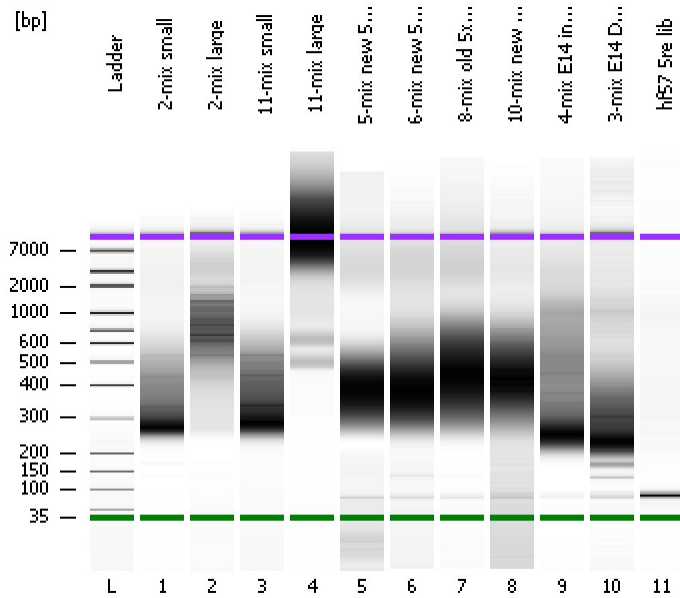


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-01\2012-05-01_001.xad

Created: 5/1/2012 9:38:55 AM
Modified: 5/1/2012 10:20:18 AM

Electrophoresis File Run Summary



Instrument Information:

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

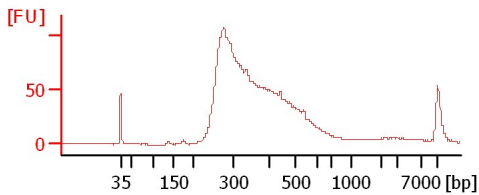
Assay Information:

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

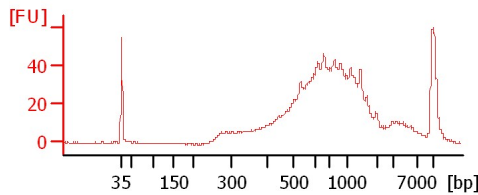
Chip Information:

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

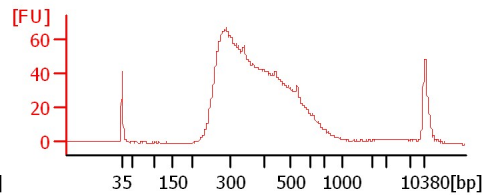
2-mix small



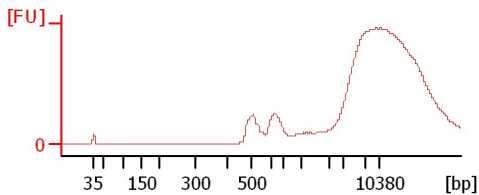
2-mix large



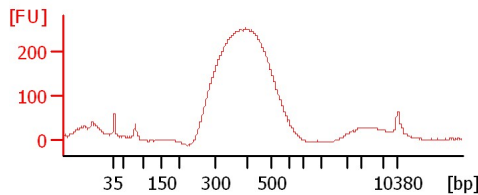
11-mix small



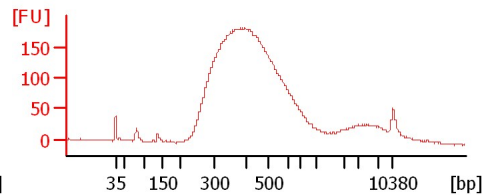
11-mix large



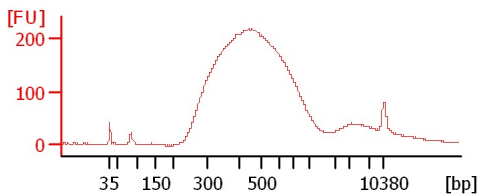
5-mix new 5x drip



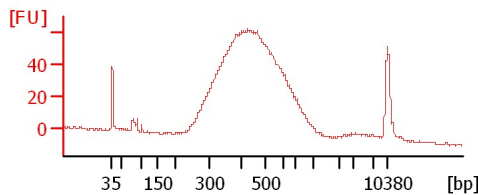
6-mix new 5x drip



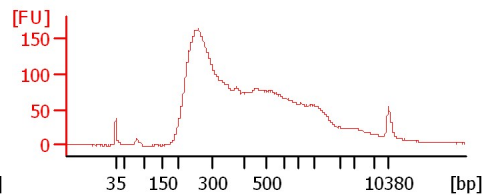
8-mix old 5x drip



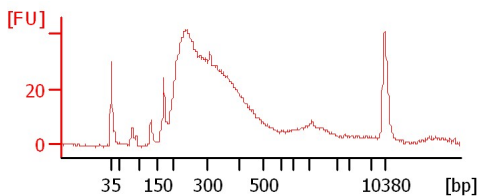
10-mix new 5x input



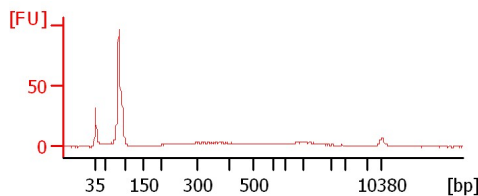
4-mix E14 input



3-mix E14 DRIP



hf57 5re lib



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-01\2012-05-01_001.xad

Created: 5/1/2012 9:38:55 AM
 Modified: 5/1/2012 10:20:18 AM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
2-mix small		<input type="checkbox"/>	✓			
2-mix large		<input type="checkbox"/>	✓			
11-mix small		<input type="checkbox"/>	✓			
11-mix large		<input type="checkbox"/>	✓			
5-mix new 5x drip		<input type="checkbox"/>	✓			
6-mix new 5x drip		<input type="checkbox"/>	✓			
8-mix old 5x drip		<input type="checkbox"/>	✓			
10-mix new 5x input		<input type="checkbox"/>	✓			
4-mix E14 input		<input type="checkbox"/>	✓			
3-mix E14 DRIP		<input type="checkbox"/>	✓			
hf57 5re lib		<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\2012-05-01\2012-05-01_001.xad

Created: 5/1/2012 9:38:55 AM
Modified: 5/1/2012 10:20:18 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

