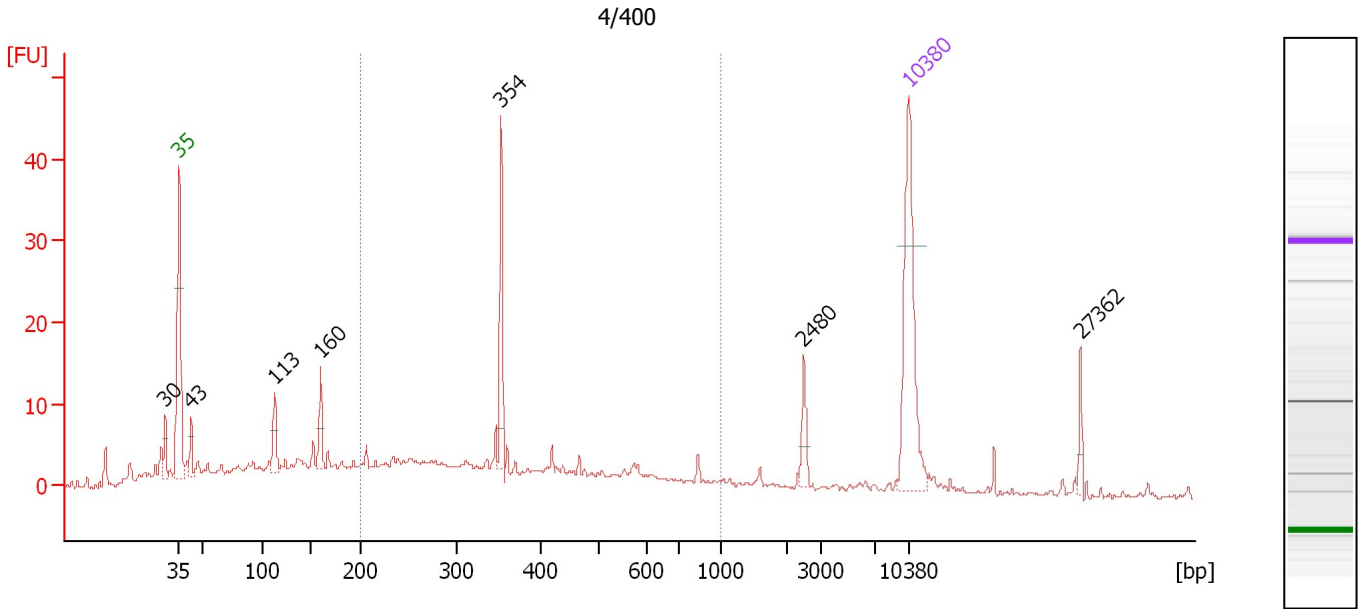
Region table for sample 4 : 28/265

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	416	789.3	171.27	112.9	48	41.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-25\2013-06-25_002.xad

Created: 6/25/2013 10:07:30 AM
 Modified: 6/25/2013 10:48:00 AM

Electropherogram Summary Continued ...



Overall Results for sample 5 : 4/400

Number of peaks found: 7 Corr. Area 1: 124.0
 Noise: 0.3

Peak table for sample 5 : 4/400

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	30	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	43	17.83	634.1	
4	113	21.30	285.7	
5	160	21.44	203.2	
6	354	43.00	184.3	
7	2,480	11.72	7.2	
8	10,380	75.00	10.9	Upper Marker
9	27,362	0.00	0.0	

