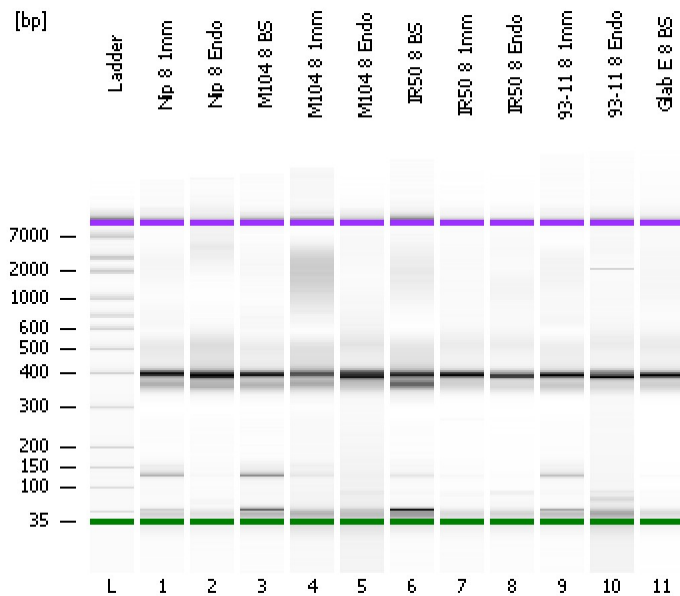


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-11\2013-07-11_003.xad

Created: 7/11/2013 1:32:58 PM
Modified: 7/11/2013 2:18:50 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

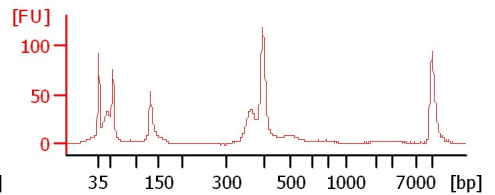
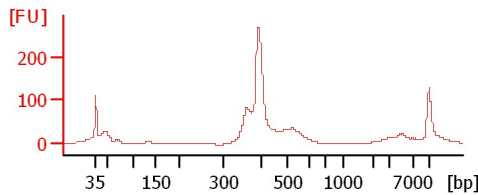
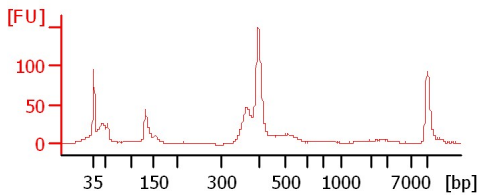
Chip Information:

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

Nip 8 1mm

Nip 8 Endo

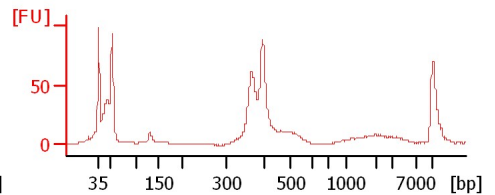
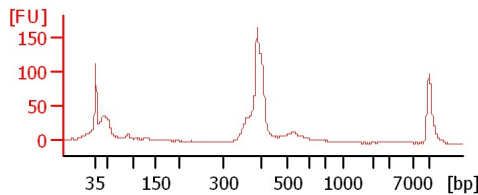
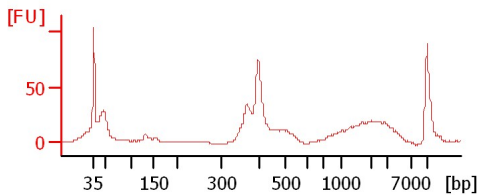
M104 8 BS



M104 8 1mm

M104 8 Endo

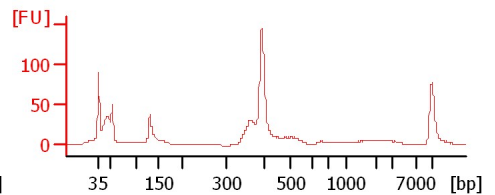
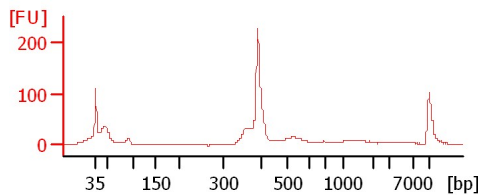
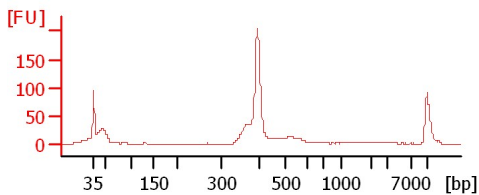
IR50 8 BS



IR50 8 1mm

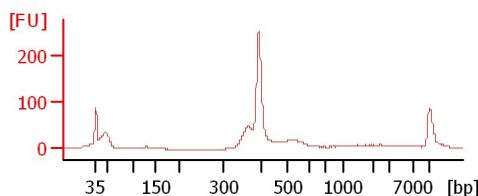
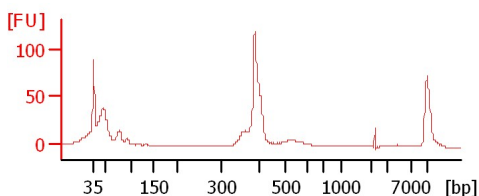
IR50 8 Endo

93-11 8 1mm



93-11 8 Endo

Glab E 8 BS



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-11\2013-07-11_003.xad

Created: 7/11/2013 1:32:58 PM
 Modified: 7/11/2013 2:18:50 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
Nip 8 1mm		<input type="checkbox"/>	✓			
Nip 8 Endo		<input type="checkbox"/>	✓			
M104 8 BS		<input type="checkbox"/>	✓			
M104 8 1mm		<input type="checkbox"/>	✓			
M104 8 Endo		<input type="checkbox"/>	✓			
IR50 8 BS		<input type="checkbox"/>	✓			
IR50 8 1mm		<input type="checkbox"/>	✓			
IR50 8 Endo		<input type="checkbox"/>	✓			
93-11 8 1mm		<input type="checkbox"/>	✓			
93-11 8 Endo		<input type="checkbox"/>	✓			
Glab E 8 BS		<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\2013-07-11\2013-07-11_003.xad