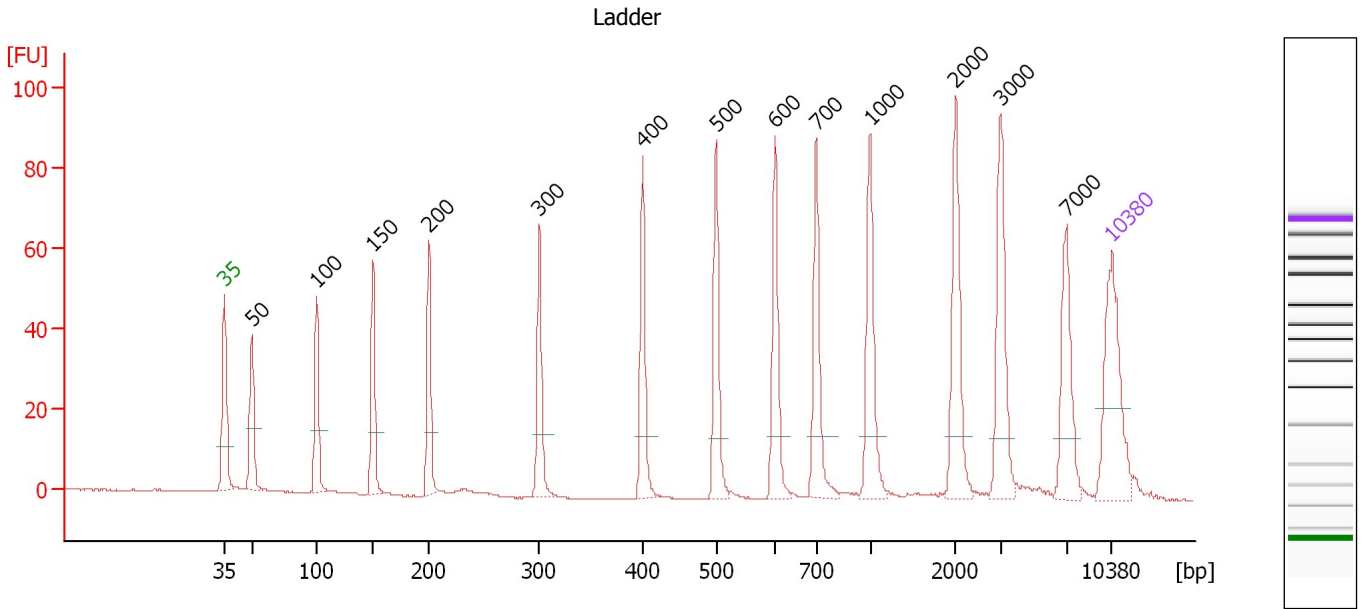
Ladder

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\2012-05-01\2012-05-01_001.xad

Created: 5/1/2012 9:38:55 AM
 Modified: 5/1/2012 10:20:18 AM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

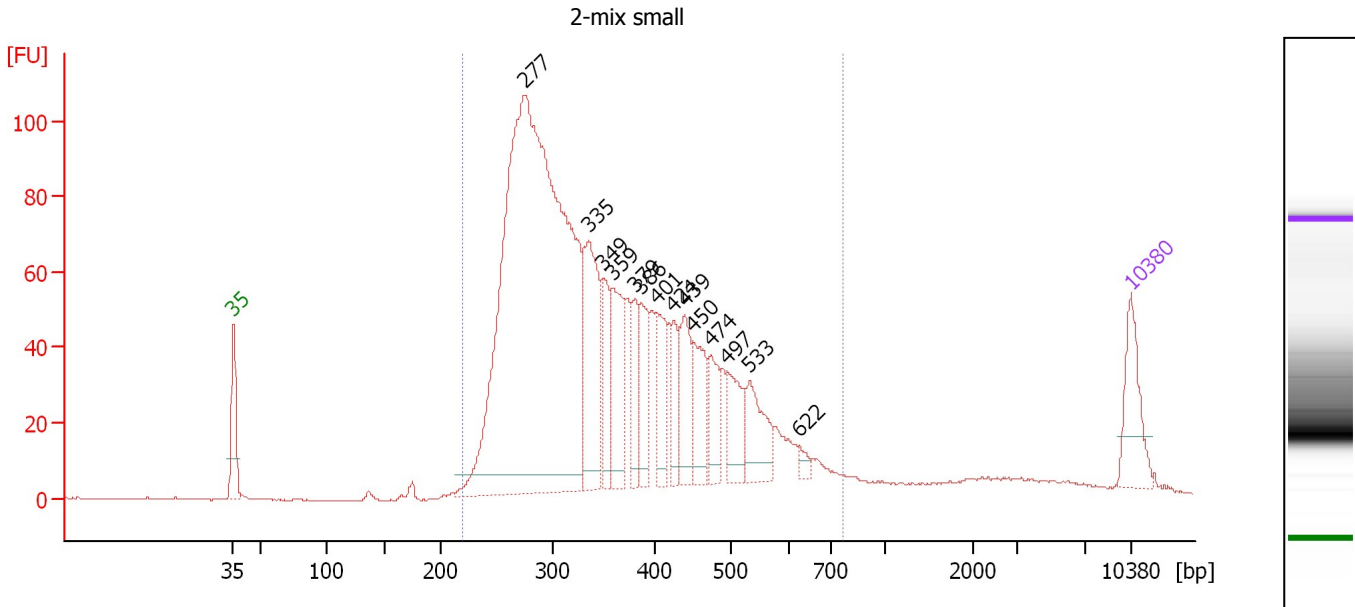
Peak table for Ladder

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\2012-05-01\2012-05-01_001.xad

Created: 5/1/2012 9:38:55 AM
 Modified: 5/1/2012 10:20:18 AM

Electropherogram Summary Continued ...



Overall Results for sample 1 : 2-mix small

Number of peaks found: 14 Corr. Area 1: 1,898.7
 Noise: 0.1

Peak table for sample 1 : 2-mix small

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	277	1,927.45	10,560.0	
3	335	243.63	1,100.7	
4	349	98.12	425.7	
5	359	147.76	623.7	
6	379	67.03	267.6	
7	386	88.52	347.8	
8	401	93.60	353.3	
9	424	62.55	223.7	
10	439	97.63	337.2	
11	450	96.18	323.7	
12	474	69.88	223.4	
13	497	83.96	256.1	
14	533	93.70	266.5	
15	622	12.89	31.4	
16	10,380	75.00	10.9	Upper Marker