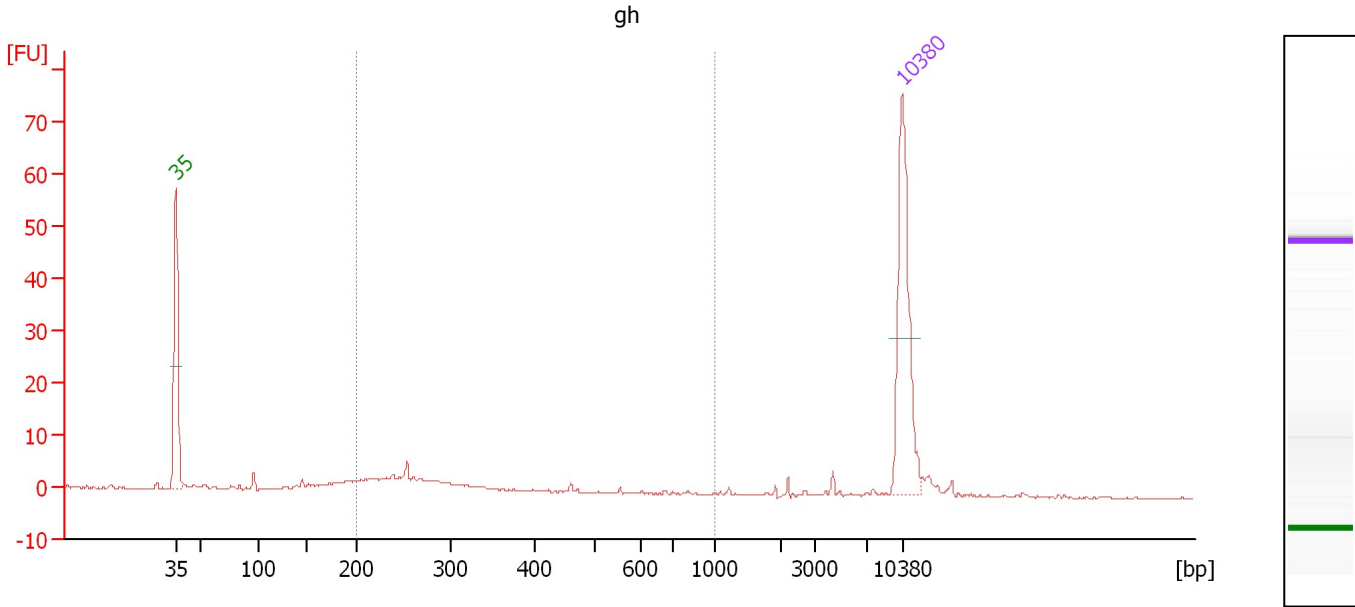
Region table for sample 5 : 4/400

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	384	1,455.2	311.99	124.0	44	38.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-25\2013-06-25_002.xad

Created: 6/25/2013 10:07:30 AM
 Modified: 6/25/2013 10:48:00 AM

Electropherogram Summary Continued ...



Overall Results for sample 6 : gh

Number of peaks found: 0 Corr. Area 1: 41.7
 Noise: 0.1

Peak table for sample 6 : gh

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	10,380	75.00	10.9	Upper Marker

