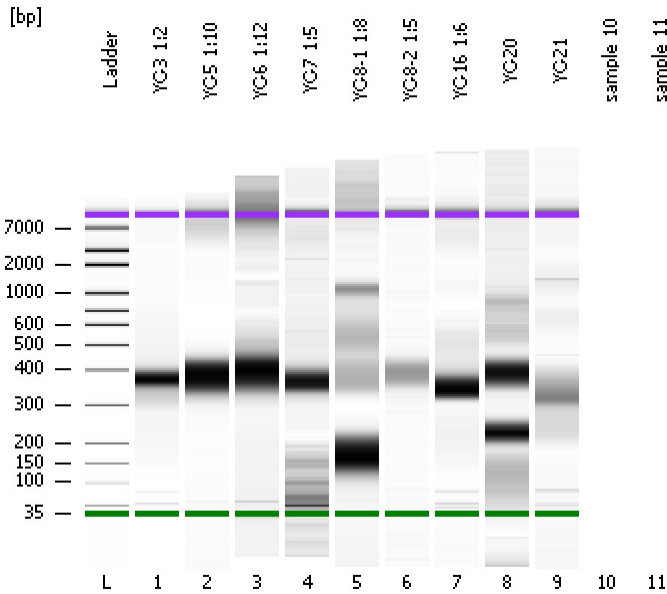


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-27\2012-04-27_001.xad

Created: 4/27/2012 11:19:42 AM
Modified: 4/27/2012 12:19:29 PM

Electrophoresis File Run Summary



Instrument Information:

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

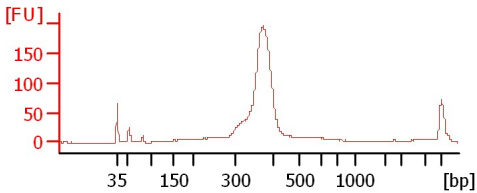
Assay Information:

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

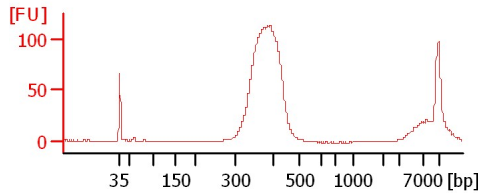
Chip Information:

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

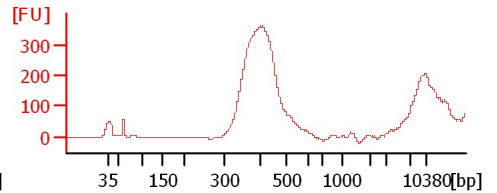
YC-3 1:2



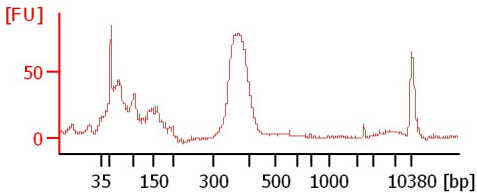
YC-5 1:10



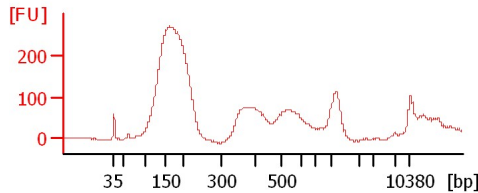
YC-6 1:12



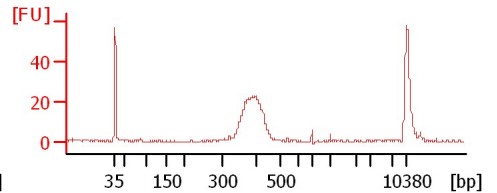
YC-7 1:5



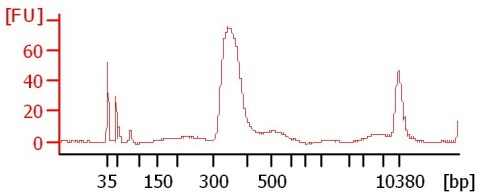
YC-8-1 1:8



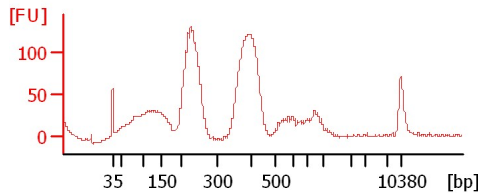
YC-8-2 1:5



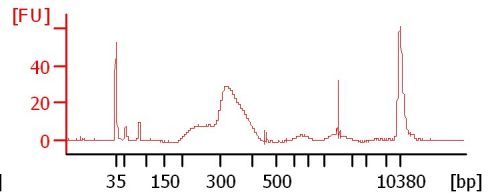
YC-16 1:6



YC-20



YC-21



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-27\2012-04-27_001.xad

Created: 4/27/2012 11:19:42 AM
 Modified: 4/27/2012 12:19:29 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
YC-3 1:2		<input type="checkbox"/>	✓			
YC-5 1:10		<input type="checkbox"/>	✓			
YC-6 1:12		<input type="checkbox"/>	✓			
YC-7 1:5		<input type="checkbox"/>	✓			
YC-8-1 1:8		<input type="checkbox"/>	✓			
YC-8-2 1:5		<input type="checkbox"/>	✓			
YC-16 1:6		<input type="checkbox"/>	✓			
YC-20		<input type="checkbox"/>	✓			
YC-21		<input type="checkbox"/>	✓			
sample 10		<input type="checkbox"/>				
sample 11		<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\2012-04-27\2012-04-27_001.xad

Created: 4/27/2012 11:19:42 AM
Modified: 4/27/2012 12:19:29 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/ μ l] : 1950
Uses Standard Area for Ladder Fragments
Lower Marker Concentration [pg/ μ l] : 125
Upper Marker Concentration [pg/ μ l] : 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