Created: 7/11/2013 1:32:58 PM
Modified: 7/11/2013 2:18:50 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

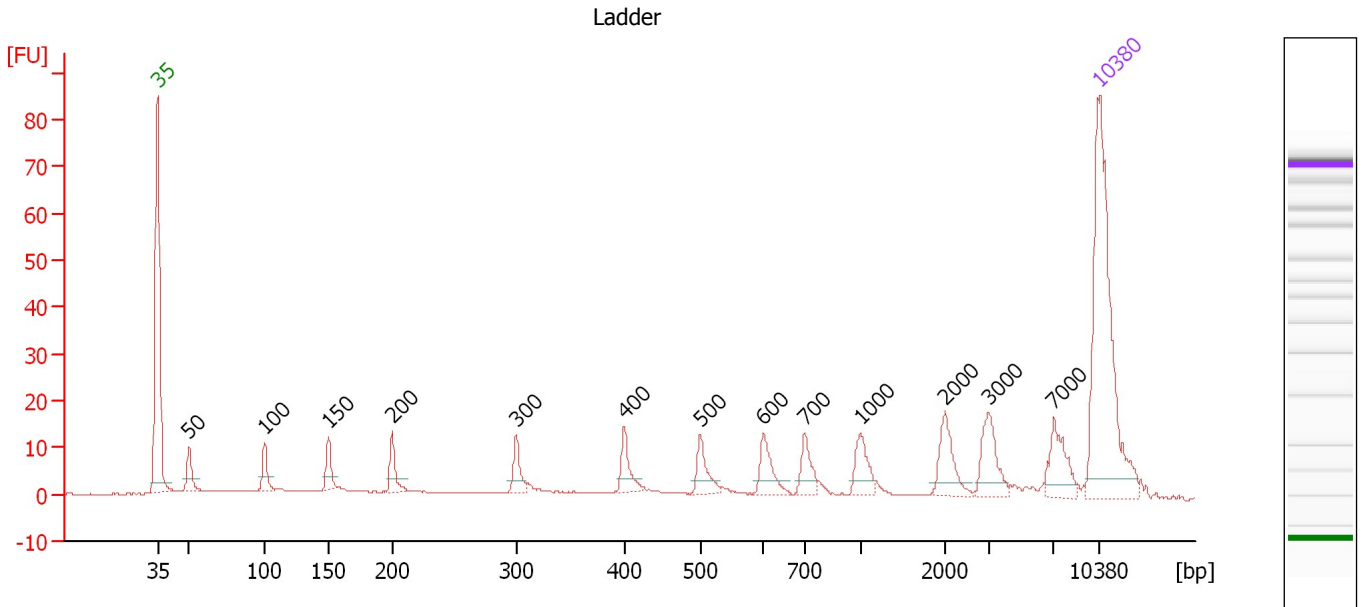
Ladder

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\2013-07-11\2013-07-11_003.xad

Created: 7/11/2013 1:32:58 PM
 Modified: 7/11/2013 2:18:50 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

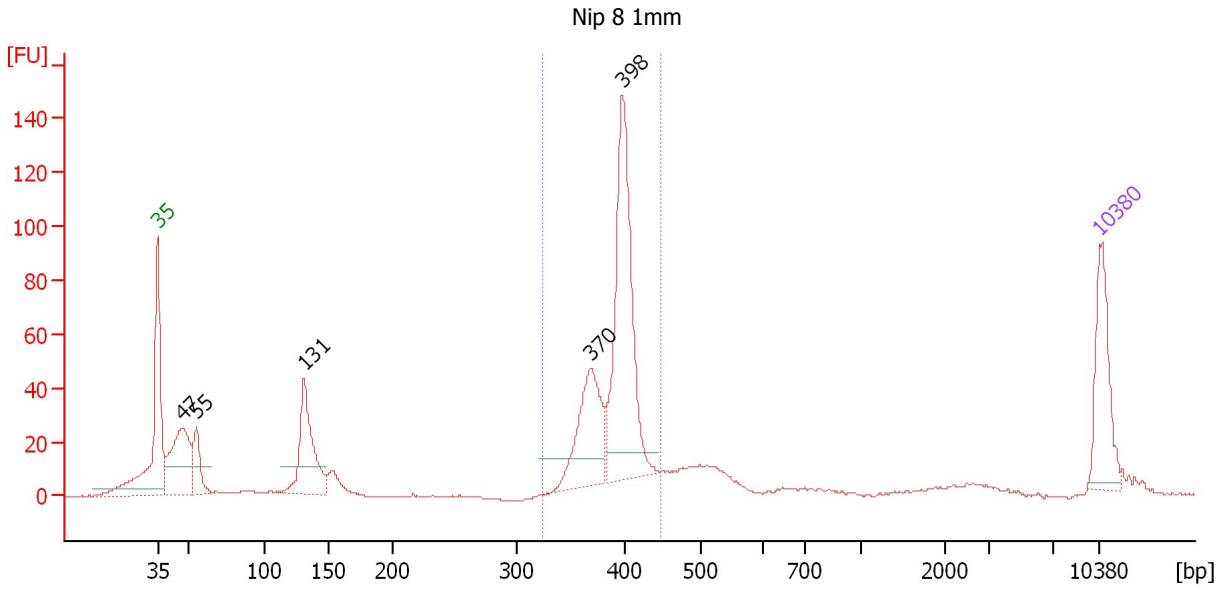
Peak table for Ladder

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\2013-07-11\2013-07-11_003.xad

Created: 7/11/2013 1:32:58 PM
 Modified: 7/11/2013 2:18:50 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 1 : Nip 8 1mm

