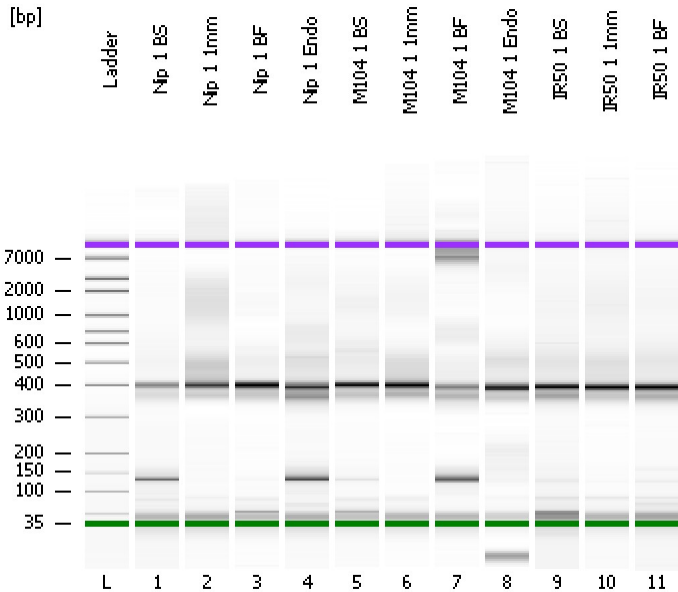


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-02\2013-07-02_004.xad

Created: 7/2/2013 2:16:41 PM
Modified: 7/2/2013 2:59:17 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

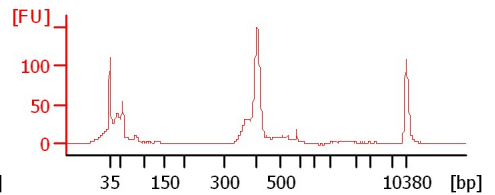
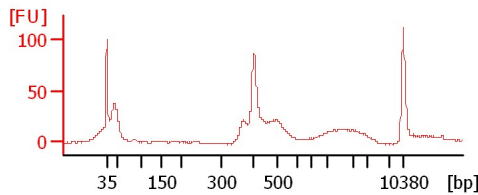
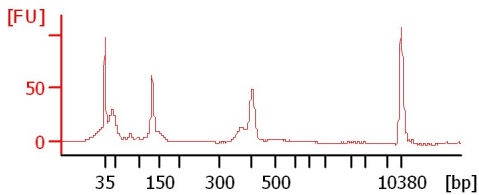
Chip Information:

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

Nip 1 BS

Nip 1 1mm

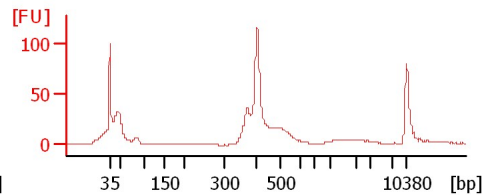
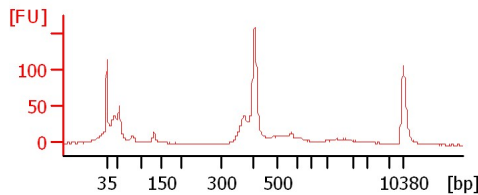
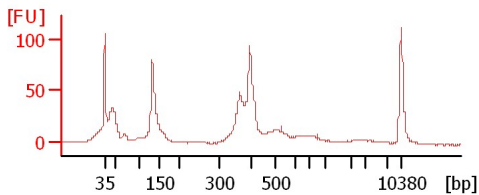
Nip 1 BF



Nip 1 Endo

M104 1 BS

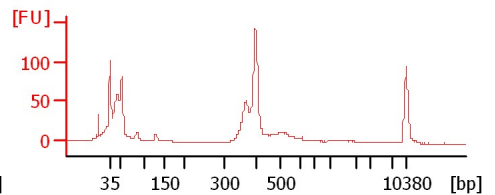
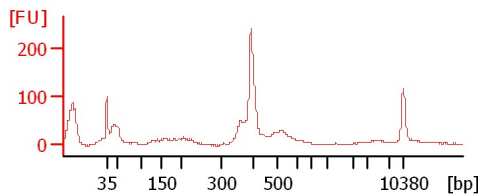
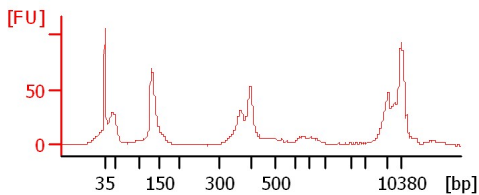
M104 1 1mm



M104 1 BF

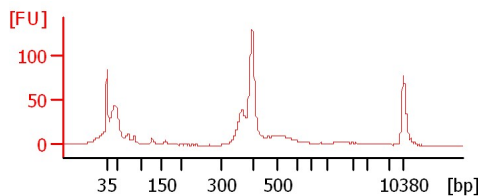
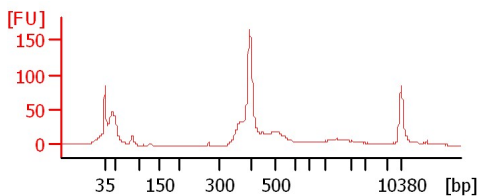
M104 1 Endo

IR50 1 BS



IR50 1 1mm

IR50 1 BF



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-02\2013-07-02_004.xad

Created: 7/2/2013 2:16:41 PM
Modified: 7/2/2013 2:59:17 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
Nip 1 BS		<input type="checkbox"/>	✓			
Nip 1 1mm		<input type="checkbox"/>	✓			
Nip 1 BF		<input type="checkbox"/>	✓			
Nip 1 Endo		<input type="checkbox"/>	✓			
M104 1 BS		<input type="checkbox"/>	✓			
M104 1 1mm		<input type="checkbox"/>	✓			
M104 1 BF		<input type="checkbox"/>	✓			
M104 1 Endo		<input type="checkbox"/>	✓			
IR50 1 BS		<input type="checkbox"/>	✓			
IR50 1 1mm		<input type="checkbox"/>	✓			
IR50 1 BF		<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\2013-07-02\2013-07-02_004.xad

Created: 7/2/2013 2:16:41 PM
Modified: 7/2/2013 2:59:17 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/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