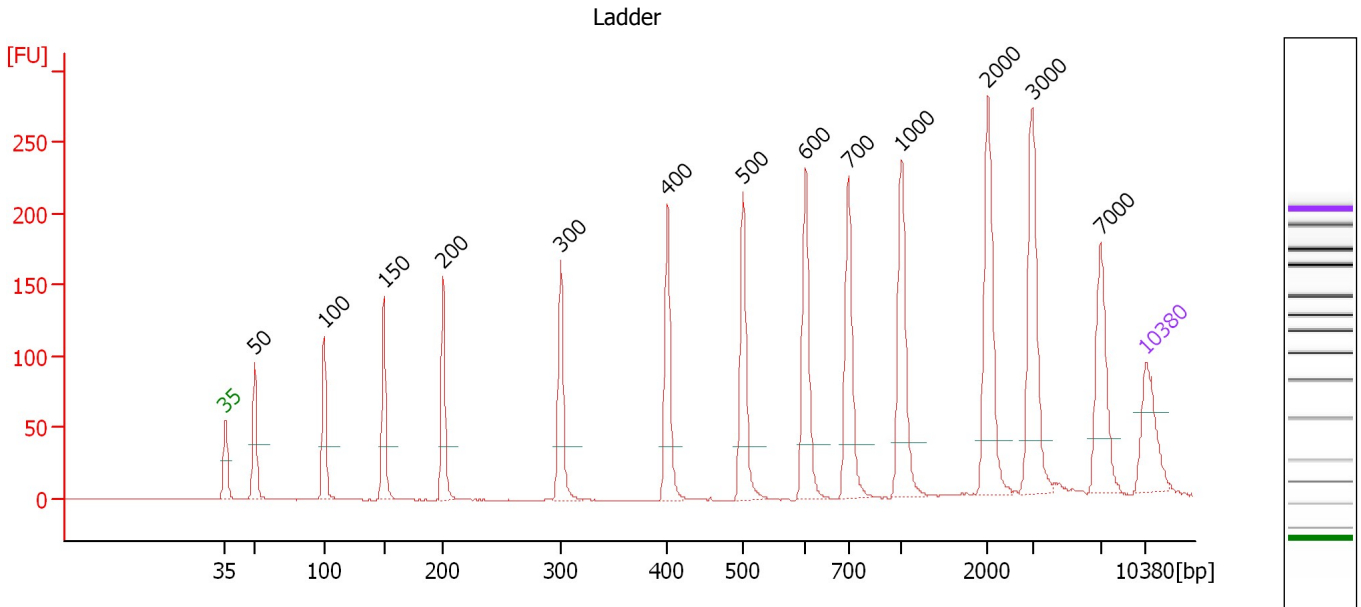
Ladder

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\2012-04-27\2012-04-27_001.xad

Created: 4/27/2012 11:19:42 AM
 Modified: 4/27/2012 12:19:29 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

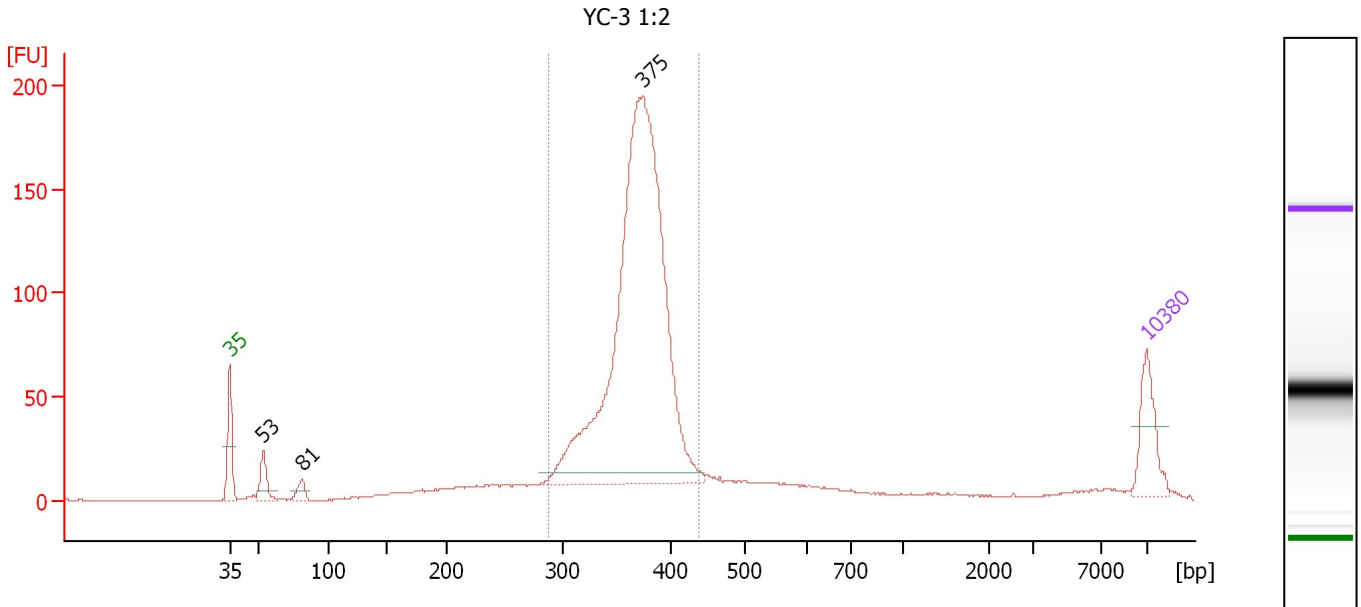
Peak table for Ladder

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\2012-04-27\2012-04-27_001.xad