Height Threshold [FU] : 10

Overall Results for sample 1 : Nip 8 1mm

Number of peaks found: 5 Corr. Area 1: 444.1
 Noise: 0.1

Peak table for sample 1 : Nip 8 1mm

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	47	157.39	5,070.1	
3	55	56.05	1,538.8	
4	131	142.40	1,649.0	
5	370	137.94	565.4	
6	398	296.86	1,129.2	
7	10,380	75.00	10.9	Upper Marker

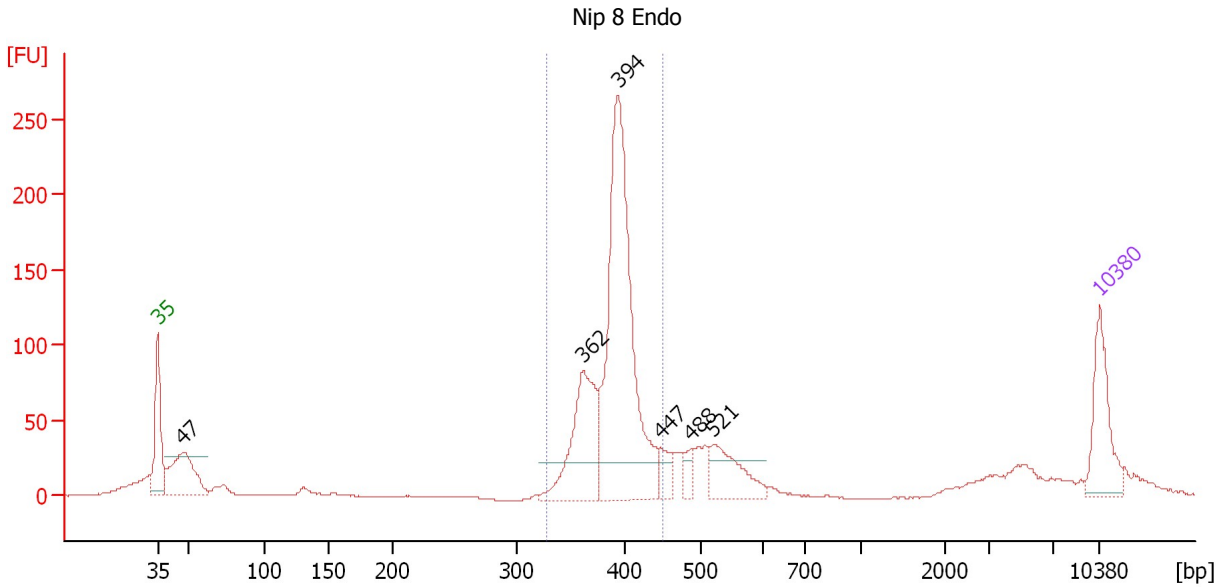
Region table for sample 1 : Nip 8 1mm

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
325	448	392	1,934.0	498.87	444.1	53	5.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-11\2013-07-11_003.xad

Created: 7/11/2013 1:32:58 PM
 Modified: 7/11/2013 2:18:50 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 2 : Nip 8 Endo

Height Threshold [FU] : 25

Overall Results for sample 2 : Nip 8 Endo

Number of peaks found: 6 Corr. Area 1: 953.3
 Noise: 0.3

Peak table for sample 2 : Nip 8 Endo

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	47	145.21	4,674.2	
3	362	188.37	788.0	
4	394	534.08	2,052.5	
5	447	29.00	98.2	
6	488	21.69	67.3	
7	521	86.20	250.6	
8	10,380	75.00	10.9	Upper Marker

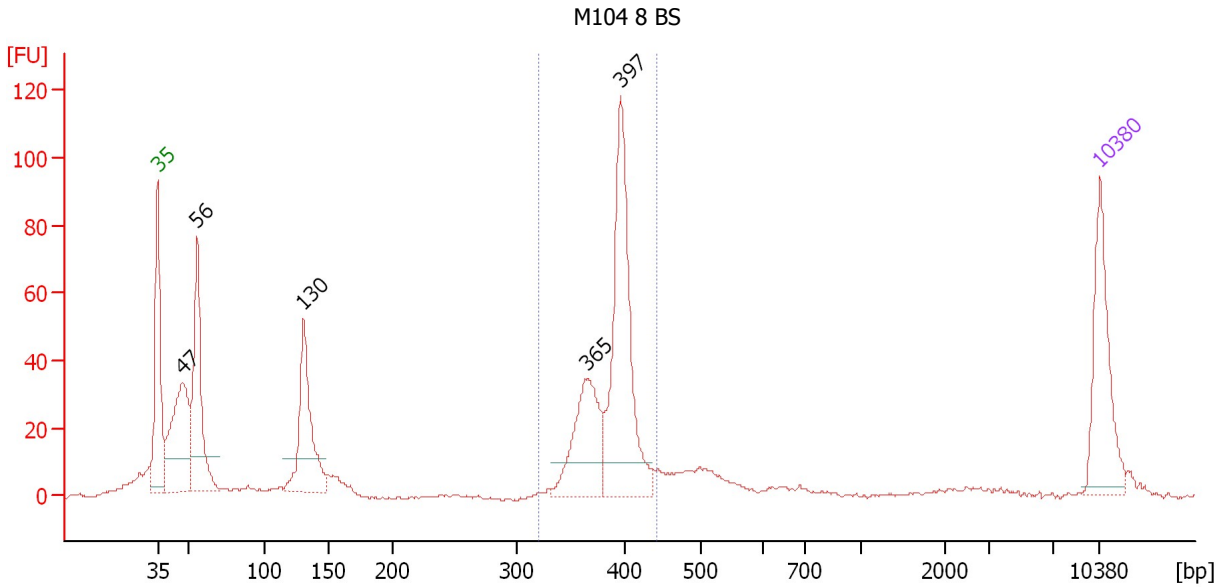
Region table for sample 2 : Nip 8 Endo

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
329	450	391	2,725.5	701.78	953.3	59	5.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-11\2013-07-11_003.xad