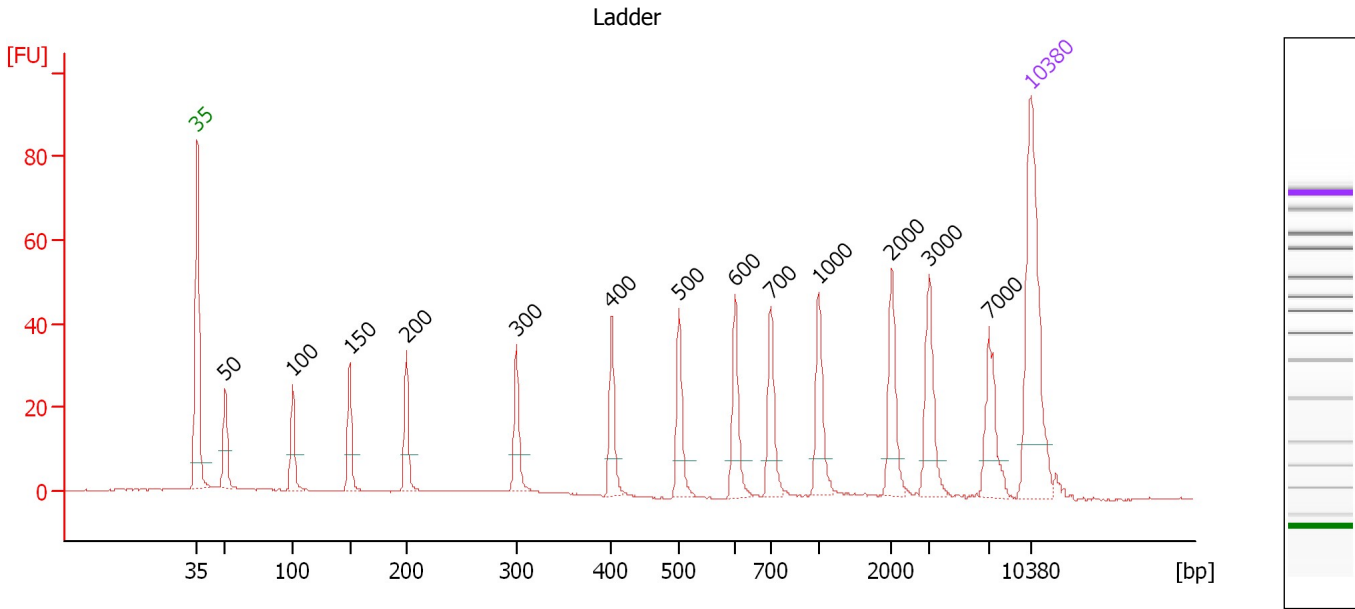
Ladder

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\2013-07-02\2013-07-02_004.xad

Created: 7/2/2013 2:16:41 PM
 Modified: 7/2/2013 2:59:17 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

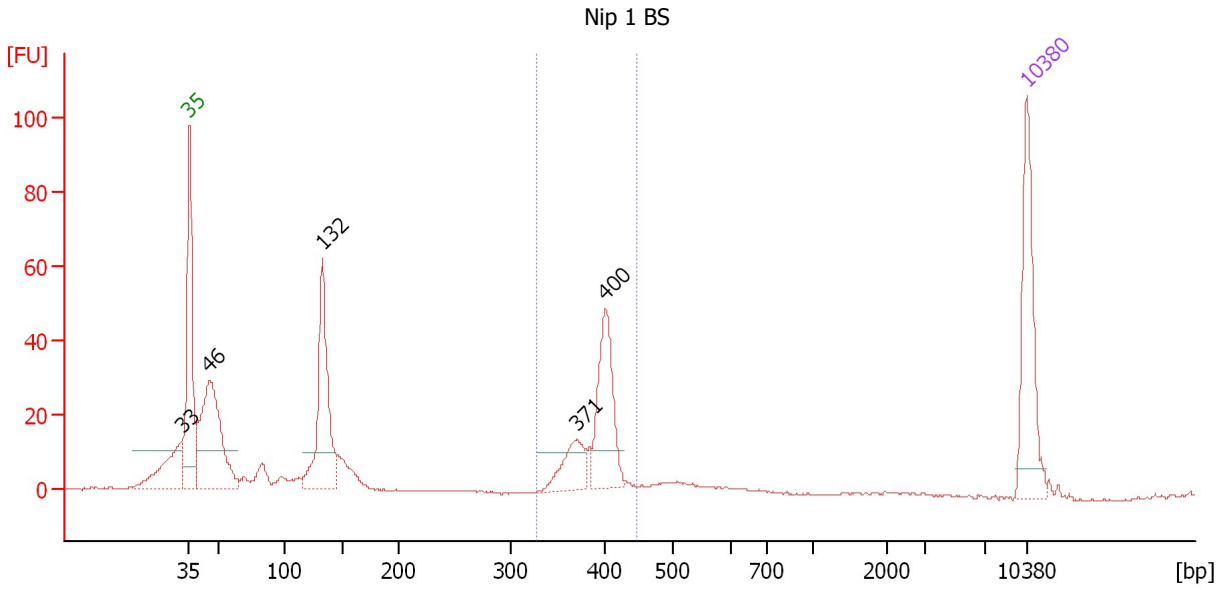
Peak table for Ladder

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\2013-07-02\2013-07-02_004.xad

Created: 7/2/2013 2:16:41 PM
 Modified: 7/2/2013 2:59:17 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 1 : Nip 1 BS

Height Threshold [FU] : 10

Overall Results for sample 1 : Nip 1 BS

Number of peaks found: 5 Corr. Area 1: 143.3
 Noise: 0.2

Peak table for sample 1 : Nip 1 BS

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	33	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	46	207.98	6,917.6	
4	132	161.27	1,848.3	
5	371	41.87	171.2	
6	400	93.23	353.2	
7	10,380	75.00	10.9	Upper Marker