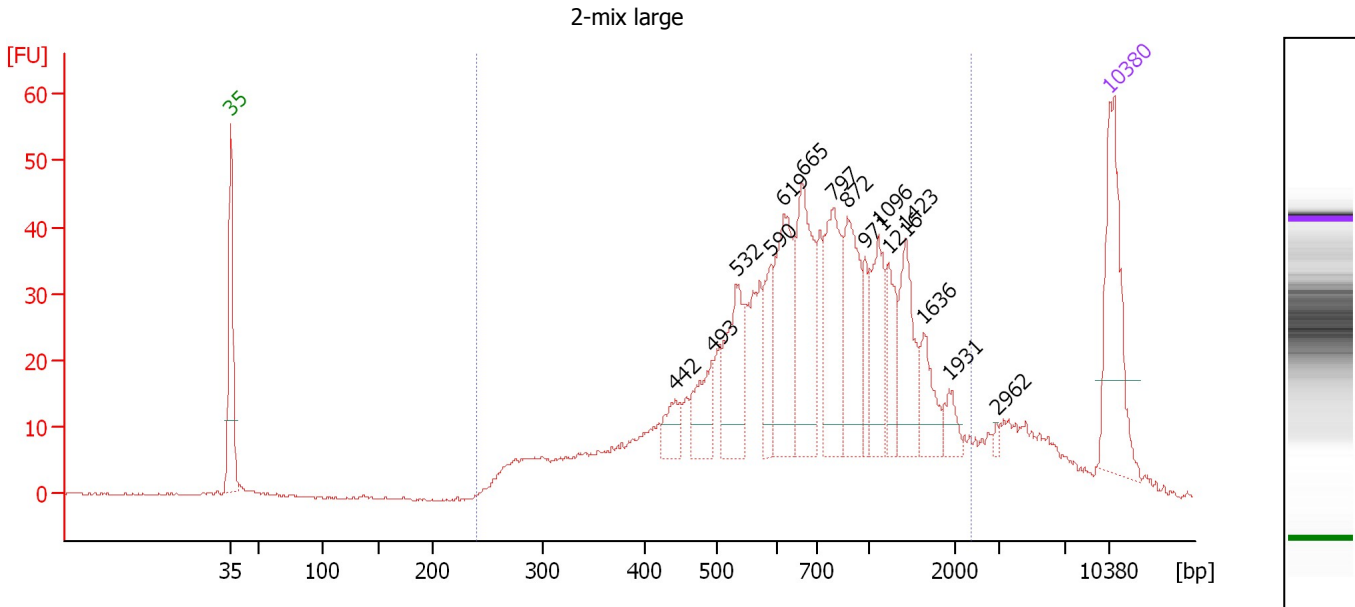
Region table for sample 1 : 2-mix small

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
221	16,205.0	365	3,564.49	761	1,898.7	96	27.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-01\2012-05-01_001.xad

Created: 5/1/2012 9:38:55 AM
 Modified: 5/1/2012 10:20:18 AM

Electropherogram Summary Continued ...



Overall Results for sample 2 : 2-mix large

Number of peaks found: 15 Corr. Area 1: 898.9
 Noise: 0.2

Peak table for sample 2 : 2-mix large

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	442	22.42	76.9	
3	493	40.74	125.2	
4	532	73.16	208.3	
5	590	31.36	80.5	
6	619	90.57	221.7	
7	665	93.74	213.6	
8	797	81.54	155.0	
9	872	69.52	120.8	
10	971	21.38	33.4	
11	1,096	49.07	67.8	
12	1,216	31.42	39.2	
13	1,423	50.30	53.6	
14	1,636	27.04	25.0	
15	1,931	12.43	9.8	
16	2,962	2.55	1.3	
17	10,380	75.00	10.9	Upper Marker

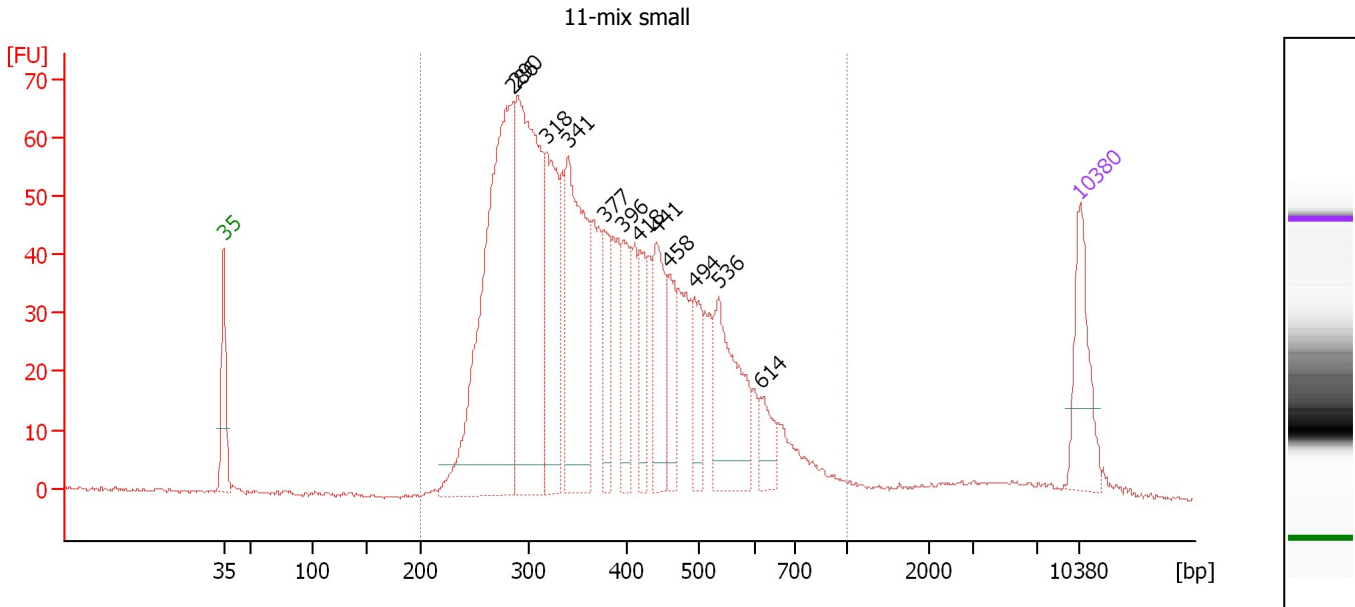
Region table for sample 2 : 2-mix large

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/µl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
240	2,971.1	821	1,192.97	2,354	898.9	92	51.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-01\2012-05-01_001.xad

Created: 5/1/2012 9:38:55 AM
 Modified: 5/1/2012 10:20:18 AM

Electropherogram Summary Continued ...



Overall Results for sample 3 : 11-mix small

Number of peaks found: 12 Corr. Area 1: 1,524.8
 Noise: 0.3

Peak table for sample 3 : 11-mix small

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	286	616.74	3,267.9	
3	290	460.20	2,400.6	
4	318	206.10	981.3	
5	341	295.43	1,313.5	
6	377	77.95	313.4	
7	396	89.08	340.7	
8	418	66.85	242.4	
9	441	108.64	373.1	
10	458	64.19	212.5	
11	494	67.81	207.8	
12	536	162.20	458.4	
13	614	37.69	93.0	
14	10,380	75.00	10.9	Upper Marker