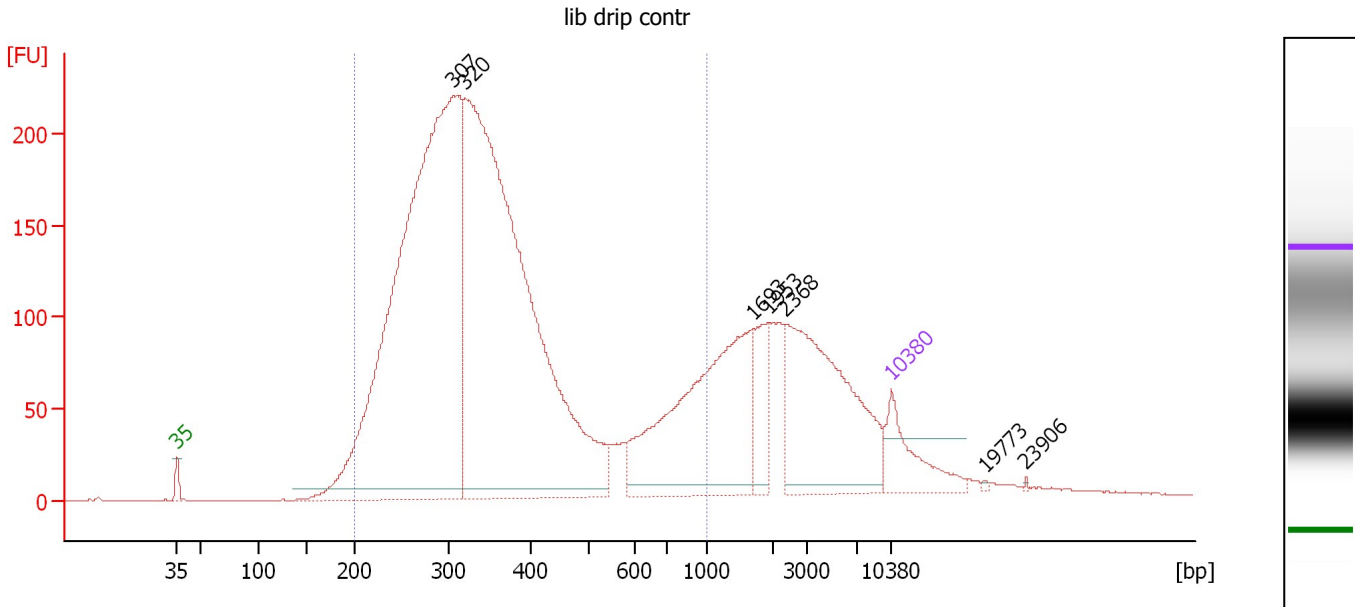
Region table for sample 6 : gh

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	288	355.6	62.71	41.7	55	31.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-25\2013-06-25_002.xad

Created: 6/25/2013 10:07:30 AM
 Modified: 6/25/2013 10:48:00 AM

Electropherogram Summary Continued ...



Overall Results for sample 7 : lib drip contr

Number of peaks found: 7 Corr. Area 1: 4,707.6
 Noise: 0.1

Peak table for sample 7 : lib drip contr

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	307	1,703.91	8,414.5	
3	320	1,654.51	7,826.3	
4	1,693	386.48	345.9	
5	1,953	73.04	56.7	
6	2,368	325.47	208.2	
7	10,380	75.00	10.9	Upper Marker
8	19,773	0.00	0.0	
9	23,906	0.00	0.0	

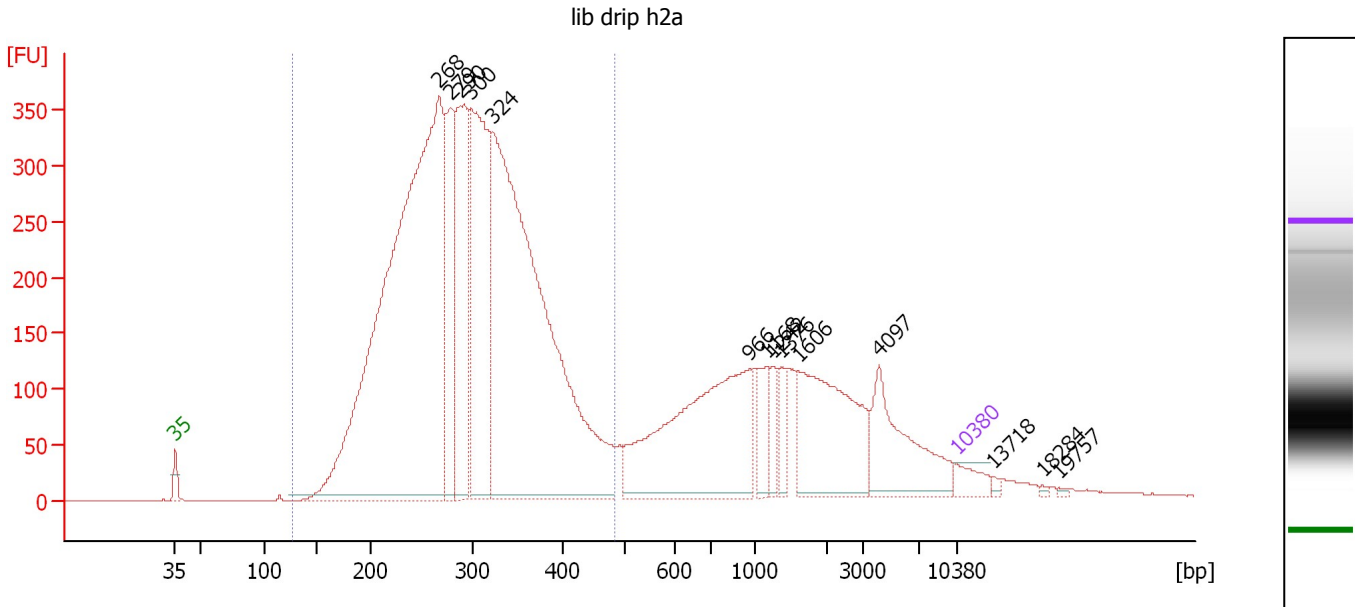
Region table for sample 7 : lib drip contr