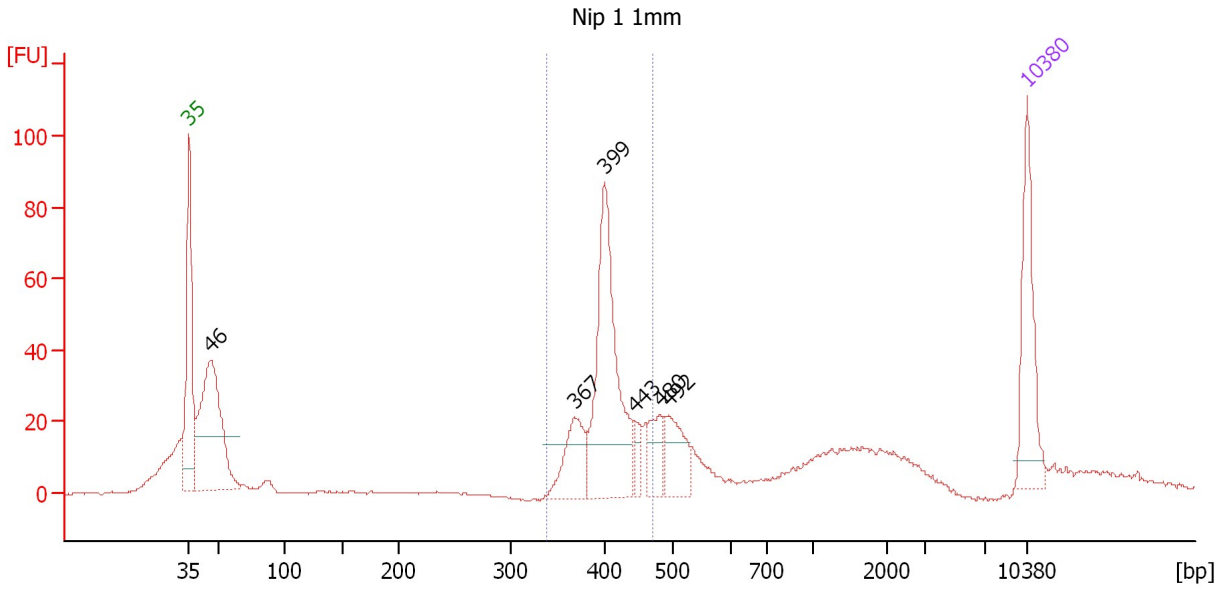
Region table for sample 1 : Nip 1 BS

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
329	444	391	566.2	145.86	143.3	27	4.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-02\2013-07-02_004.xad

Created: 7/2/2013 2:16:41 PM
 Modified: 7/2/2013 2:59:17 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 2 : Nip 1 1mm

Height Threshold [FU] : 15

Overall Results for sample 2 : Nip 1 1mm

Number of peaks found: 6 Corr. Area 1: 303.5
 Noise: 0.2

Peak table for sample 2 : Nip 1 1mm

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	46	259.13	8,544.5	
3	367	63.66	262.6	
4	399	222.79	845.2	
5	443	15.94	54.5	
6	480	37.82	119.4	
7	492	54.88	169.0	
8	10,380	75.00	10.9	Upper Marker

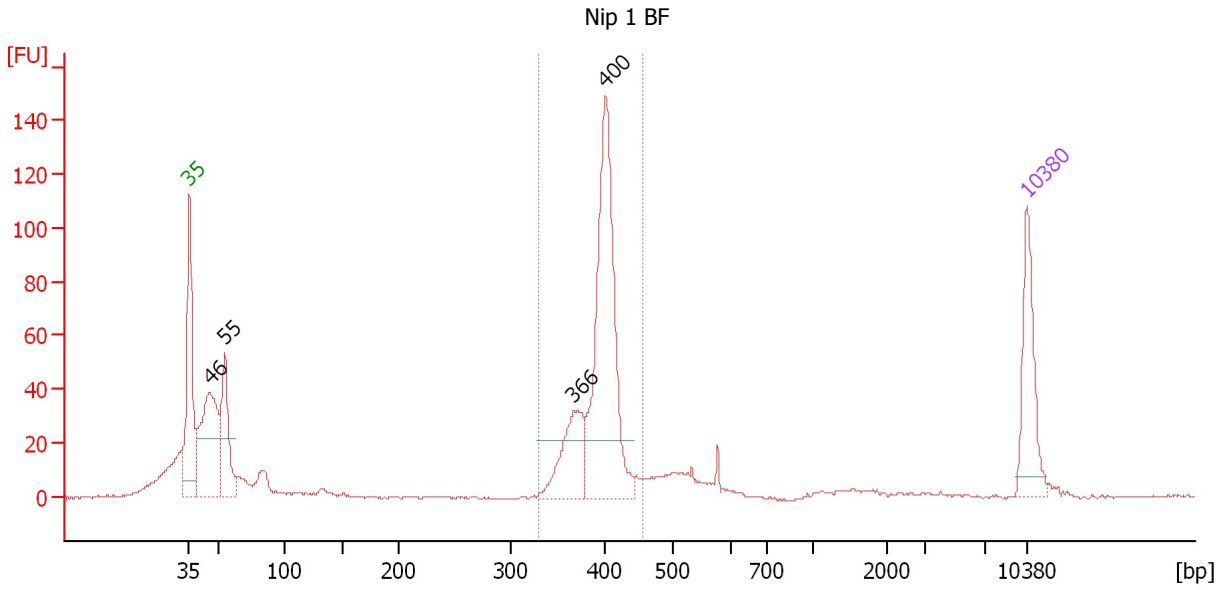
Region table for sample 2 : Nip 1 1mm

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
339	469	405	1,172.9	312.31	303.5	35	6.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-02\2013-07-02_004.xad

Created: 7/2/2013 2:16:41 PM
 Modified: 7/2/2013 2:59:17 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 3 : Nip 1 BF

Height Threshold [FU] : 22

Overall Results for sample 3 : Nip 1 BF

Number of peaks found: 4 Corr. Area 1: 426.4
 Noise: 0.4

Peak table for sample 3 : Nip 1 BF

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	46	229.97	7,609.6	
3	55	129.48	3,558.2	
4	366	101.70	420.6	
5	400	341.42	1,293.5	
6	10,380	75.00	10.9	Upper Marker