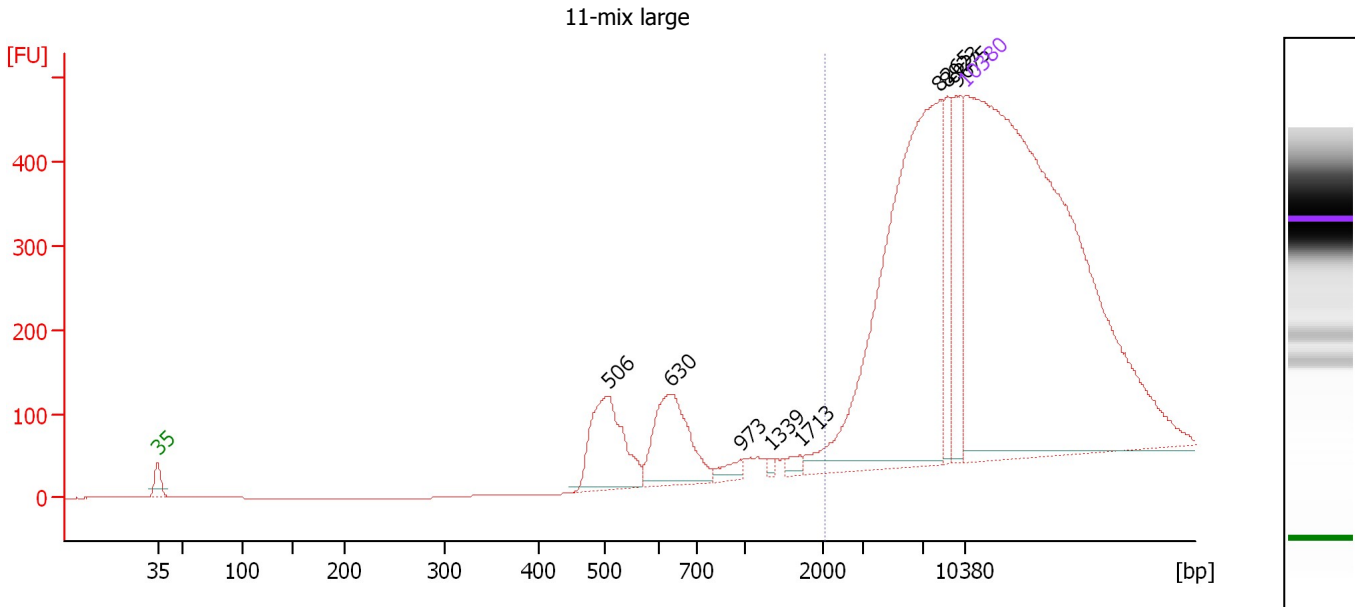
Region table for sample 3 : 11-mix small

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	12,297.3	393	2,856.10	1,000	1,524.8	97	30.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-01\2012-05-01_001.xad

Created: 5/1/2012 9:38:55 AM
 Modified: 5/1/2012 10:20:18 AM

Electropherogram Summary Continued ...



Overall Results for sample 4 : 11-mix large

Number of peaks found: 8 Corr. Area 1: 2,840.5
 Noise: 0.3

Peak table for sample 4 : 11-mix large

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	506	11.33	33.9	
3	630	10.38	25.0	
4	973	1.09	1.7	
5	1,339	0.33	0.4	
6	1,713	0.66	0.6	
7	8,265	42.89	7.9	
8	8,923	5.38	0.9	
9	9,675	6.68	1.0	
10	10,380	75.00	10.9	Upper Marker

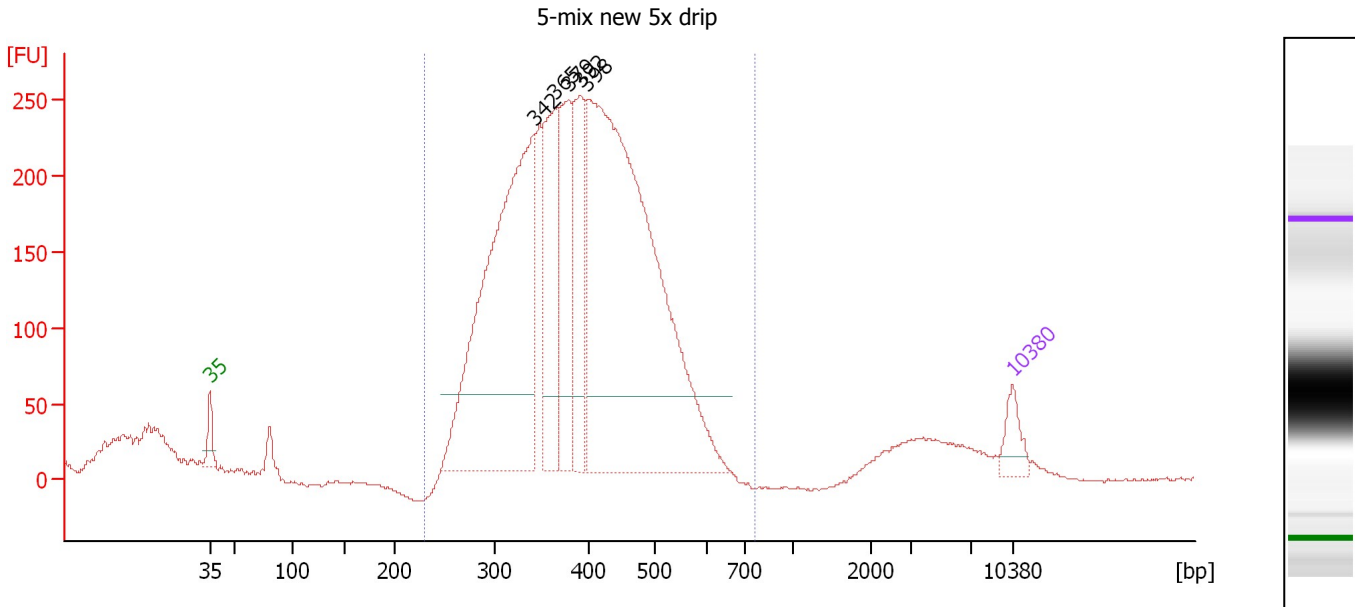
Region table for sample 4 : 11-mix large

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
2,052	13.8	12,489	54.67	30,304	2,840.5	79	47.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-01\2012-05-01_001.xad

Created: 5/1/2012 9:38:55 AM
 Modified: 5/1/2012 10:20:18 AM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 5 : 5-mix new 5x drip

Height Threshold [FU] : 50

Overall Results for sample 5 : 5-mix new 5x drip

Number of peaks found: 5 Corr. Area 1: 5,131.2
 Noise: 0.9

Peak table for sample 5 : 5-mix new 5x drip

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	342	2,006.71	8,882.5	
3	365	624.37	2,590.2	
4	379	524.64	2,097.4	
5	392	436.35	1,685.8	
6	398	2,864.52	10,892.0	
7	10,380	75.00	10.9	Upper Marker