Created: 7/11/2013 1:32:58 PM
 Modified: 7/11/2013 2:18:50 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 3 : M104 8 BS

Height Threshold [FU] : 10

Overall Results for sample 3 : M104 8 BS

Number of peaks found: 5 Corr. Area 1: 334.1
 Noise: 0.4

Peak table for sample 3 : M104 8 BS

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	47	170.26	5,500.1	
3	56	164.28	4,483.5	
4	130	137.14	1,593.0	
5	365	110.96	460.2	
6	397	221.35	845.6	
7	10,380	75.00	10.9	Upper Marker

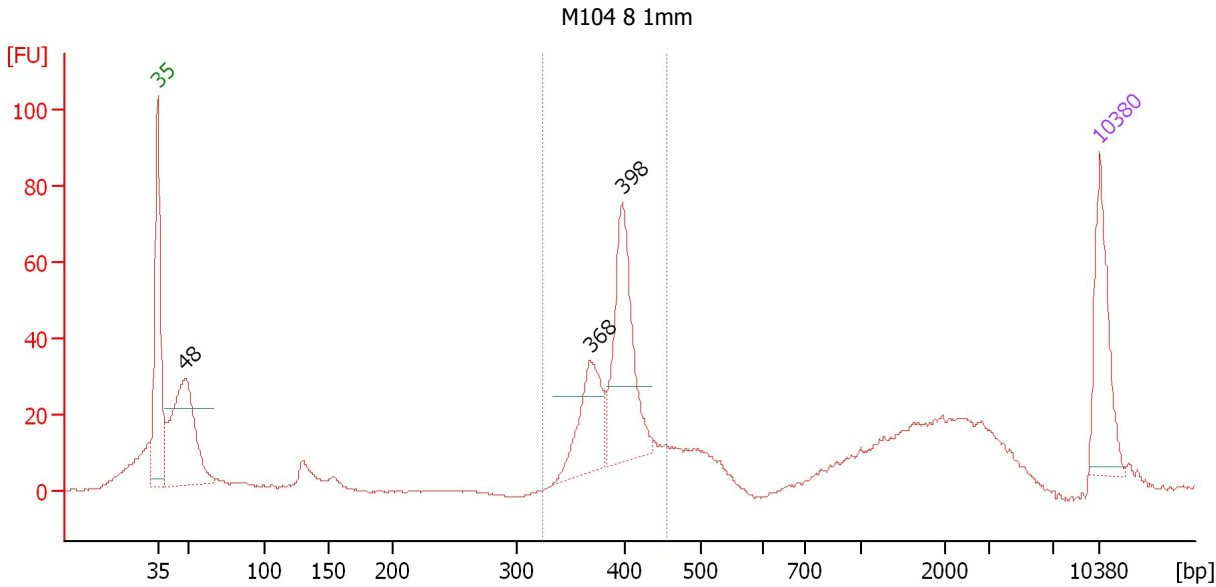
Region table for sample 3 : M104 8 BS

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
322	444	388	1,321.6	338.19	334.1	39	5.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-11\2013-07-11_003.xad

Created: 7/11/2013 1:32:58 PM
 Modified: 7/11/2013 2:18:50 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 4 : M104 8 1mm

Height Threshold [FU] : 20

Overall Results for sample 4 : M104 8 1mm

Number of peaks found: 3 Corr. Area 1: 297.5
 Noise: 0.2

Peak table for sample 4 : M104 8 1mm

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	48	238.33	7,487.7	
3	368	98.40	404.7	
4	398	175.17	666.1	
5	10,380	75.00	10.9	Upper Marker

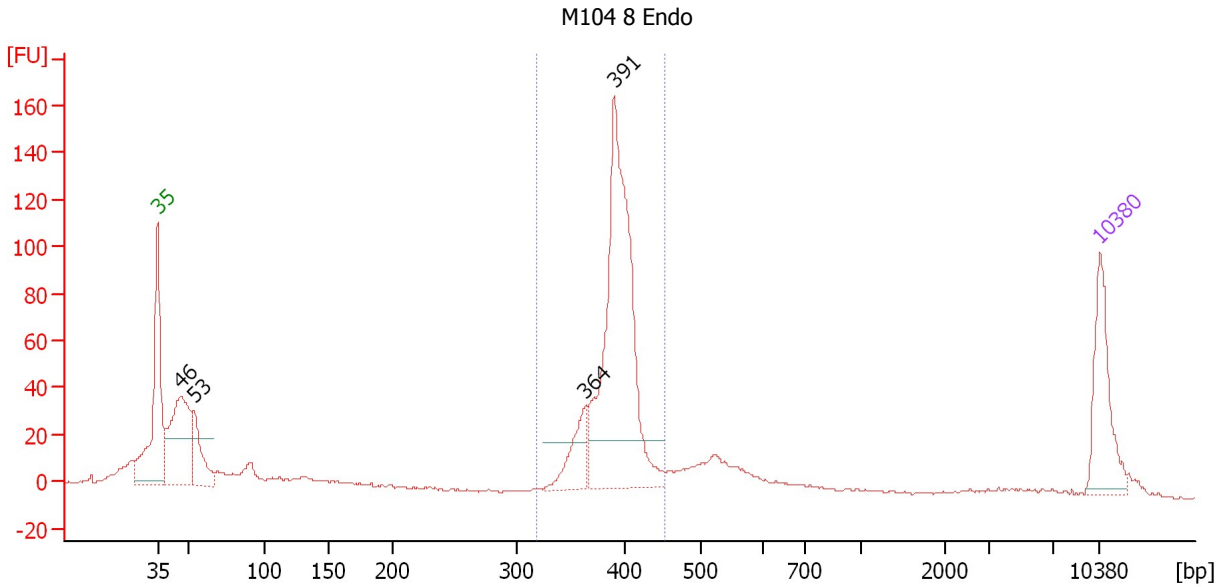
Region table for sample 4 : M104 8 1mm

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
326	455	393	1,420.0	367.25	297.5	36	6.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-11\2013-07-11_003.xad