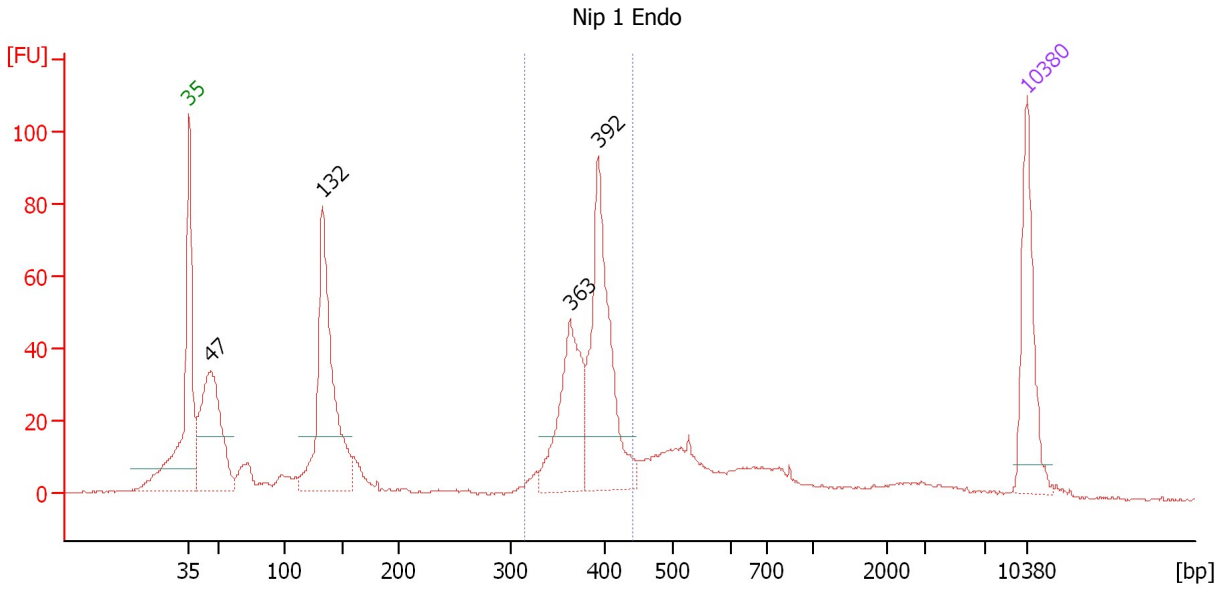
Region table for sample 3 : Nip 1 BF

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
329	454	394	1,671.1	433.85	426.4	50	5.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-02\2013-07-02_004.xad

Created: 7/2/2013 2:16:41 PM
 Modified: 7/2/2013 2:59:17 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 4 : Nip 1 Endo

Height Threshold [FU] : 15

Overall Results for sample 4 : Nip 1 Endo

Number of peaks found: 4 Corr. Area 1: 376.2
 Noise: 0.3

Peak table for sample 4 : Nip 1 Endo

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	47	225.65	7,348.6	
3	132	286.39	3,275.5	
4	363	139.71	583.2	
5	392	206.87	799.0	
6	10,380	75.00	10.9	Upper Marker

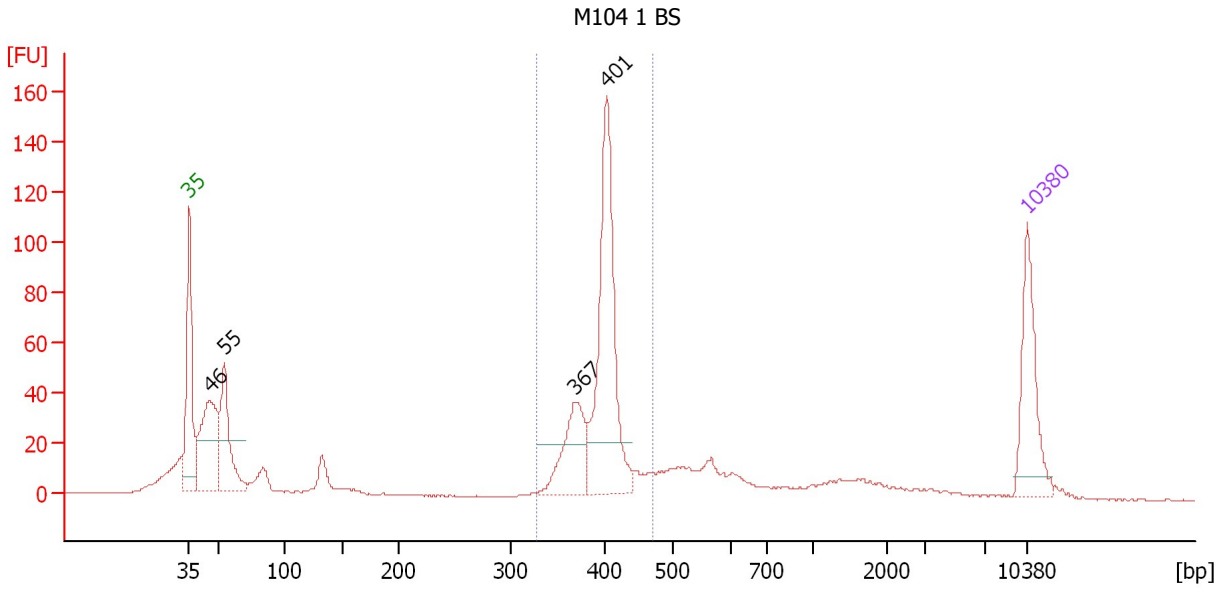
Region table for sample 4 : Nip 1 Endo

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
314	438	382	1,464.2	368.20	376.2	35	6.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-02\2013-07-02_004.xad

Created: 7/2/2013 2:16:41 PM
 Modified: 7/2/2013 2:59:17 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 5 : M104 1 BS

Height Threshold [FU] : 20

Overall Results for sample 5 : M104 1 BS

Number of peaks found: 4 Corr. Area 1: 438.4
 Noise: 0.3

Peak table for sample 5 : M104 1 BS

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	46	173.52	5,747.3	
3	55	126.64	3,494.1	
4	367	91.23	376.7	
5	401	253.43	957.4	
6	10,380	75.00	10.9	Upper Marker