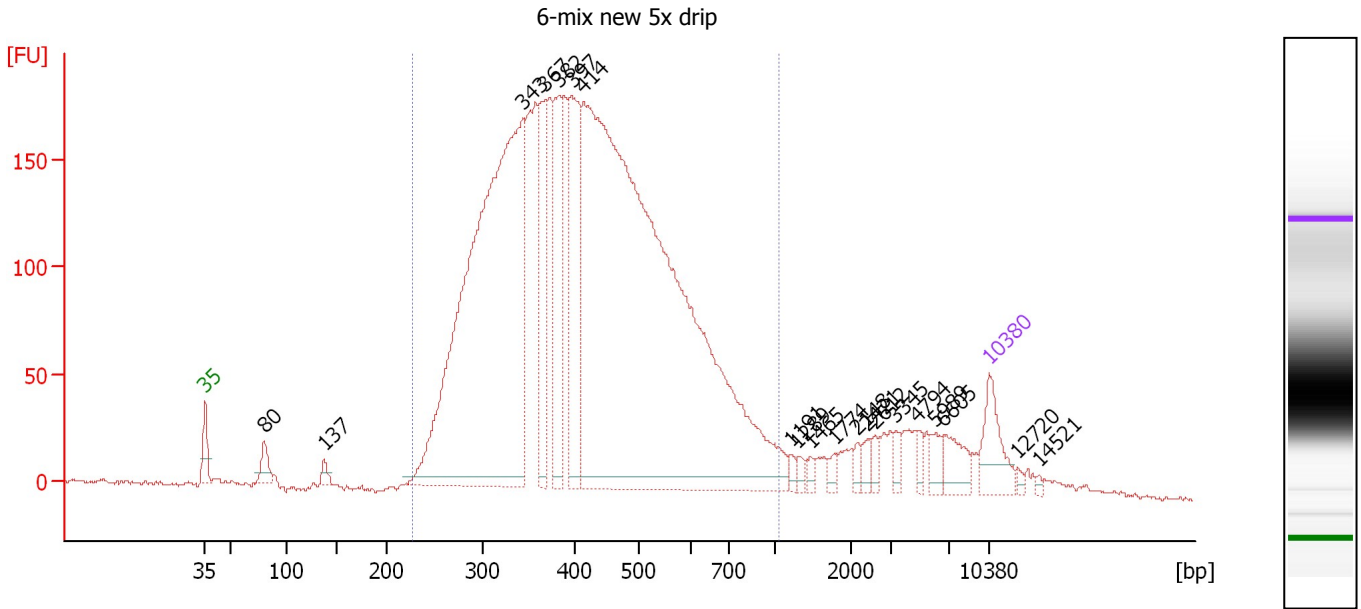
Region table for sample 5 : 5-mix new 5x drip

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
230	27,592.1	397	6,860.52	767	5,131.1	88	19.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-01\2012-05-01_001.xad

Created: 5/1/2012 9:38:55 AM
 Modified: 5/1/2012 10:20:18 AM

Electropherogram Summary Continued ...



Overall Results for sample 6 : 6-mix new 5x drip

Number of peaks found: 20 Corr. Area 1: 4,723.3
 Noise: 1.2

Peak table for sample 6 : 6-mix new 5x drip

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	80	50.79	956.8	
3	137	20.40	224.9	
4	343	1,728.64	7,642.0	
5	367	217.31	896.3	
6	382	254.89	1,010.9	
7	397	313.28	1,194.8	
8	414	2,688.64	9,834.4	
9	1,191	12.19	15.5	
10	1,289	12.14	14.3	
11	1,465	10.74	11.1	
12	1,774	12.68	10.8	
13	2,148	13.80	9.7	
14	2,421	16.72	10.5	
15	2,612	16.94	9.8	
16	3,345	16.15	7.3	
17	4,794	16.30	5.2	
18	5,989	26.31	6.7	
19	6,605	48.54	11.1	
20	10,380	75.00	10.9	Upper Marker
21	12,720	0.00	0.0	
22	14,521	0.00	0.0	

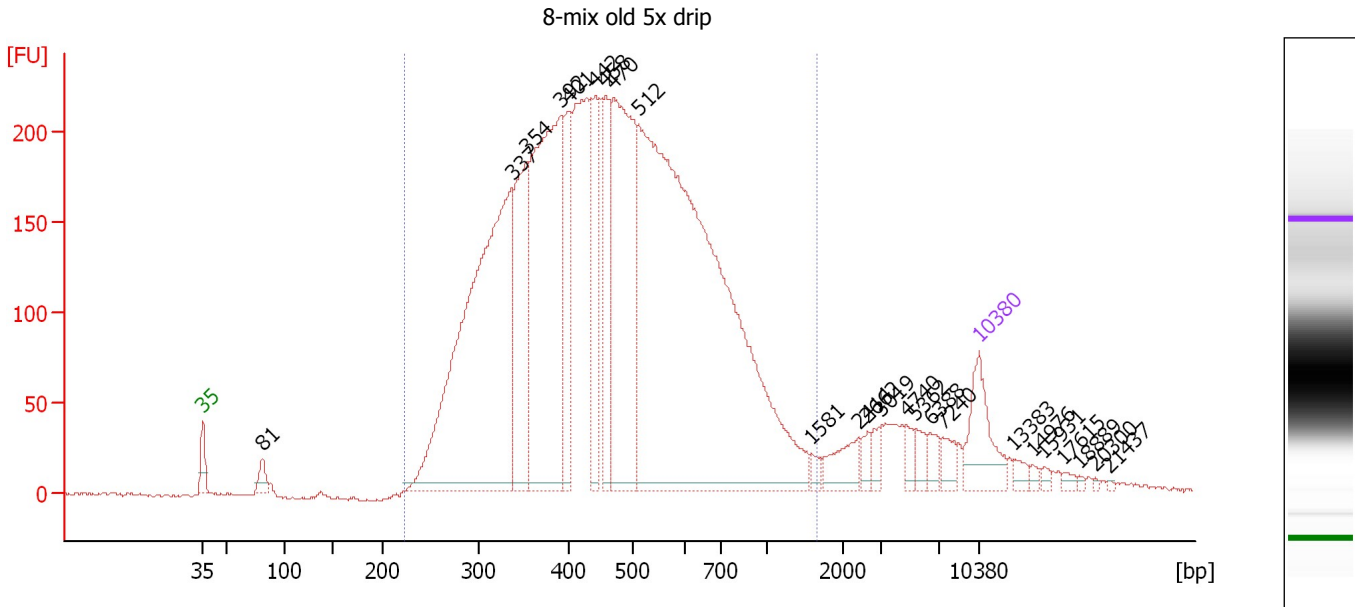
Region table for sample 6 : 6-mix new 5x drip

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
226	22,529.3	434	5,790.49	1,033	4,723.3	90	30.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-01\2012-05-01_001.xad

Created: 5/1/2012 9:38:55 AM
 Modified: 5/1/2012 10:20:18 AM

Electropherogram Summary Continued ...