Created: 4/27/2012 11:19:42 AM
 Modified: 4/27/2012 12:19:29 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : YC-3 1:2

Number of peaks found: 3 Corr. Area 1: 1,246.3
 Noise: 0.2

Peak table for sample 1 : YC-3 1:2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	53	64.57	1,839.7	
3	81	30.52	568.3	
4	375	1,457.35	5,894.9	
5	10,380	75.00	10.9	Upper Marker

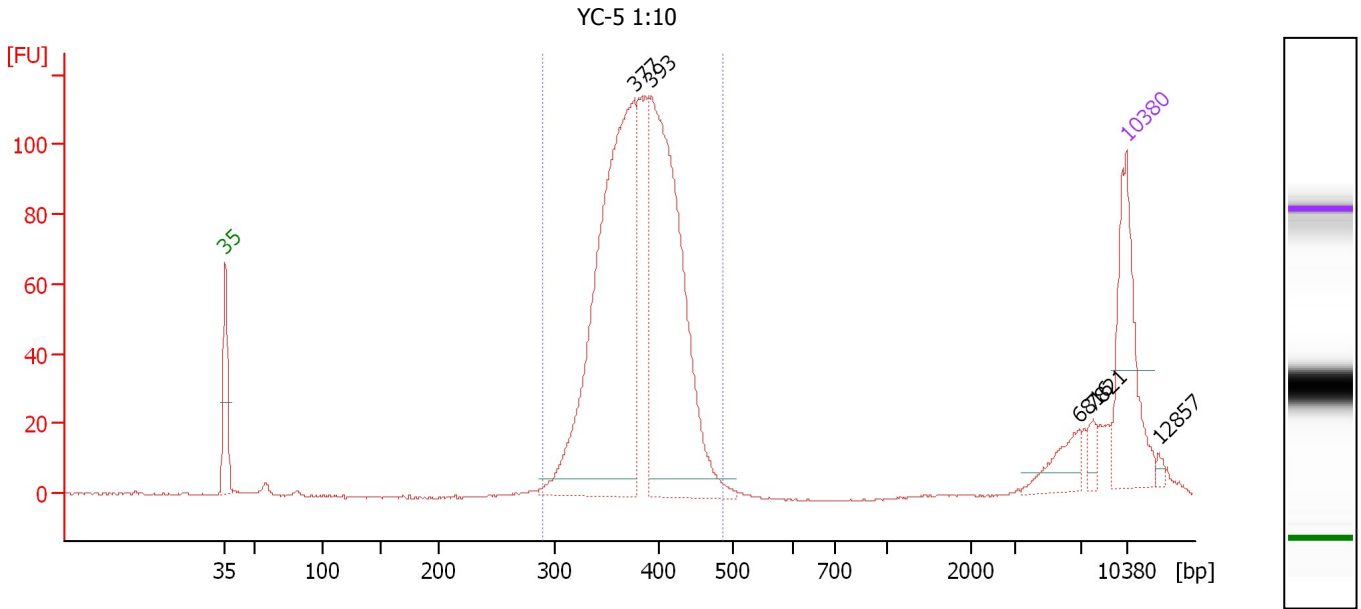
Region table for sample 1 : YC-3 1:2

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
288	6,757.1	368	1,633.72	437	1,246.3	78	7.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-27\2012-04-27_001.xad

Created: 4/27/2012 11:19:42 AM
 Modified: 4/27/2012 12:19:29 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : YC-5 1:10

Number of peaks found: 5 Corr. Area 1: 1,159.3
 Noise: 0.2

Peak table for sample 2 : YC-5 1:10

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	377	450.08	1,810.5	
3	393	376.37	1,451.0	
4	6,816	24.59	5.5	
5	7,821	8.27	1.6	
6	10,380	75.00	10.9	Upper Marker
7	12,857	0.00	0.0	