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	377	16,679.8	3,572.73	4,707.6	77	41.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-25\2013-06-25_002.xad

Created: 6/25/2013 10:07:30 AM
 Modified: 6/25/2013 10:48:00 AM

Electropherogram Summary Continued ...



Overall Results for sample 8 : lib drip h2a

Number of peaks found: 14 Corr. Area 1: 7,945.9
 Noise: 0.3

Peak table for sample 8 : lib drip h2a

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	268	5,540.28	31,297.6	
3	279	787.28	4,272.6	
4	290	1,117.49	5,845.8	
5	300	1,543.07	7,804.5	
6	324	4,274.28	19,975.5	
7	966	1,280.43	2,007.9	
8	1,168	165.53	214.7	
9	1,242	106.86	130.3	
10	1,376	96.55	106.3	
11	1,606	752.40	709.7	
12	4,097	459.97	170.1	
13	10,380	75.00	10.9	Upper Marker
14	13,718	0.00	0.0	
15	18,284	0.00	0.0	
16	19,757	0.00	0.0	

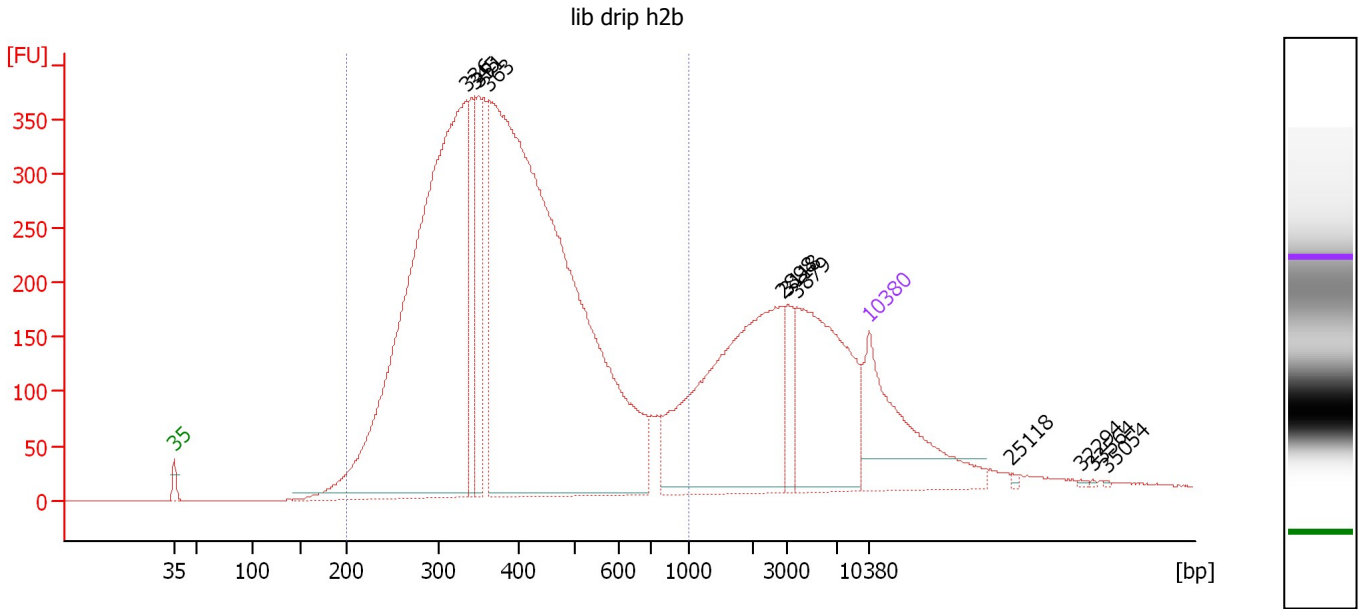
Region table for sample 8 : lib drip h2a

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
126	482	297	73,162.6	13,444.65	7,945.9	74	21.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-25\2013-06-25_002.xad

Created: 6/25/2013 10:07:30 AM
 Modified: 6/25/2013 10:48:00 AM

Electropherogram Summary Continued ...