Overall Results for sample 7 : 8-mix old 5x drip

Number of peaks found: 24 Corr. Area 1: 6,158.4
 Noise: 0.8

Peak table for sample 7 : 8-mix old 5x drip

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	81	28.26	525.6	
3	337	919.63	4,133.6	
4	354	264.91	1,133.0	
5	392	620.57	2,400.9	
6	401	147.43	557.4	
7	442	158.29	542.4	
8	458	146.31	484.1	
9	470	458.69	1,477.5	
10	512	1,559.80	4,619.2	
11	1,581	10.38	9.9	
12	2,414	42.51	26.7	
13	2,662	15.91	9.1	
14	3,019	17.44	8.8	
15	4,740	14.90	4.8	
16	5,362	18.92	5.3	
17	6,388	18.50	4.4	
18	7,240	20.81	4.4	
19	10,380	75.00	10.9	Upper Marker
20	13,383	0.00	0.0	
21	14,976	0.00	0.0	
22	15,931	0.00	0.0	
23	17,615	0.00	0.0	
24	18,889	0.00	0.0	
25	20,300	0.00	0.0	
26	21,437	0.00	0.0	


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-01\2012-05-01_001.xad

Created: 5/1/2012 9:38:55 AM
Modified: 5/1/2012 10:20:18 AM

Electropherogram Summary Continued ...

... Region table for sample 7 :

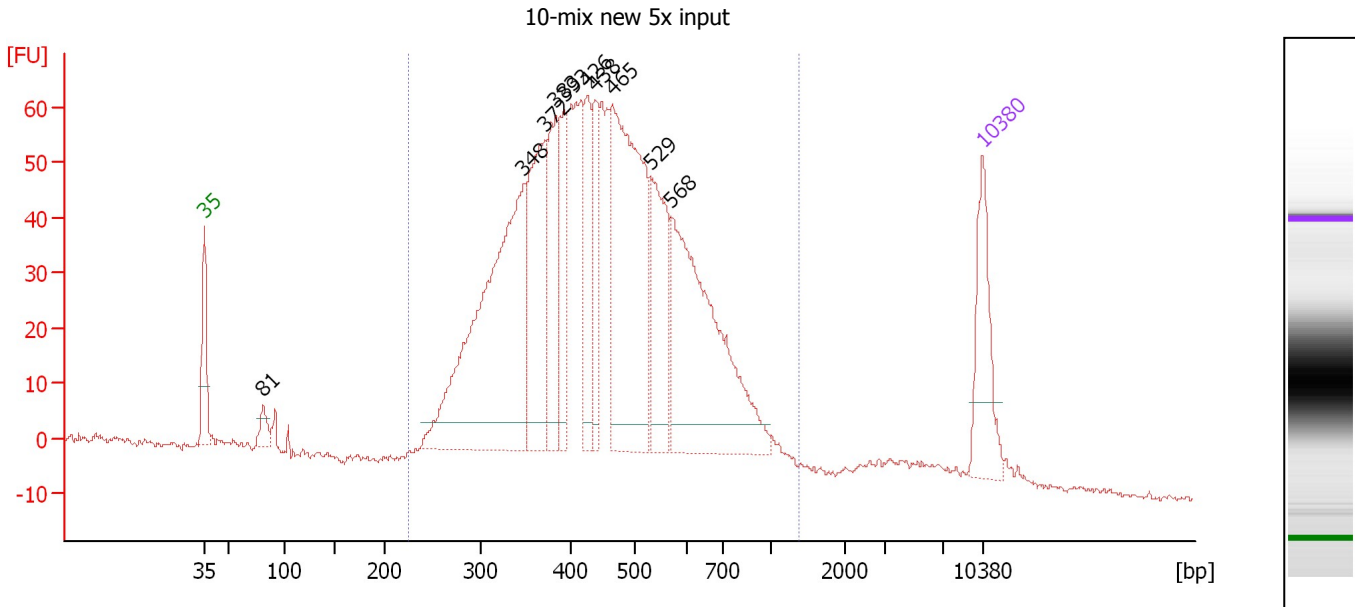
8-mix old 5x drip

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Co lor
222	16,548.5	498	4,633.04	1,658	6,158.4	93	40.2	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-01\2012-05-01_001.xad

Created: 5/1/2012 9:38:55 AM
 Modified: 5/1/2012 10:20:18 AM

Electropherogram Summary Continued ...



Overall Results for sample 8 : 10-mix new 5x input

Number of peaks found: 10 Corr. Area 1: 1,627.7
 Noise: 0.6

Peak table for sample 8 : 10-mix new 5x input

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	81	23.39	438.5	
3	348	485.71	2,116.4	
4	372	194.59	792.7	
5	383	113.44	448.6	
6	393	86.30	333.0	
7	426	92.45	328.8	
8	438	73.90	255.4	
9	465	369.22	1,203.3	
10	529	141.79	405.9	
11	568	326.80	871.2	
12	10,380	75.00	10.9	Upper Marker

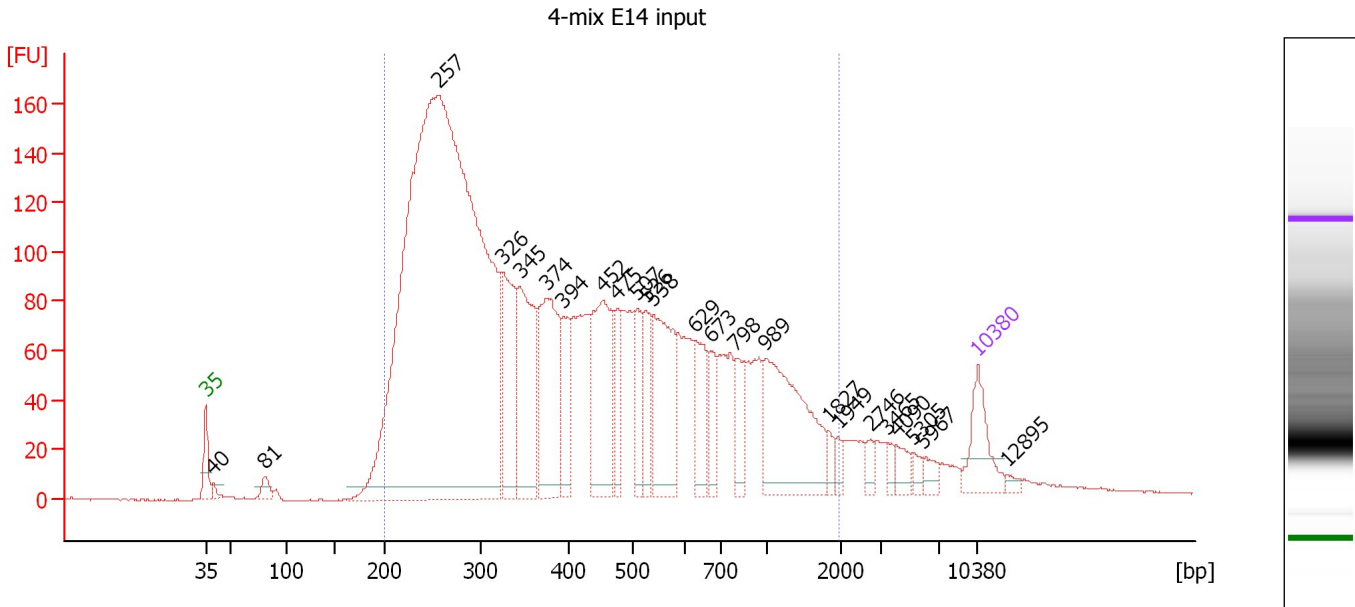
Region table for sample 8 : 10-mix new 5x input

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
226	8,812.4	468	2,428.38	1,388	1,627.7	94	31.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-01\2012-05-01_001.xad

Created: 5/1/2012 9:38:55 AM
 Modified: 5/1/2012 10:20:18 AM

Electropherogram Summary Continued ...