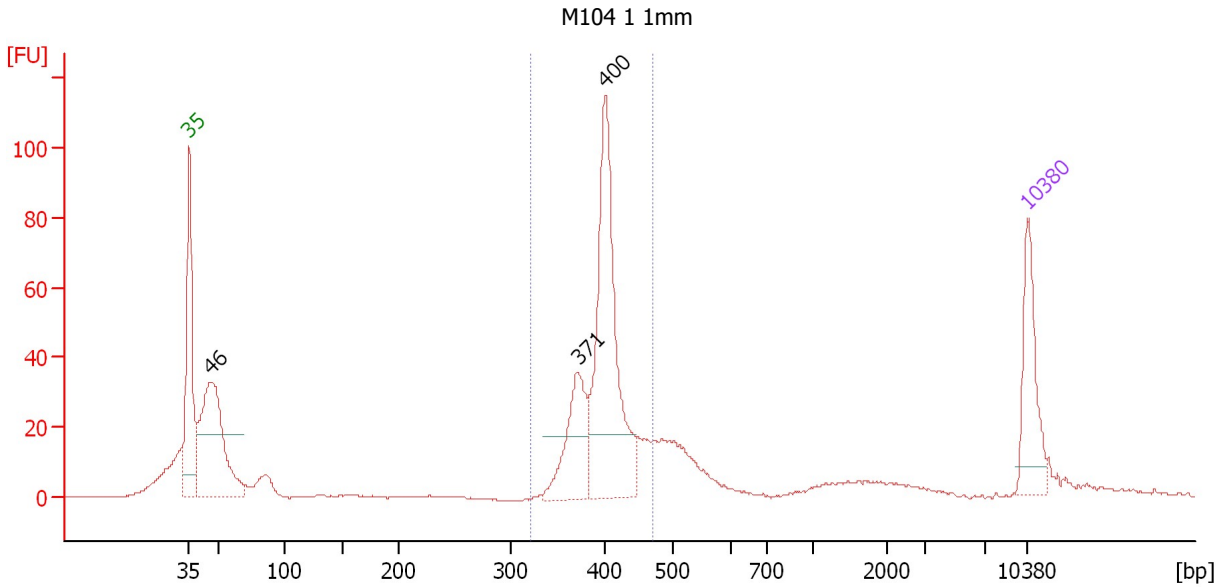
Region table for sample 5 : M104 1 BS

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
327	468	396	1,432.1	373.00	438.4	42	6.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-02\2013-07-02_004.xad

Created: 7/2/2013 2:16:41 PM
 Modified: 7/2/2013 2:59:17 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 6 : M104 1 1mm

Height Threshold [FU] : 18

Overall Results for sample 6 : M104 1 1mm

Number of peaks found: 3 Corr. Area 1: 383.1
 Noise: 0.3

Peak table for sample 6 : M104 1 1mm

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	46	315.73	10,288.3	
3	371	121.82	497.9	
4	400	336.53	1,276.3	
5	10,380	75.00	10.9	Upper Marker

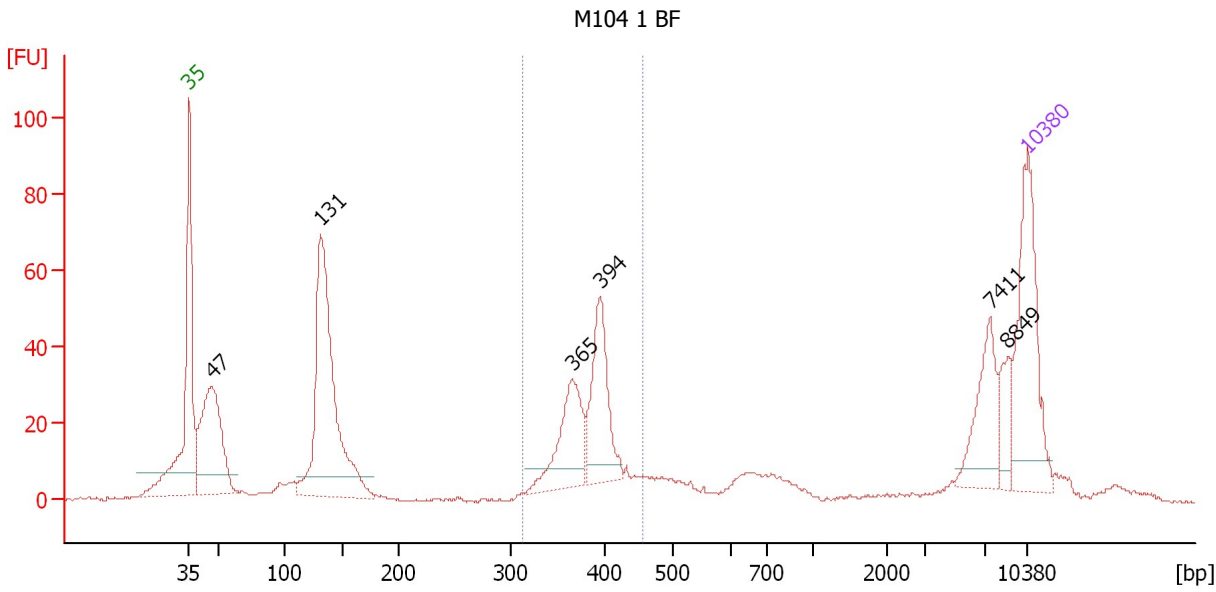
Region table for sample 6 : M104 1 1mm

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
322	469	400	1,823.9	479.51	383.1	49	6.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-02\2013-07-02_004.xad

Created: 7/2/2013 2:16:41 PM
 Modified: 7/2/2013 2:59:17 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : M104 1 BF

Number of peaks found: 6 Corr. Area 1: 240.0
 Noise: 0.4

Peak table for sample 7 : M104 1 BF

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	47	146.47	4,740.3	
3	131	246.28	2,850.3	
4	365	68.16	282.8	
5	394	75.58	290.6	
6	7,411	41.70	8.5	
7	8,849	18.28	3.1	
8	10,380	75.00	10.9	Upper Marker