Overall Results for sample 9 : lib drip h2b

Number of peaks found: 11 Corr. Area 1: 8,738.4
 Noise: 0.3

Peak table for sample 9 : lib drip h2b

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	336	581.54	2,621.5	
3	345	59.63	261.6	
4	351	59.10	254.9	
5	363	776.17	3,243.7	
6	2,898	181.98	95.1	
7	3,118	17.91	8.7	
8	3,879	112.29	43.9	
9	10,380	75.00	10.9	Upper Marker
10	25,118	0.00	0.0	
11	32,294	0.00	0.0	
12	33,564	0.00	0.0	
13	35,054	0.00	0.0	

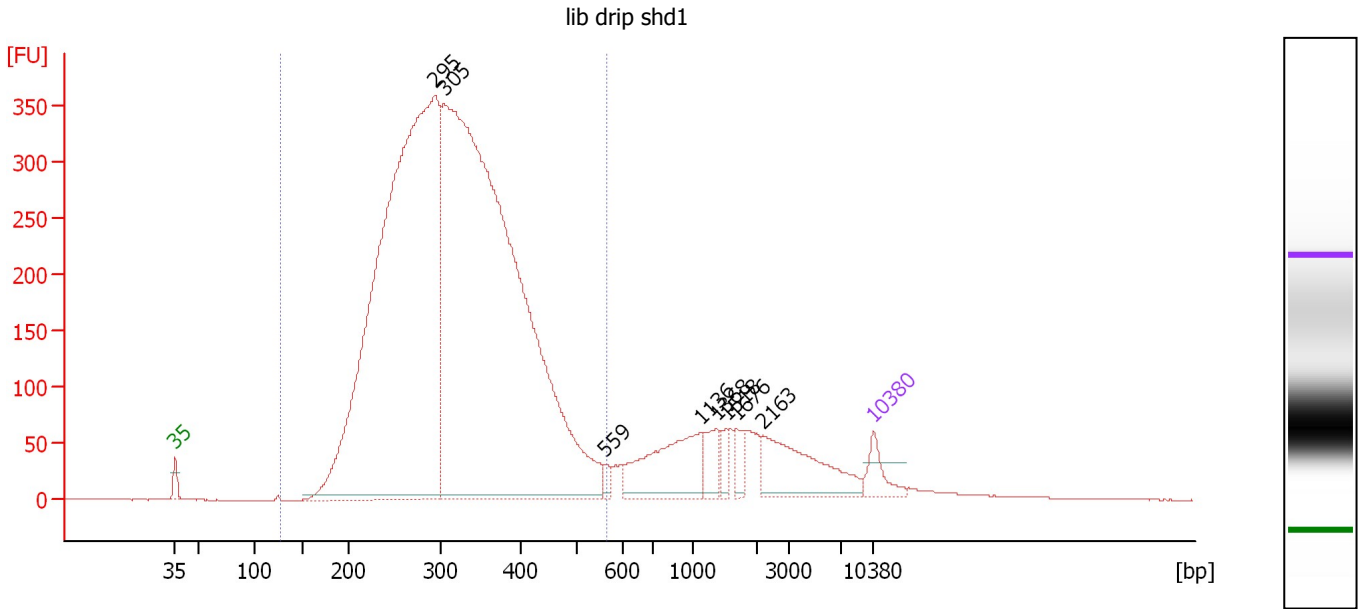
Region table for sample 9 : lib drip h2b

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	406	6,443.7	1,525.21	8,738.4	78	34.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-25\2013-06-25_002.xad

Created: 6/25/2013 10:07:30 AM
 Modified: 6/25/2013 10:48:00 AM

Electropherogram Summary Continued ...