Overall Results for sample 9 : 4-mix E14 input

Number of peaks found: 24 Corr. Area 1: 4,271.5
 Noise: 0.2

Peak table for sample 9 : 4-mix E14 input

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	40	13.79	527.1	
3	81	31.50	587.3	
4	257	3,133.97	18,459.0	
5	326	235.29	1,092.8	
6	345	291.83	1,282.8	
7	374	296.28	1,198.7	
8	394	105.27	405.3	
9	452	265.60	890.7	
10	475	77.89	248.4	
11	507	86.65	258.7	
12	526	88.83	255.8	
13	538	230.32	648.0	
14	629	98.86	238.0	
15	673	58.57	131.9	
16	798	76.91	146.1	
17	989	290.24	444.6	
18	1,827	16.55	13.7	
19	1,949	14.05	10.9	
20	2,746	16.96	9.4	
21	3,465	14.75	6.4	
22	4,090	24.68	9.1	
23	5,305	13.31	3.8	
24	5,967	19.63	5.0	
25	10,380	75.00	10.9	Upper Marker
26	12,895	0.00	0.0	


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-01\2012-05-01_001.xad

Created: 5/1/2012 9:38:55 AM
Modified: 5/1/2012 10:20:18 AM

Electropherogram Summary Continued ...

... Region table for sample 9 :

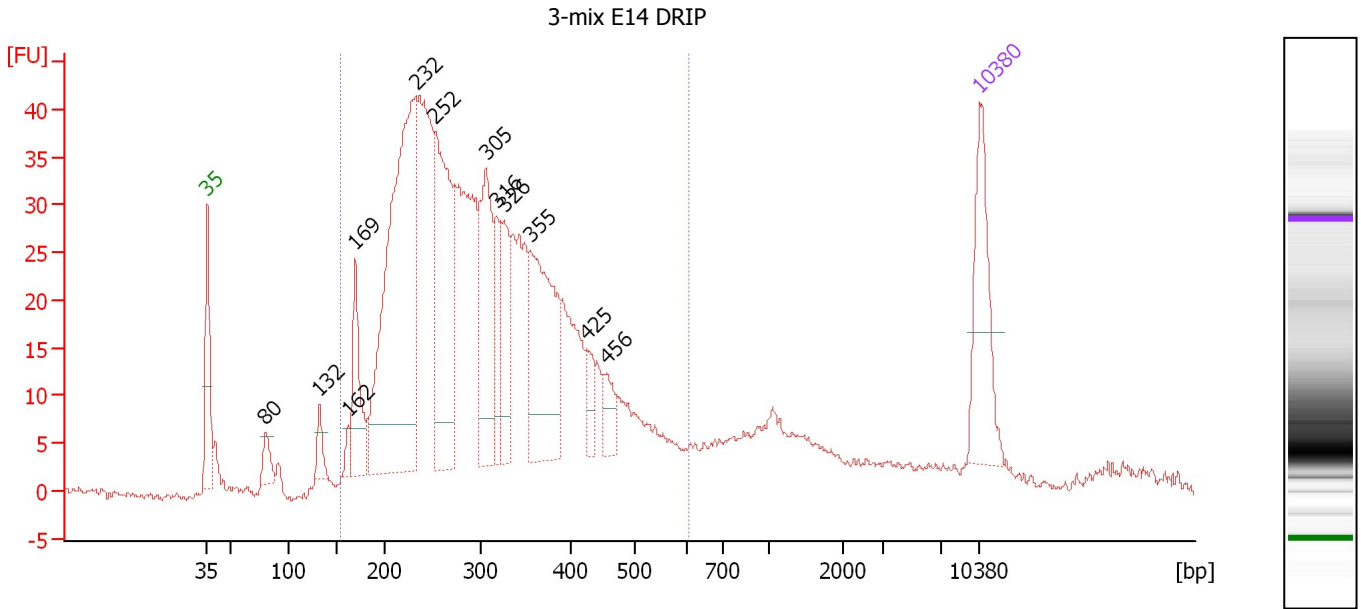
4-mix E14 input

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Co lor
200	26,636.7	489	6,003.79	1,968	4,271.5	94	66.9	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-01\2012-05-01_001.xad

Created: 5/1/2012 9:38:55 AM
 Modified: 5/1/2012 10:20:18 AM

Electropherogram Summary Continued ...



Overall Results for sample 10 : 3-mix E14 DRIP

Number of peaks found: 12 Corr. Area 1: 943.3
 Noise: 0.5

Peak table for sample 10 : 3-mix E14 DRIP

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	80	25.00	471.9	
3	132	23.74	272.1	
4	162	10.93	102.1	
5	169	84.47	756.2	
6	232	472.16	3,082.3	
7	252	226.89	1,366.7	
8	305	133.24	661.6	
9	316	54.70	261.9	
10	326	63.74	296.3	
11	355	174.80	745.7	
12	425	24.07	85.9	
13	456	23.93	79.6	
14	10,380	75.00	10.9	Upper Marker