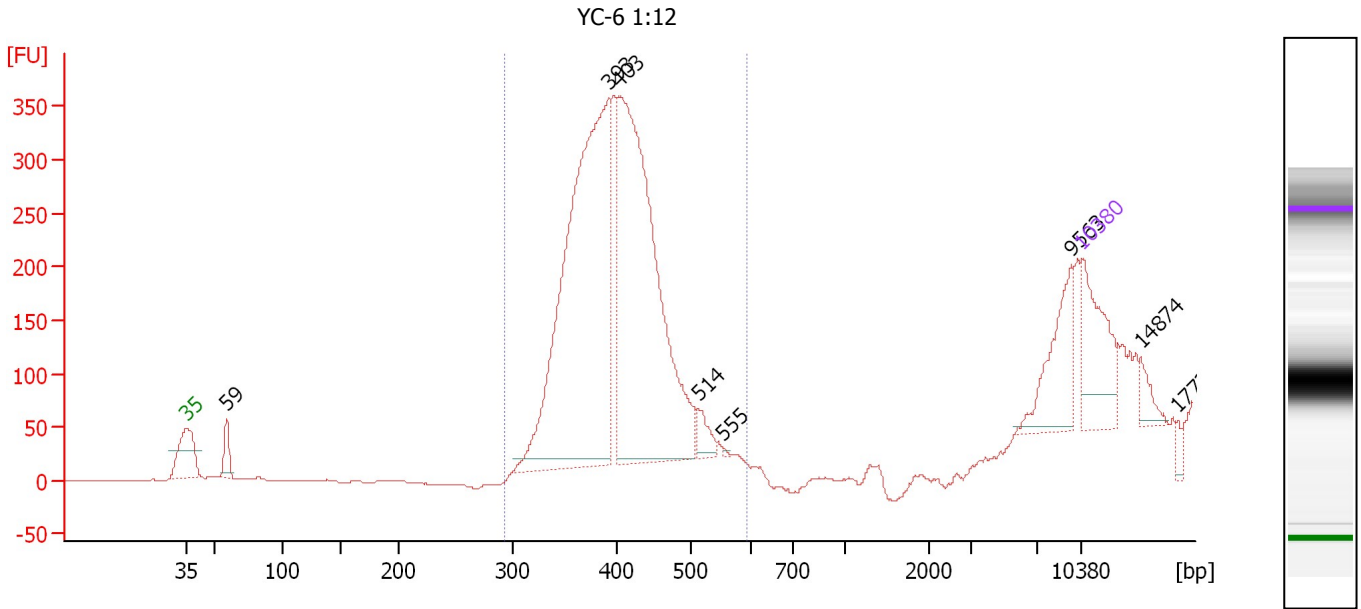
Region table for sample 2 : YC-5 1:10

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
290	3,714.2	383	931.66	488	1,159.3	92	9.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-27\2012-04-27_001.xad

Created: 4/27/2012 11:19:42 AM
 Modified: 4/27/2012 12:19:29 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : YC-6 1:12

Number of peaks found: 8 Corr. Area 1: 3,616.4
 Noise: 0.2

Peak table for sample 3 : YC-6 1:12

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	59	29.60	761.6	
3	393	667.05	2,572.6	
4	403	574.39	2,159.7	
5	514	21.73	64.1	
6	555	1.17	3.2	
7	9,563	72.49	11.5	
8	10,380	75.00	10.9	Upper Marker
9	14,874	0.00	0.0	
10	17,734	0.00	0.0	

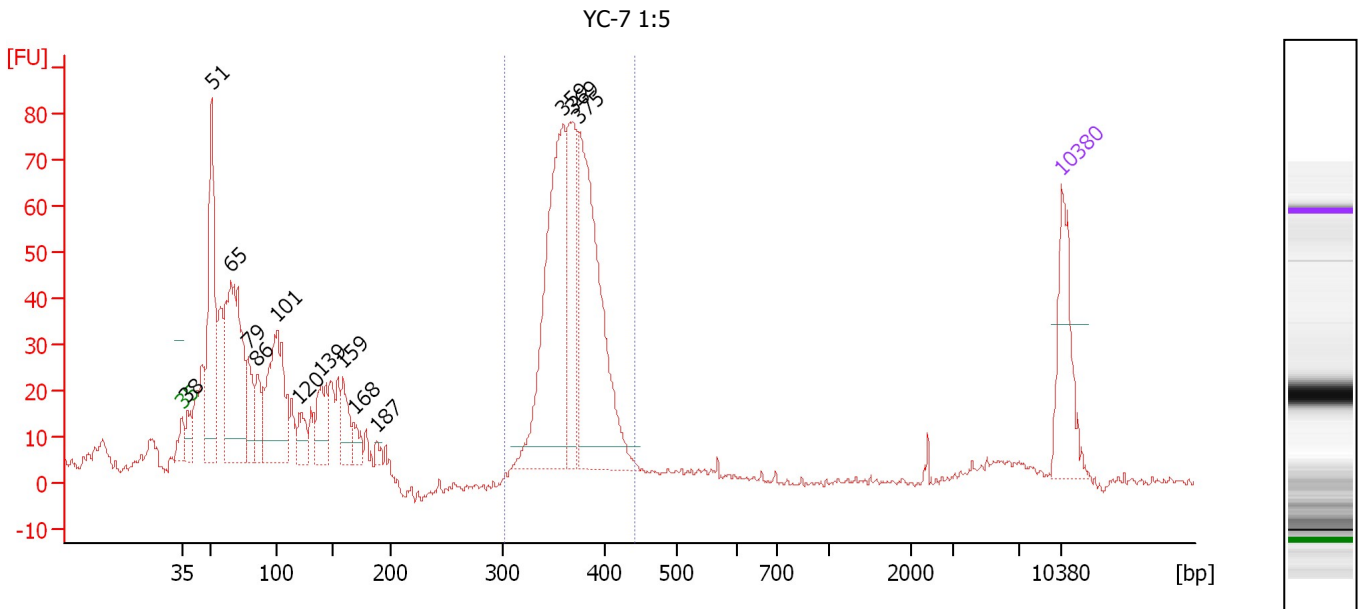
Region table for sample 3 : YC-6 1:12

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
293	4,768.9	402	1,250.17	593	3,616.4	88	10.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-27\2012-04-27_001.xad

Created: 4/27/2012 11:19:42 AM
 Modified: 4/27/2012 12:19:29 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : YC-7 1:5

Number of peaks found: 14 Corr. Area 1: 544.7
 Noise: 0.7

Peak table for sample 4 : YC-7 1:5

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	38	33.70	1,359.3	
3	51	247.28	7,348.3	
4	65	307.01	7,147.8	
5	79	68.19	1,311.6	
6	86	48.03	850.1	
7	101	208.02	3,133.5	
8	120	38.63	488.8	
9	139	70.35	764.8	
10	159	48.35	461.9	
11	168	23.98	216.2	
12	187	9.44	76.4	
13	359	326.63	1,377.9	
14	369	140.45	577.4	
15	375	313.70	1,266.1	
16	10,380	75.00	10.9	Upper Marker