Overall Results for sample 10 : lib drip shd1

Number of peaks found: 8 Corr. Area 1: 7,688.5
 Noise: 0.3

Peak table for sample 10 : lib drip shd1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	295	4,849.53	24,912.3	
3	305	5,850.44	29,078.4	
4	559	30.74	83.3	
5	1,136	358.67	478.5	
6	1,368	93.13	103.1	
7	1,518	43.07	43.0	
8	1,676	56.42	51.0	
9	2,163	308.34	216.0	
10	10,380	75.00	10.9	Upper Marker

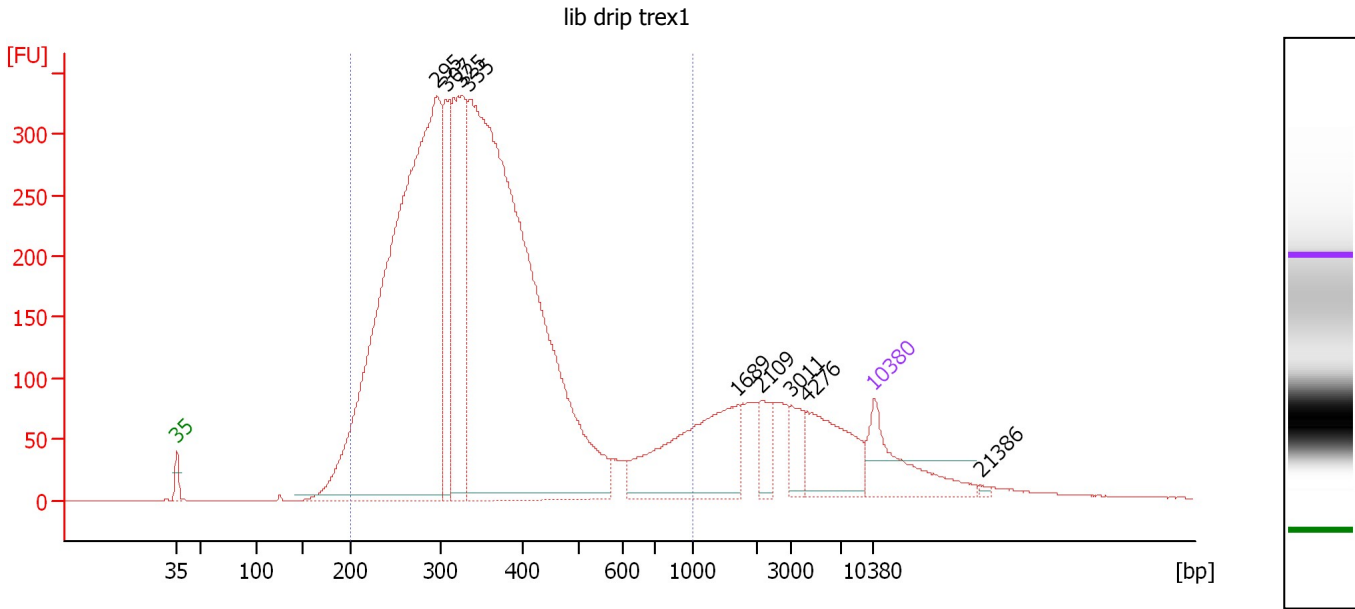
Region table for sample 10 : lib drip shd1

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
128	564	320	52,892.4	10,434.76	7,688.5	86	22.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-25\2013-06-25_002.xad

Created: 6/25/2013 10:07:30 AM
 Modified: 6/25/2013 10:48:00 AM

Electropherogram Summary Continued ...