Created: 7/11/2013 1:32:58 PM
 Modified: 7/11/2013 2:18:50 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 5 : M104 8 Endo

Height Threshold [FU] : 20

Overall Results for sample 5 : M104 8 Endo

Number of peaks found: 4 Corr. Area 1: 552.3
 Noise: 0.5

Peak table for sample 5 : M104 8 Endo

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	46	200.53	6,561.4	
3	53	75.67	2,150.4	
4	364	57.33	238.7	
5	391	431.45	1,672.6	
6	10,380	75.00	10.9	Upper Marker

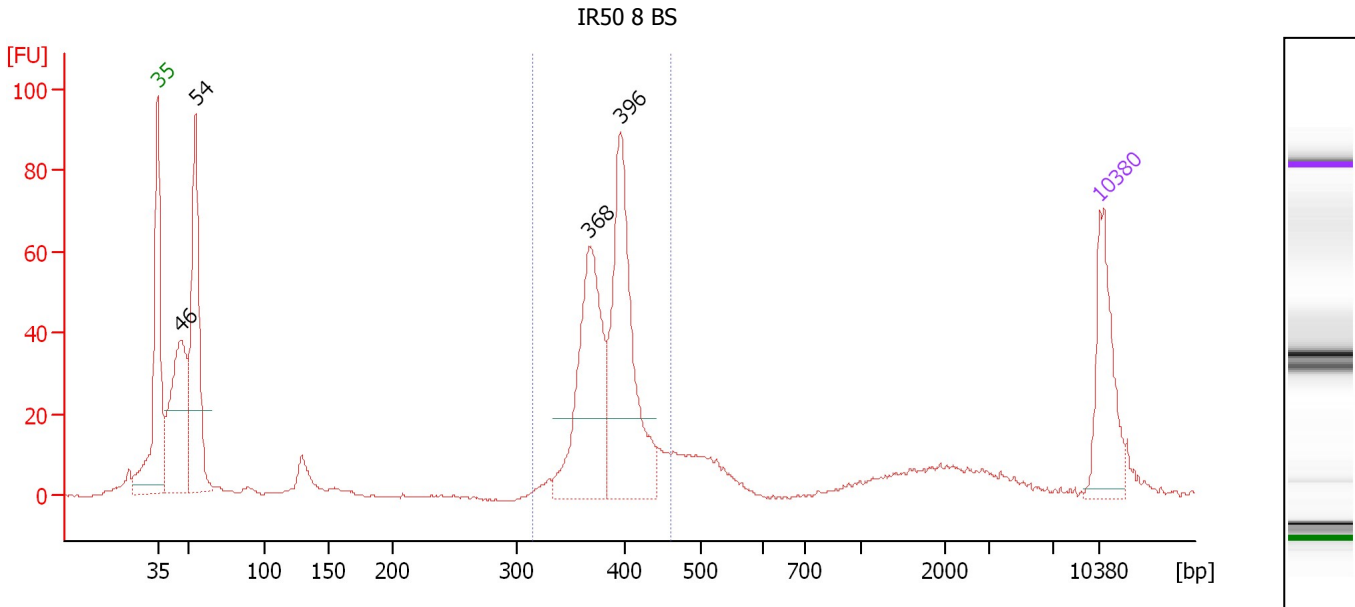
Region table for sample 5 : M104 8 Endo

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
320	453	392	1,934.5	499.20	552.3	53	5.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-11\2013-07-11_003.xad

Created: 7/11/2013 1:32:58 PM
 Modified: 7/11/2013 2:18:50 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 6 : IR50 8 BS

Height Threshold [FU] : 20

Overall Results for sample 6 : IR50 8 BS

Number of peaks found: 4 Corr. Area 1: 396.1
 Noise: 0.3

Peak table for sample 6 : IR50 8 BS

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	46	219.05	7,194.6	
3	54	247.43	6,894.2	
4	368	219.85	905.1	
5	396	246.41	941.9	
6	10,380	75.00	10.9	Upper Marker

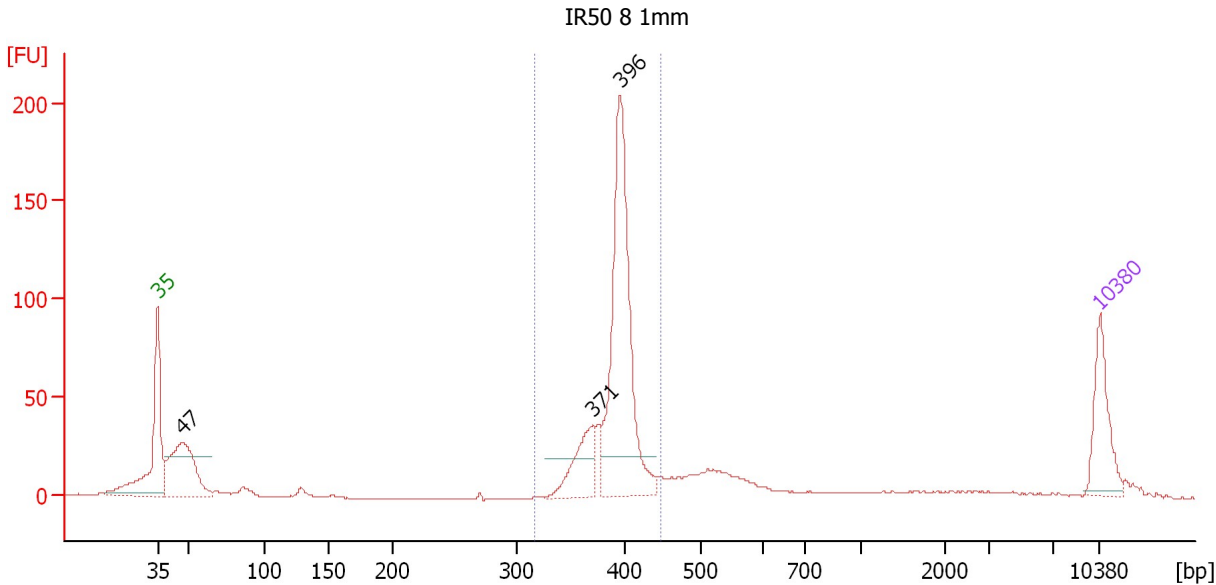
Region table for sample 6 : IR50 8 BS

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
315	462	388	1,863.2	475.58	396.1	45	6.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-11\2013-07-11_003.xad