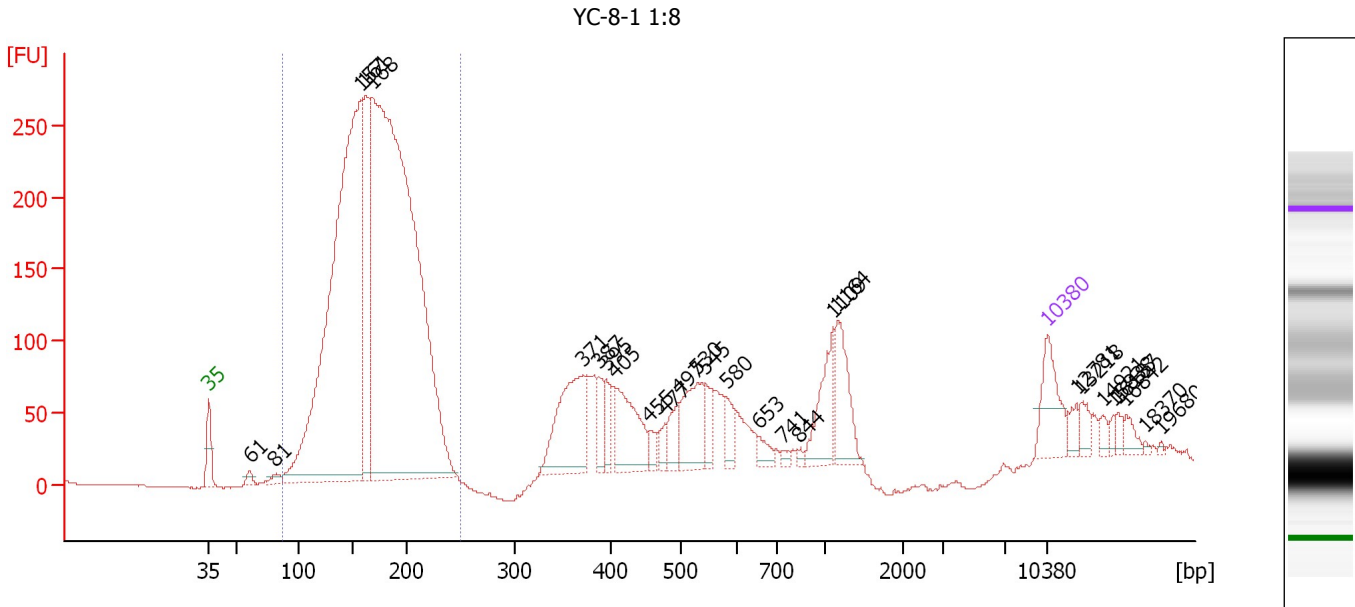
Region table for sample 4 : YC-7 1:5

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
303	3,357.0	370	817.46	442	544.7	40	6.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-27\2012-04-27_001.xad

Created: 4/27/2012 11:19:42 AM
 Modified: 4/27/2012 12:19:29 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : YC-8-1 1:8

Number of peaks found: 28 Corr. Area 1: 3,723.9
 Noise: 0.6

Peak table for sample 5 : YC-8-1 1:8

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	61	14.86	366.9	
3	81	17.89	335.5	
4	157	1,686.55	16,258.6	
5	161	385.83	3,628.1	
6	168	2,409.07	21,720.1	
7	371	225.87	921.4	
8	387	45.60	178.3	
9	395	45.92	176.1	
10	405	149.50	559.8	
11	455	21.82	72.7	
12	477	21.97	69.7	
13	497	43.53	132.8	
14	530	117.32	335.6	
15	545	43.26	120.3	
16	580	39.21	102.4	
17	653	21.53	50.0	
18	741	7.81	16.0	
19	844	5.42	9.7	
20	1,109	91.79	125.4	
21	1,164	96.53	125.7	
22	10,380	75.00	10.9	Upper Marker
23	12,781	0.00	0.0	
24	13,218	0.00	0.0	
25	14,921	0.00	0.0	
26	15,838	0.00	0.0	


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-27\2012-04-27_001.xad

Created: 4/27/2012 11:19:42 AM
Modified: 4/27/2012 12:19:29 PM

Electropherogram Summary Continued ...**... Peak table for sample 5 : YC-8-1 1:8**

Peak	Size [bp]	Conc. [pg/ μ l]	Molarity [pmol/l]	Observations
27	16,187	0.00	0.0	
28	16,842	0.00	0.0	
29	18,370	0.00	0.0	
30	19,680	0.00	0.0	