Overall Results for sample 11 : lib drip trex1

Number of peaks found: 9 Corr. Area 1: 7,467.9
 Noise: 0.2

Peak table for sample 11 : lib drip trex1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	295	1,272.20	6,538.7	
3	307	165.81	819.2	
4	325	299.85	1,397.4	
5	335	1,364.49	6,171.3	
6	1,689	175.60	157.5	
7	2,109	31.03	22.3	
8	3,011	30.26	15.2	
9	4,276	92.85	32.9	
10	10,380	75.00	10.9	Upper Marker
11	21,386	0.00	0.0	

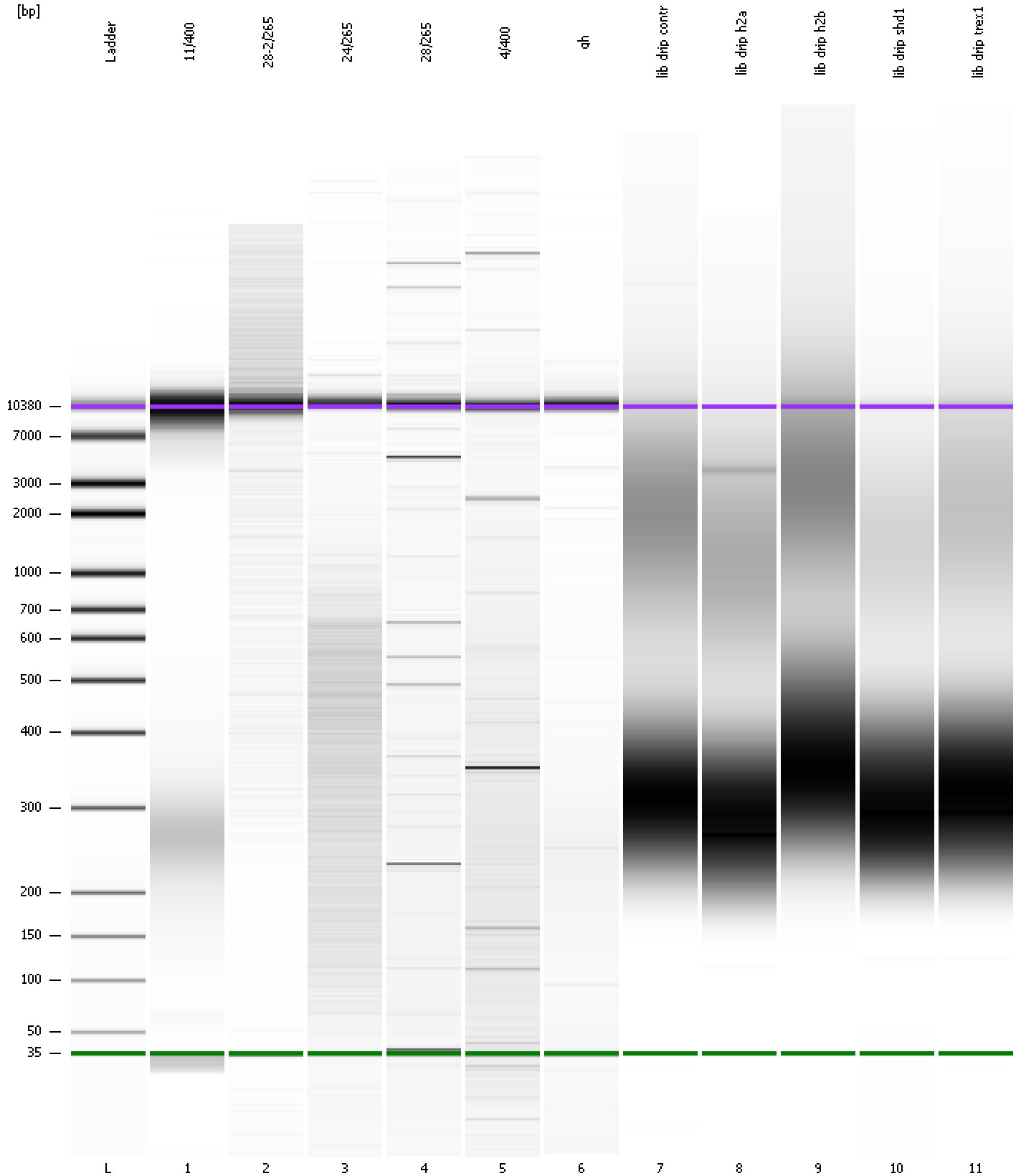
Region table for sample 11 : lib drip trex1