Created: 7/11/2013 1:32:58 PM
 Modified: 7/11/2013 2:18:50 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 7 : IR50 8 1mm

Height Threshold [FU] : 20

Overall Results for sample 7 : IR50 8 1mm

Number of peaks found: 3 Corr. Area 1: 520.7
 Noise: 0.3

Peak table for sample 7 : IR50 8 1mm

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	47	222.66	7,164.1	
3	371	98.35	402.0	
4	396	441.47	1,687.8	
5	10,380	75.00	10.9	Upper Marker

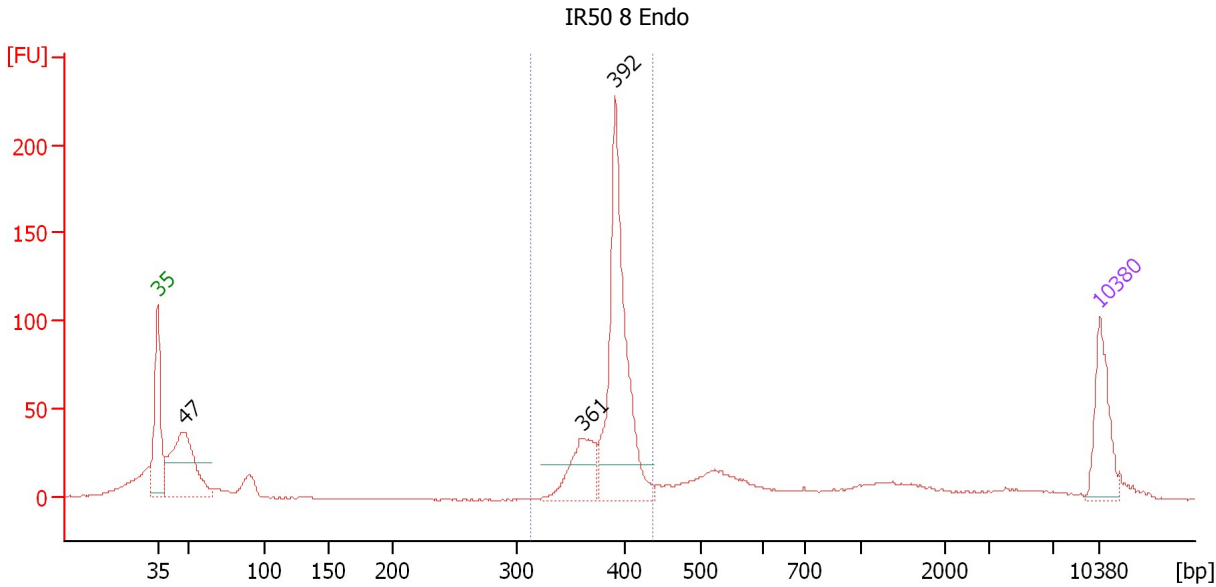
Region table for sample 7 : IR50 8 1mm

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
317	447	392	2,195.8	567.82	520.7	60	4.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-11\2013-07-11_003.xad

Created: 7/11/2013 1:32:58 PM
 Modified: 7/11/2013 2:18:50 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 8 : IR50 8 Endo

Height Threshold [FU] : 20

Overall Results for sample 8 : IR50 8 Endo

Number of peaks found: 3 Corr. Area 1: 497.4
 Noise: 0.3

Peak table for sample 8 : IR50 8 Endo

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	47	259.71	8,290.1	
3	361	108.84	456.5	
4	392	390.68	1,511.3	
5	10,380	75.00	10.9	Upper Marker

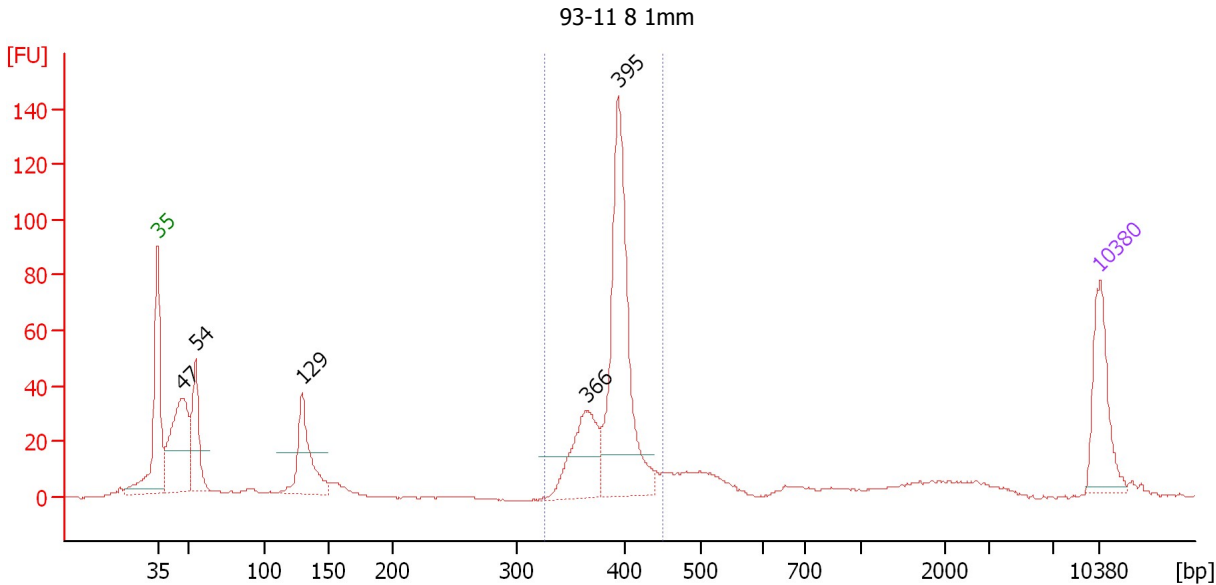
Region table for sample 8 : IR50 8 Endo

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
314	439	389	1,899.9	487.21	497.4	47	4.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-11\2013-07-11_003.xad