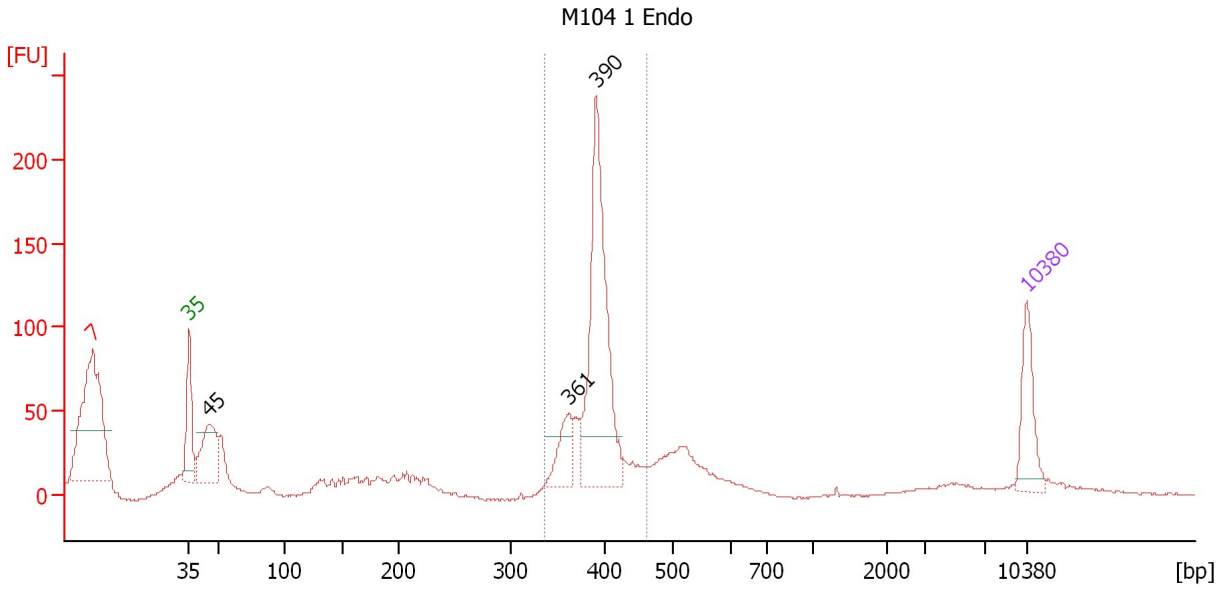
Region table for sample 7 : M104 1 BF

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
312	454	382	727.7	182.83	240.0	27	6.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-02\2013-07-02_004.xad

Created: 7/2/2013 2:16:41 PM
 Modified: 7/2/2013 2:59:17 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 8 : M104 1 Endo

Height Threshold [FU] : 30

Overall Results for sample 8 : M104 1 Endo

Number of peaks found: 3 Corr. Area 1: 592.0
 Noise: 0.4

Peak table for sample 8 : M104 1 Endo

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	7	0.00	0.0	excluded peak
2	35	125.00	5,411.3	Lower Marker
3	45	162.59	5,414.9	
4	361	78.23	328.2	
5	390	439.47	1,707.5	
6	10,380	75.00	10.9	Upper Marker

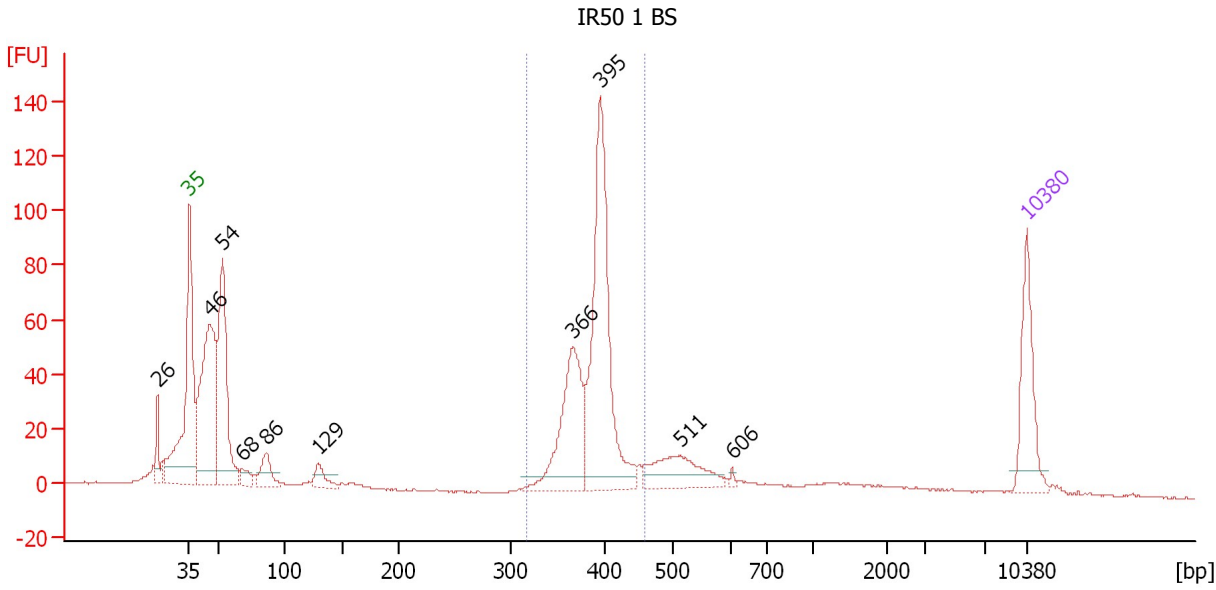
Region table for sample 8 : M104 1 Endo

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
335	461	390	2,168.6	557.77	592.0	46	5.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-02\2013-07-02_004.xad

Created: 7/2/2013 2:16:41 PM
 Modified: 7/2/2013 2:59:17 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : IR50 1 BS

Number of peaks found: 10 Corr. Area 1: 438.7
 Noise: 0.3

Peak table for sample 9 : IR50 1 BS

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	26	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	46	320.79	10,595.4	
4	54	251.12	7,072.9	
5	68	19.28	428.6	
6	86	42.37	746.2	
7	129	27.71	326.2	
8	366	176.81	732.9	
9	395	330.23	1,268.3	
10	511	80.83	239.7	
11	606	3.14	7.8	
12	10,380	75.00	10.9	Upper Marker