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	360	14,831.2	3,136.83	7,467.9	85	35.8	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-25\2013-06-25_002.xad

Created: 6/25/2013 10:07:30 AM
Modified: 6/25/2013 10:48:00 AM

Gel Image

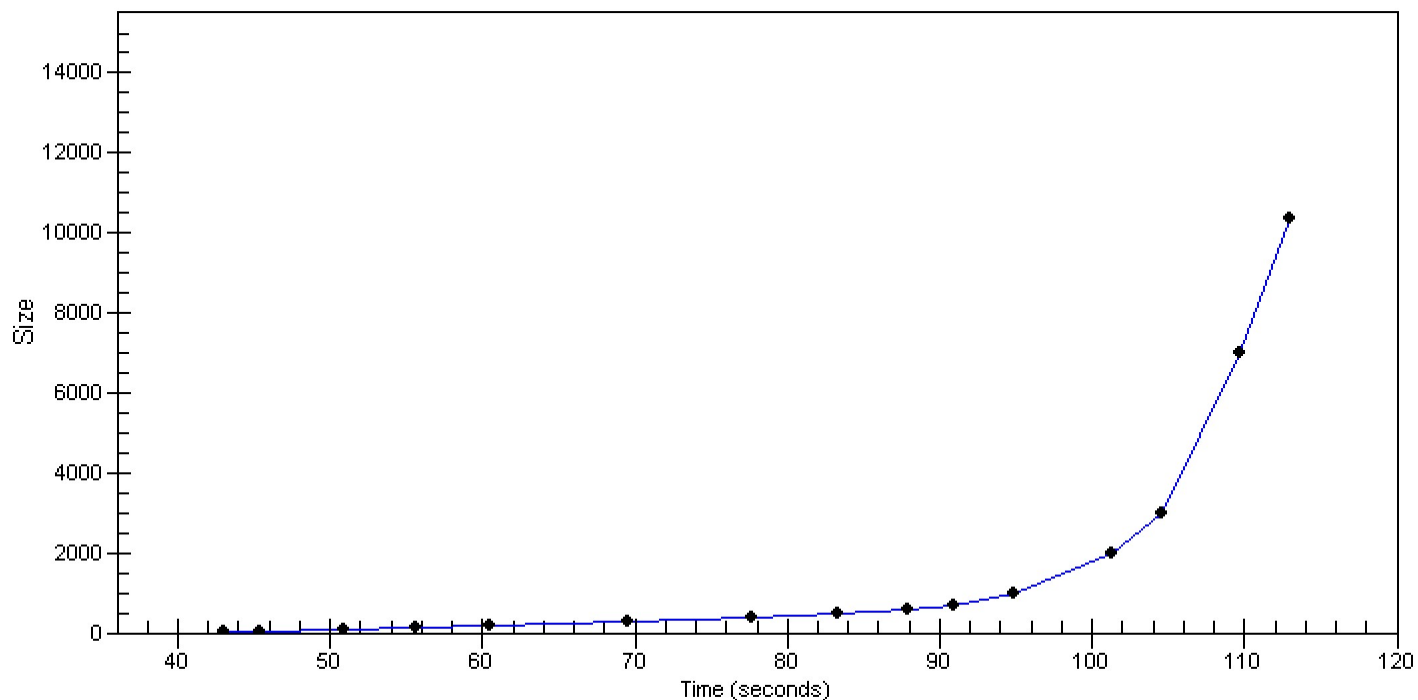


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-25\2013-06-25_002.xad

Created: 6/25/2013 10:07:30 AM
Modified: 6/25/2013 10:48:00 AM

Curves

Standard Curve



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-25\2013-06-25_002.xad

Created: 6/25/2013 10:07:30 AM
 Modified: 6/25/2013 10:48:00 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		6/25/2013 10:47:57 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-06-25\2013-06-25_002.xad)		Instrument	Run		6/25/2013 10:07:36 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		6/25/2013 10:07:36 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		6/25/2013 10:07:36 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		6/25/2013 10:07:36 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		6/25/2013 10:07:36 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		6/25/2013 10:07:36 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		6/25/2013 10:07:36 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1