Created: 7/11/2013 1:32:58 PM
 Modified: 7/11/2013 2:18:50 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 9 : 93-11 8 1mm

Height Threshold [FU] : 15

Overall Results for sample 9 : 93-11 8 1mm

Number of peaks found: 5 Corr. Area 1: 379.9
 Noise: 0.2

Peak table for sample 9 : 93-11 8 1mm

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	47	216.88	7,009.6	
3	54	111.14	3,100.2	
4	129	124.09	1,456.1	
5	366	120.99	500.8	
6	395	333.46	1,279.7	
7	10,380	75.00	10.9	Upper Marker

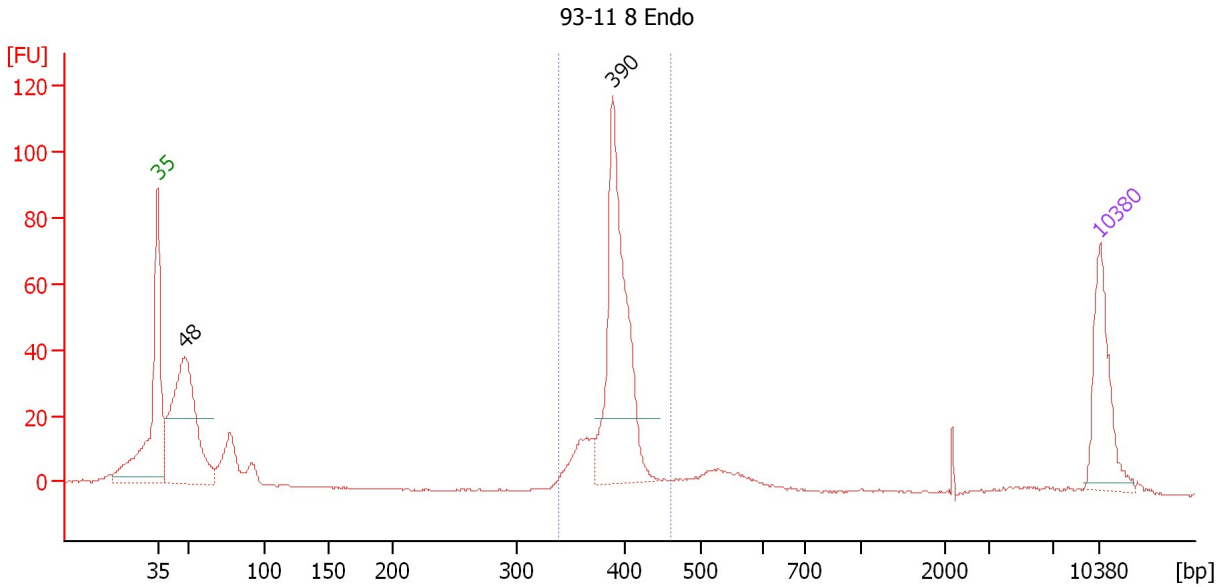
Region table for sample 9 : 93-11 8 1mm

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
327	451	390	1,809.8	465.29	379.9	45	5.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-11\2013-07-11_003.xad

Created: 7/11/2013 1:32:58 PM
 Modified: 7/11/2013 2:18:50 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 10 : 93-11 8 Endo

Height Threshold [FU] : 20

Overall Results for sample 10 : 93-11 8 Endo

Number of peaks found: 2 Corr. Area 1: 291.1
 Noise: 0.3

Peak table for sample 10 : 93-11 8 Endo

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	48	321.17	10,172.1	
3	390	282.36	1,098.2	
4	10,380	75.00	10.9	Upper Marker

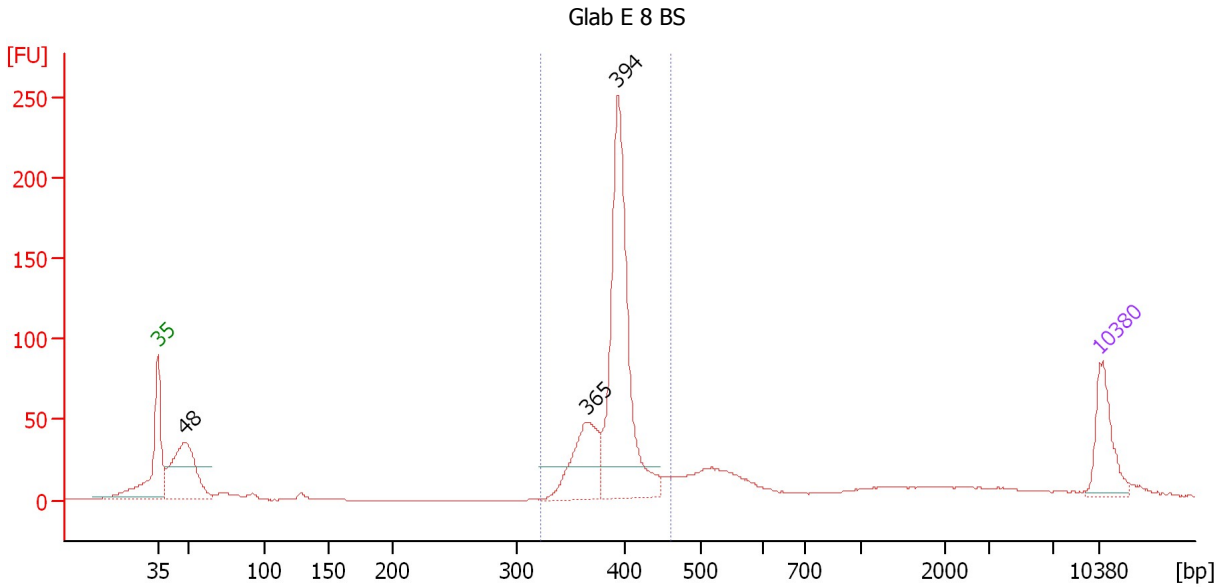
Region table for sample 10 : 93-11 8 Endo