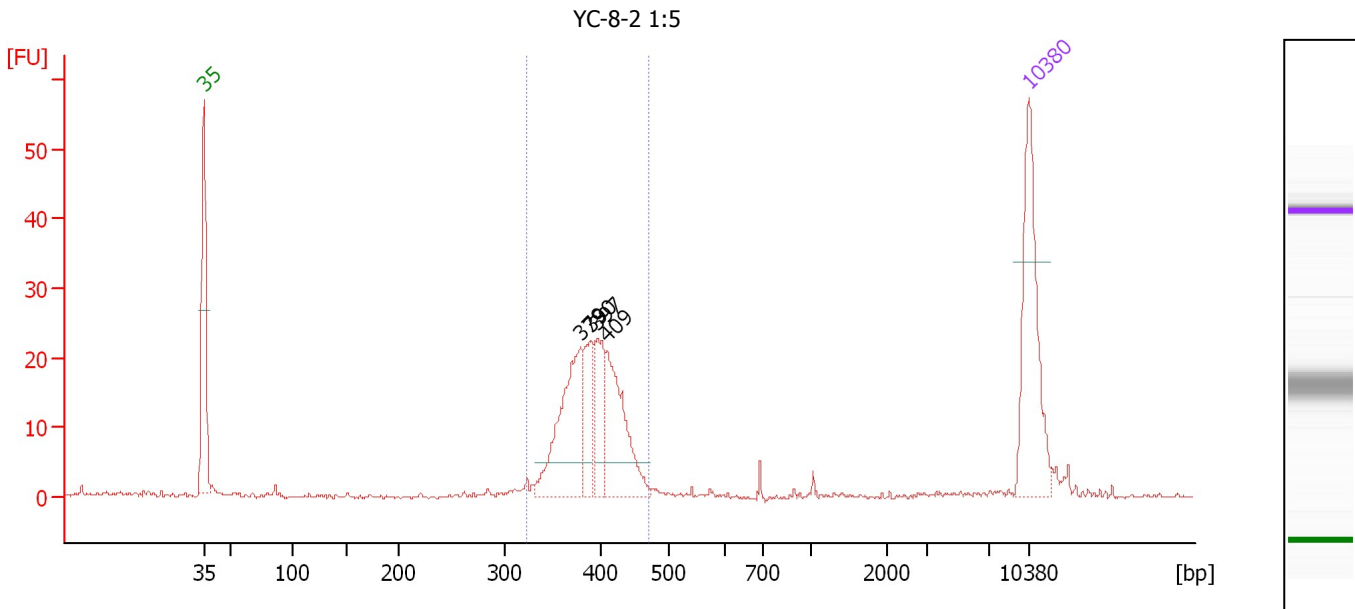
Region table for sample 5 : YC-8-1 1:8

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/ μ l]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
88	39,611.9	170	4,269.14	250	3,723.9	72	17.5	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-27\2012-04-27_001.xad

Created: 4/27/2012 11:19:42 AM
 Modified: 4/27/2012 12:19:29 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : YC-8-2 1:5

Number of peaks found: 4 Corr. Area 1: 173.7
 Noise: 0.3

Peak table for sample 6 : YC-8-2 1:5

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	379	103.27	412.8	
3	390	37.31	144.9	
4	397	41.17	157.1	
5	409	80.14	296.9	
6	10,380	75.00	10.9	Upper Marker

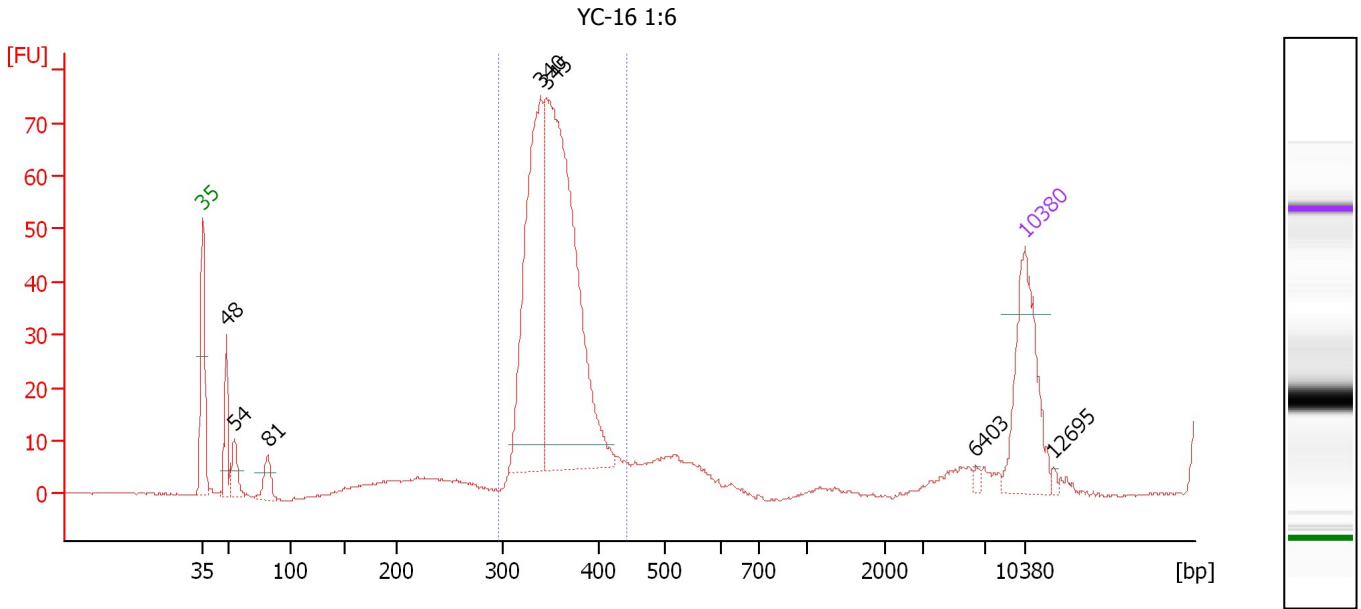
Region table for sample 6 : YC-8-2 1:5

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
323	1,037.3	393	267.50	470	173.7	87	7.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-27\2012-04-27_001.xad

Created: 4/27/2012 11:19:42 AM
 Modified: 4/27/2012 12:19:29 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : YC-16 1:6

Number of peaks found: 7 Corr. Area 1: 542.4
 Noise: 0.2

Peak table for sample 7 : YC-16 1:6

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	48	36.30	1,135.7	
3	54	26.32	735.1	
4	81	22.87	428.2	
5	340	236.59	1,055.1	
6	345	404.72	1,775.5	
7	6,403	2.50	0.6	
8	10,380	75.00	10.9	Upper Marker
9	12,695	0.00	0.0	