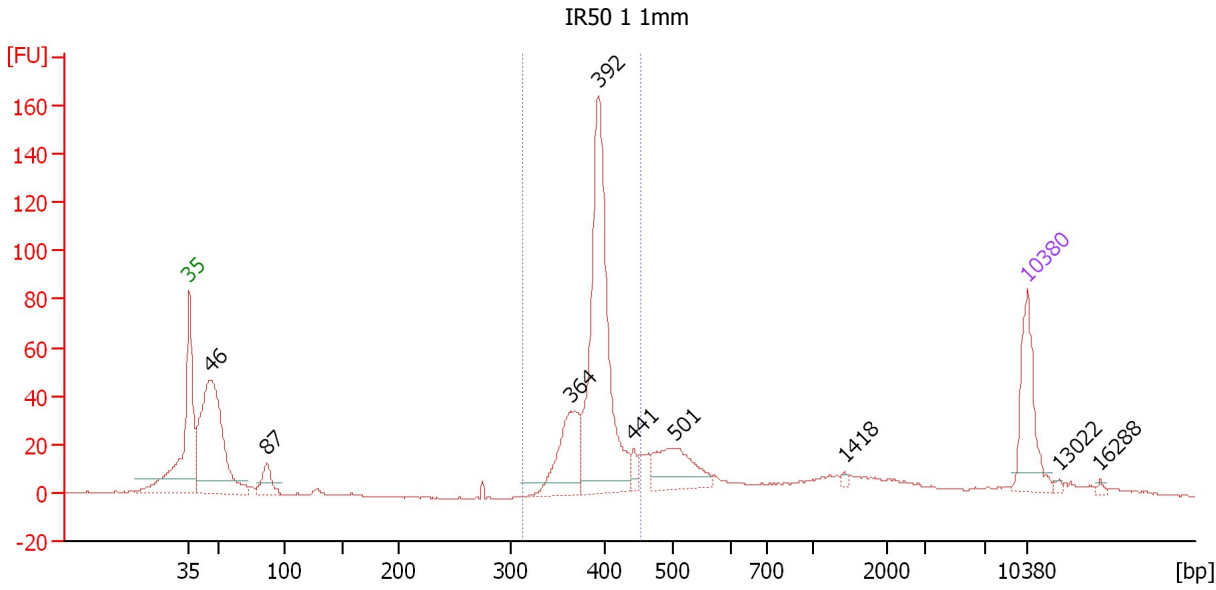
Region table for sample 9 : IR50 1 BS

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
318	456	387	2,018.9	514.41	438.7	42	5.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-02\2013-07-02_004.xad

Created: 7/2/2013 2:16:41 PM
 Modified: 7/2/2013 2:59:17 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : IR50 1 1mm

Number of peaks found: 9 Corr. Area 1: 471.5
 Noise: 0.2

Peak table for sample 10 : IR50 1 1mm

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	46	387.09	12,842.9	
3	87	39.36	688.7	
4	364	113.83	473.9	
5	392	395.21	1,527.8	
6	441	15.55	53.4	
7	501	88.21	267.0	
8	1,418	3.16	3.4	
9	10,380	75.00	10.9	Upper Marker
10	13,022	0.00	0.0	
11	16,288	0.00	0.0	

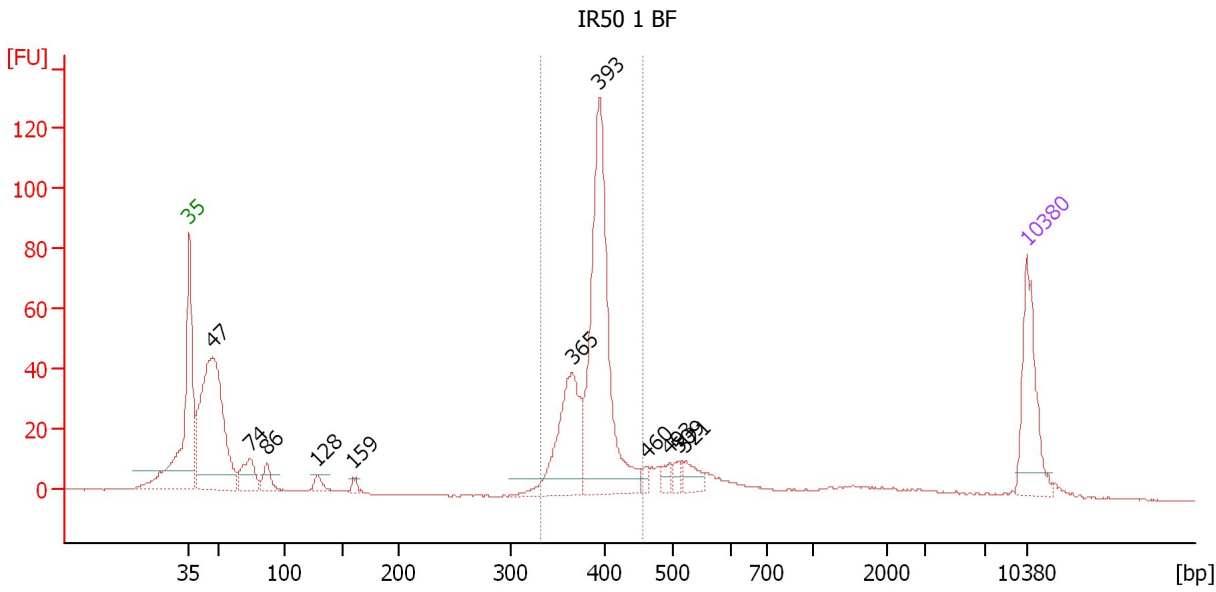
Region table for sample 10 : IR50 1 1mm

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
314	453	390	2,108.8	542.13	471.5	45	5.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-02\2013-07-02_004.xad

Created: 7/2/2013 2:16:41 PM
 Modified: 7/2/2013 2:59:17 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : IR50 1 BF

Number of peaks found: 11 Corr. Area 1: 394.1
 Noise: 0.2

Peak table for sample 11 : IR50 1 BF

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	47	377.06	12,052.1	
3	74	49.35	1,010.5	
4	86	24.76	433.8	
5	128	12.76	151.4	
6	159	8.40	79.9	
7	365	150.62	625.3	
8	393	339.54	1,307.8	
9	460	8.10	26.7	
10	493	11.10	34.1	
11	509	9.96	29.6	
12	521	20.88	60.7	
13	10,380	75.00	10.9	Upper Marker