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
339	462	392	1,349.6	348.47	291.1	48	4.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-11\2013-07-11_003.xad

Created: 7/11/2013 1:32:58 PM
 Modified: 7/11/2013 2:18:50 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 11 : Glab E 8 BS

Height Threshold [FU] : 20

Overall Results for sample 11 : Glab E 8 BS

Number of peaks found: 3 Corr. Area 1: 647.7
 Noise: 0.2

Peak table for sample 11 : Glab E 8 BS

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	48	254.18	8,030.1	
3	365	159.33	661.5	
4	394	495.76	1,906.0	
5	10,380	75.00	10.9	Upper Marker

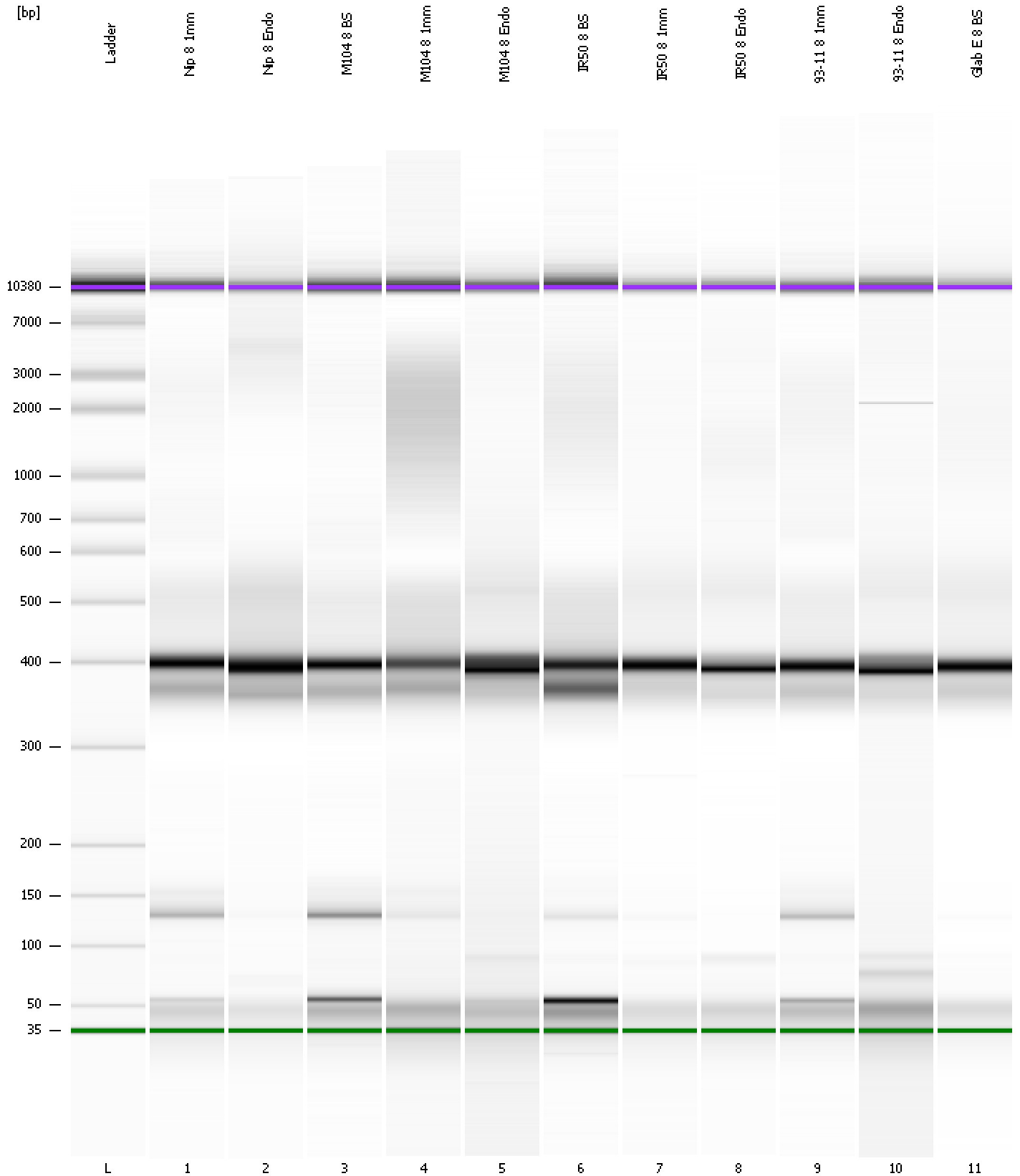
Region table for sample 11 : Glab E 8 BS

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
323	462	392	2,617.0	675.29	647.7	56	5.6	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-11\2013-07-11_003.xad

Created: 7/11/2013 1:32:58 PM
Modified: 7/11/2013 2:18:50 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-11\2013-07-11_003.xad

Created: 7/11/2013 1:32:58 PM
 Modified: 7/11/2013 2:18:50 PM

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		7/11/2013 2:14:17 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-07-11\2013-07-11_003.xad)		Instrument	Run		7/11/2013 1:33:04 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		7/11/2013 1:33:04 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		7/11/2013 1:33:04 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		7/11/2013 1:33:04 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		7/11/2013 1:33:04 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		7/11/2013 1:33:04 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		7/11/2013 1:33:04 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1