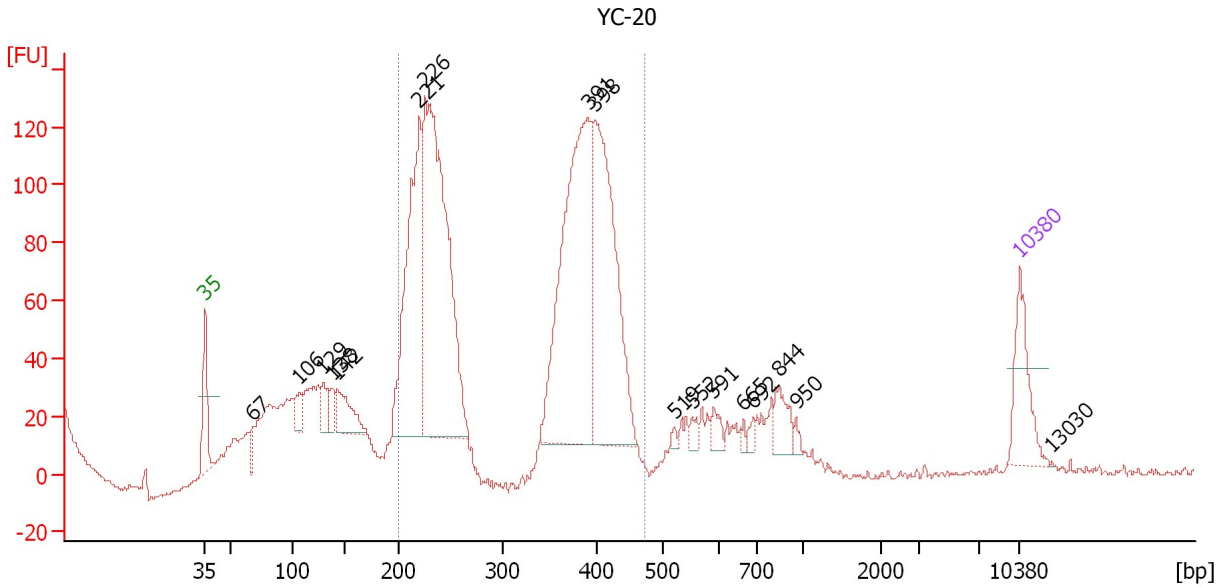
Region table for sample 7 : YC-16 1:6

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
297	2,993.1	355	699.74	441	542.4	79	7.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-27\2012-04-27_001.xad

Created: 4/27/2012 11:19:42 AM
 Modified: 4/27/2012 12:19:29 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 8 : YC-20

Height Threshold [FU] : 0.1

Overall Results for sample 8 : YC-20

Number of peaks found: 17 Corr. Area 1: 1,589.0
 Noise: 0.6

Peak table for sample 8 : YC-20

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	67	8.66	195.6	
3	106	35.20	502.4	
4	129	36.37	425.9	
5	138	33.24	365.2	
6	142	76.86	817.4	
7	221	423.54	2,905.6	
8	226	737.32	4,932.7	
9	391	566.68	2,195.8	
10	398	442.86	1,684.4	
11	519	6.04	17.6	
12	552	12.48	34.3	
13	591	18.72	48.0	
14	665	6.99	15.9	
15	692	8.61	18.9	
16	844	41.04	73.7	
17	950	7.54	12.0	
18	10,380	75.00	10.9	Upper Marker
19	13,030	0.00	0.0	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-27\2012-04-27_001.xad

Created: 4/27/2012 11:19:42 AM
Modified: 4/27/2012 12:19:29 PM

Electropherogram Summary Continued ...

... Region table for sample 8 :

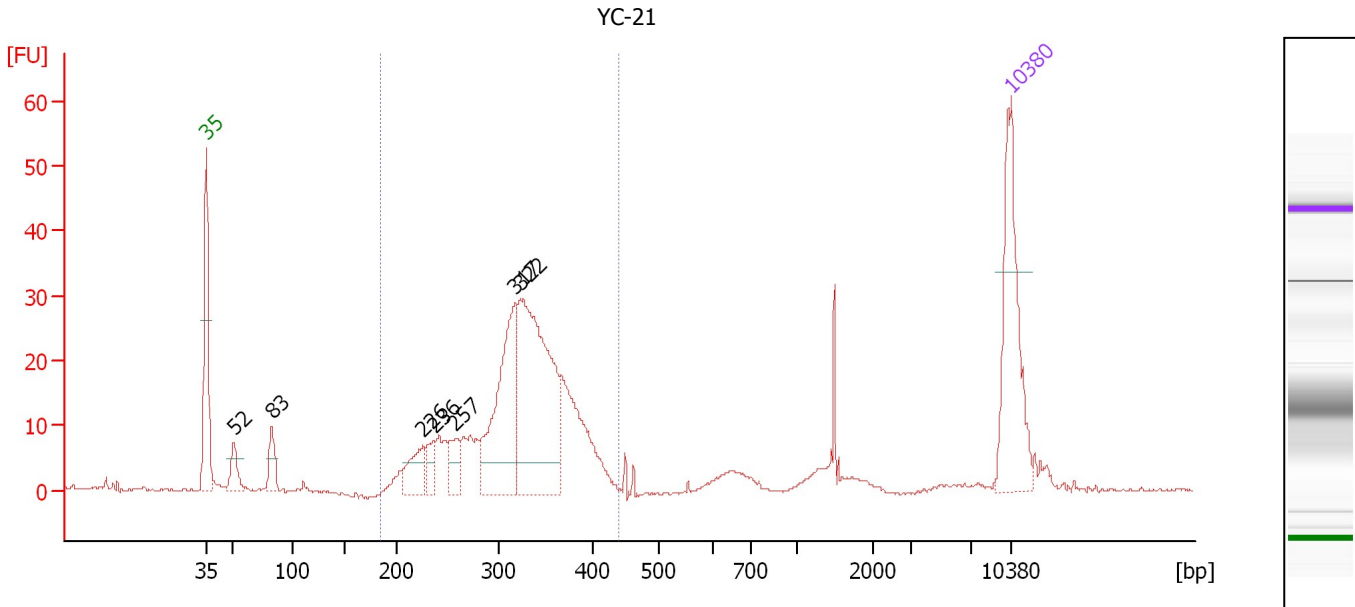
YC-20

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	12,119.2	323	2,287.90	472	1,589.0	75	25.9	■