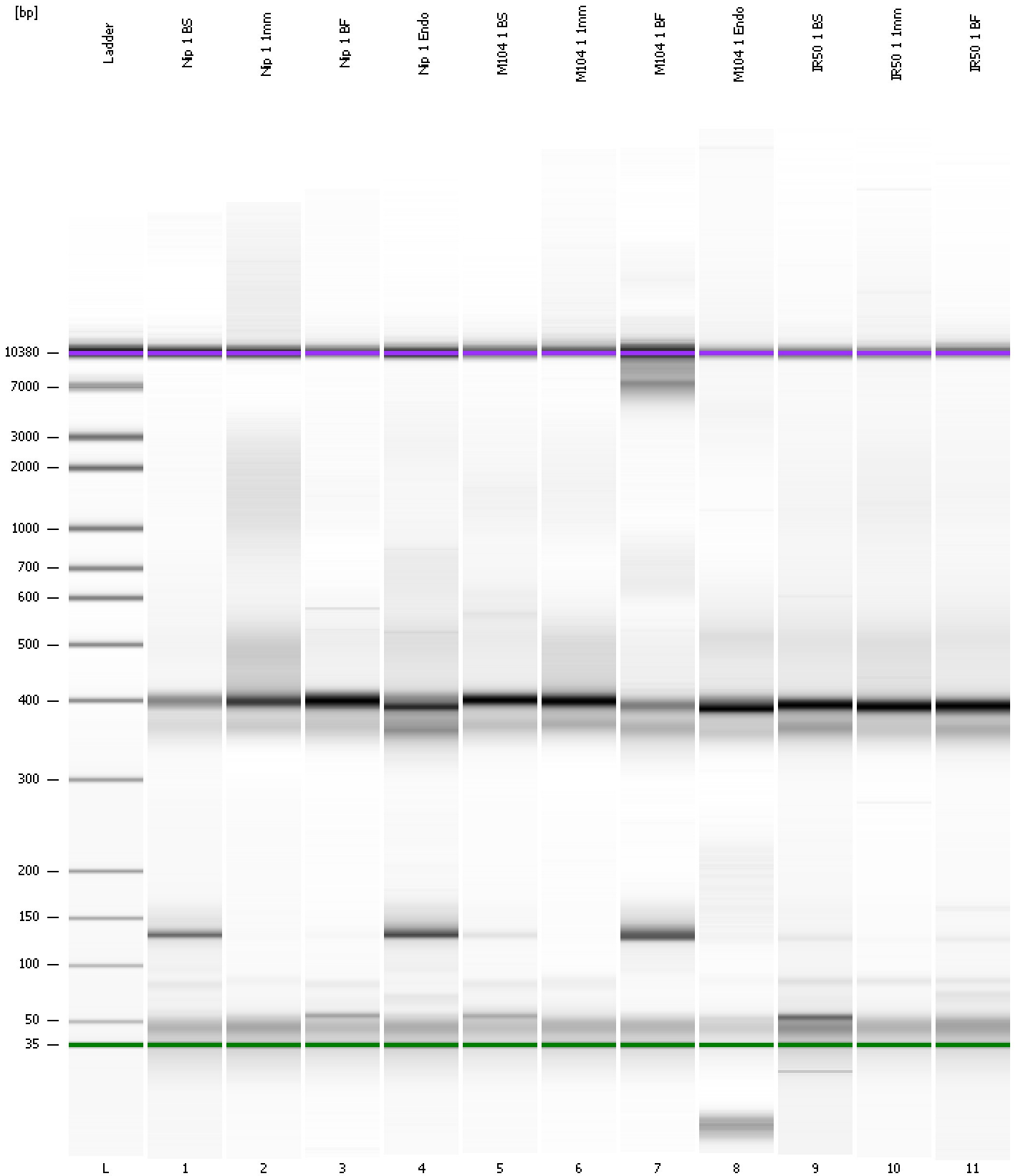
Region table for sample 11 : IR50 1 BF

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
332	453	387	1,898.8	483.78	394.1	49	5.6	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-02\2013-07-02_004.xad

Created: 7/2/2013 2:16:41 PM
Modified: 7/2/2013 2:59:17 PM

Gel Image

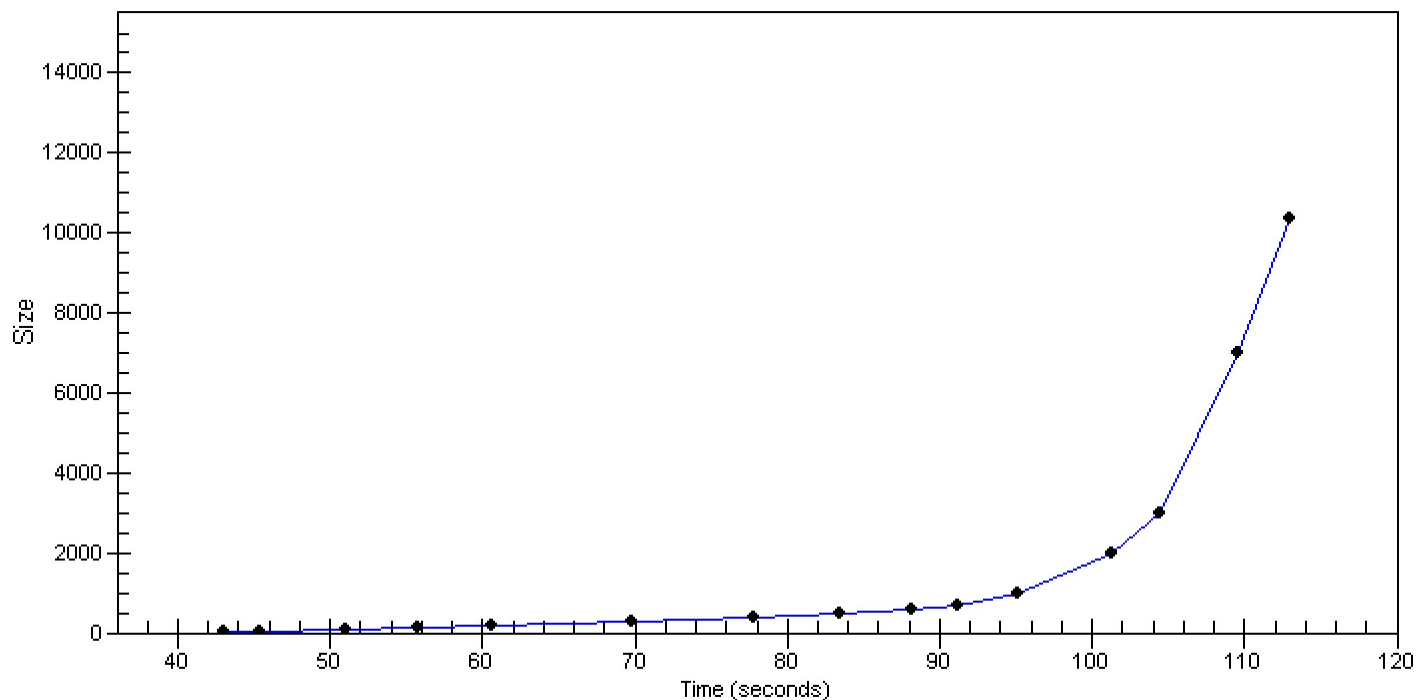


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-02\2013-07-02_004.xad

Created: 7/2/2013 2:16:41 PM
Modified: 7/2/2013 2:59:17 PM

Curves

Standard Curve



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-02\2013-07-02_004.xad

Created: 7/2/2013 2:16:41 PM
 Modified: 7/2/2013 2:59:17 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		7/2/2013 2:57:10 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-07-02\2013-07-02_004.xad)		Instrument	Run		7/2/2013 2:16:47 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		7/2/2013 2:16:47 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		7/2/2013 2:16:47 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		7/2/2013 2:16:47 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		7/2/2013 2:16:47 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		7/2/2013 2:16:47 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		7/2/2013 2:16:47 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1