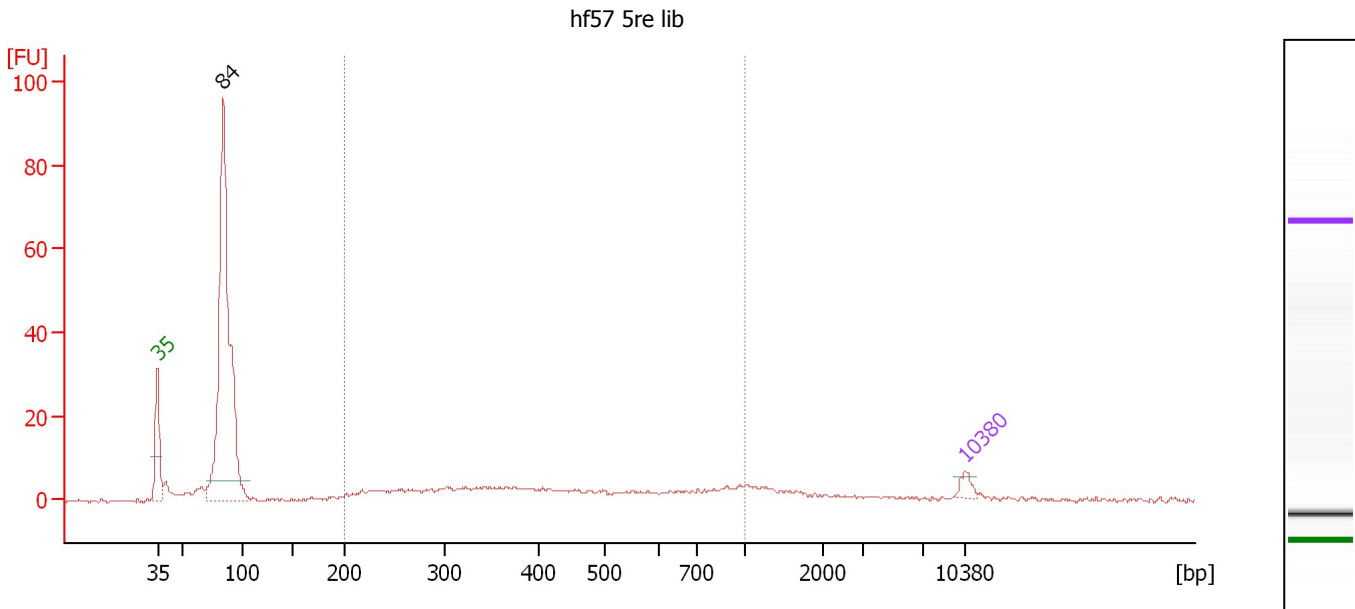
Region table for sample 10 : 3-mix E14 DRIP

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
154	12,699.2	308	2,301.47	607	943.3	87	29.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-01\2012-05-01_001.xad

Created: 5/1/2012 9:38:55 AM
 Modified: 5/1/2012 10:20:18 AM

Electropherogram Summary Continued ...



Overall Results for sample 11 : hf57 5re lib

Number of peaks found: 1 Corr. Area 1: 115.2
 Noise: 0.4

Peak table for sample 11 : hf57 5re lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	84	4,888.49	87,715.7	
3	10,380	75.00	10.9	Upper Marker

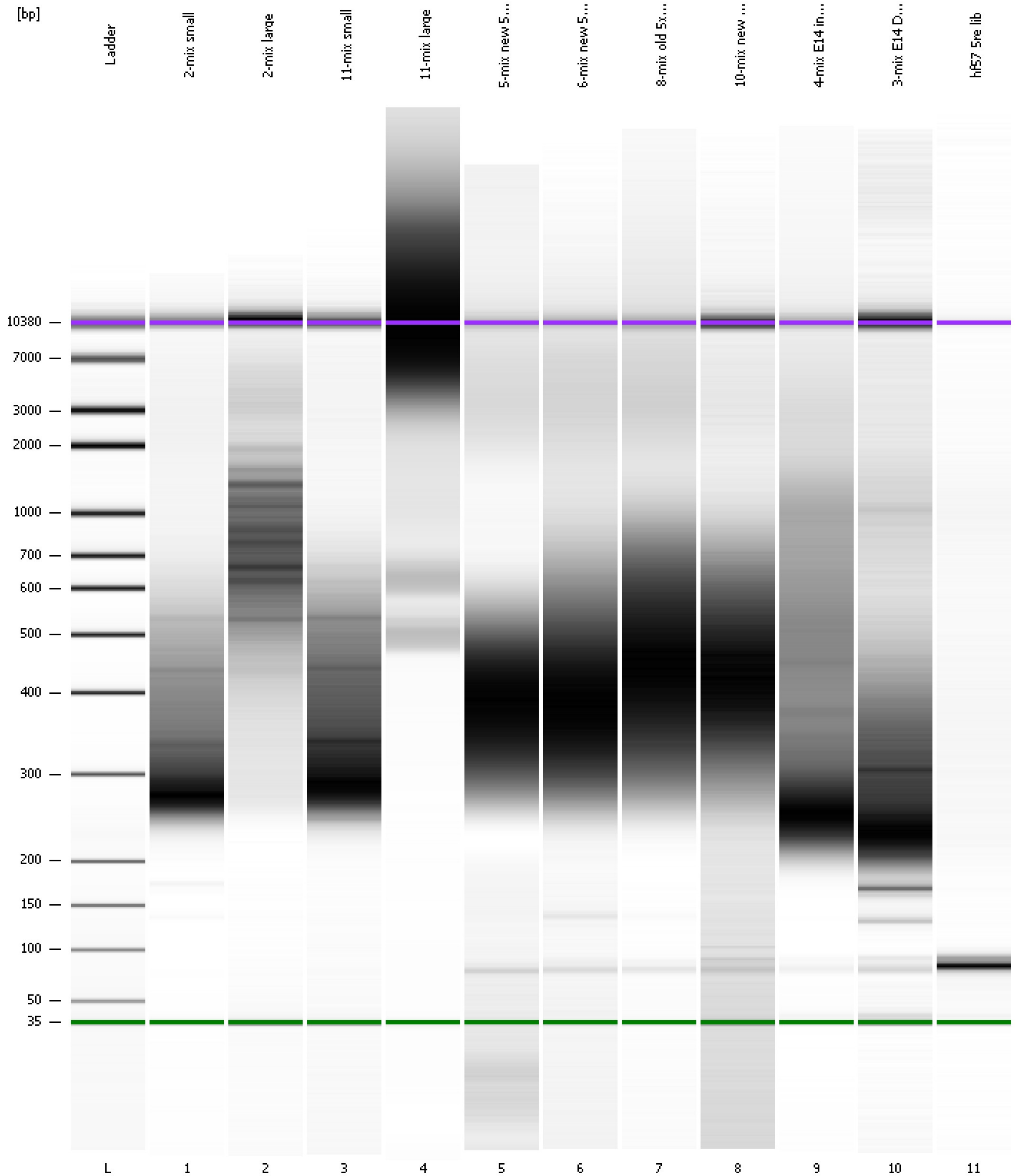
Region table for sample 11 : hf57 5re lib

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	8,498.5	464	2,044.31	1,000	115.2	31	43.9	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-01\2012-05-01_001.xad

Created: 5/1/2012 9:38:55 AM
Modified: 5/1/2012 10:20:18 AM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-01\2012-05-01_001.xad

Created: 5/1/2012 9:38:55 AM
 Modified: 5/1/2012 10:20:18 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		5/1/2012 10:20:14 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2012-05-01\2012-05-01_001.xad)		Instrument	Run		5/1/2012 9:39:00 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		5/1/2012 9:39:00 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		5/1/2012 9:39:00 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		5/1/2012 9:39:00 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		5/1/2012 9:39:00 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		5/1/2012 9:39:00 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		5/1/2012 9:39:00 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1