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-27\2012-04-27_001.xad

Created: 4/27/2012 11:19:42 AM
 Modified: 4/27/2012 12:19:29 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : YC-21

Number of peaks found: 7 Corr. Area 1: 336.4
 Noise: 0.2

Peak table for sample 9 : YC-21

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	52	21.88	640.9	
3	83	24.13	440.7	
4	226	31.76	213.4	
5	236	18.05	115.7	
6	257	22.09	130.2	
7	317	124.34	593.9	
8	322	199.05	935.6	
9	10,380	75.00	10.9	Upper Marker

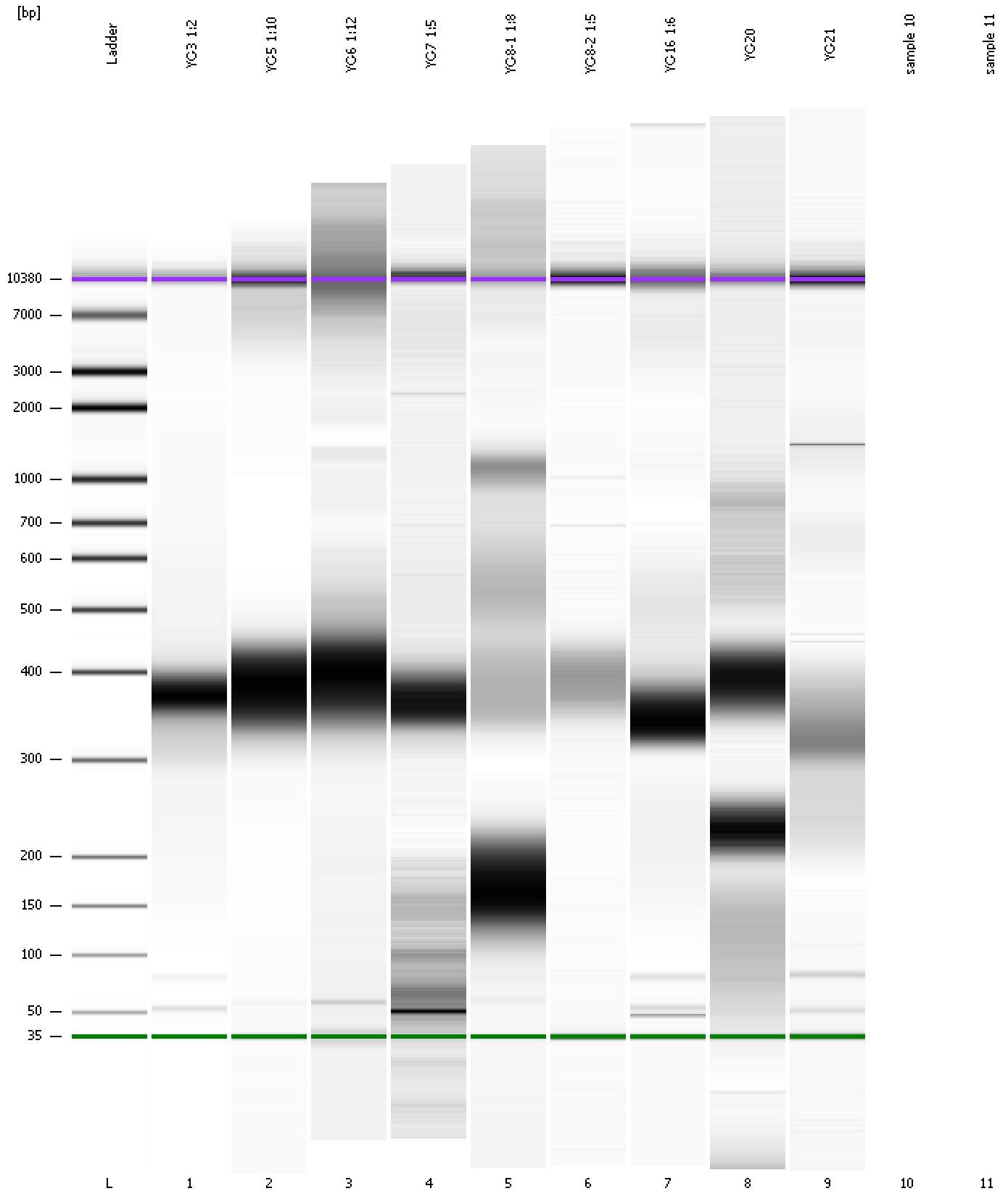
Region table for sample 9 : YC-21

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
186	2,485.1	321	509.54	439	336.4	84	15.0	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-27\2012-04-27_001.xad

Created: 4/27/2012 11:19:42 AM
Modified: 4/27/2012 12:19:29 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-27\2012-04-27_001.xad

Created: 4/27/2012 11:19:42 AM
Modified: 4/27/2012 12:19:29 PM

Invalid Samples

Sample 10 has not been run, no results available.

Sample 11 has not been run, no results available.

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-04-27\2012-04-27_001.xad

Created: 4/27/2012 11:19:42 AM
 Modified: 4/27/2012 12:19:29 PM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 10)		Instrument	Run		4/27/2012 11:55:18 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2012-04-27\2012-04-27_001.xad)		Instrument	Run		4/27/2012 11:19:48 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		4/27/2012 11:19:48 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		4/27/2012 11:19:48 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		4/27/2012 11:19:48 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		4/27/2012 11:19:48 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		4/27/2012 11:19:48 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		4/27/2012 11:19:48 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1