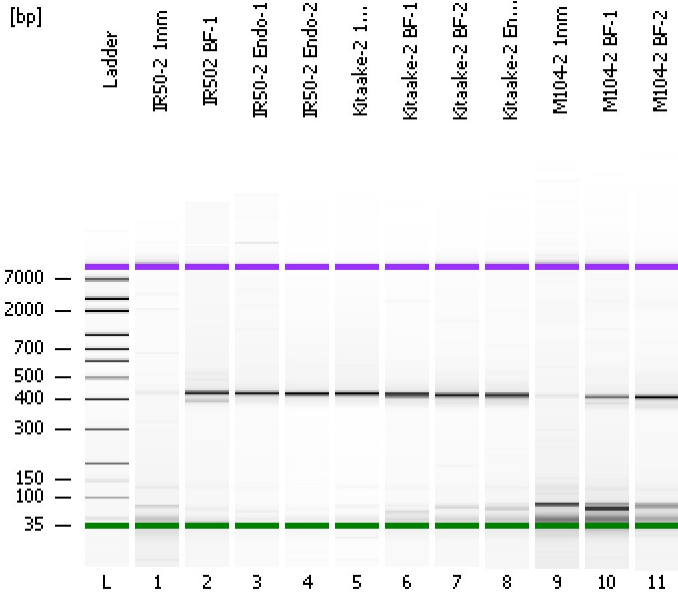


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-07-12\2012-07-12_005.xad

Created: 7/12/2012 12:14:54 PM
Modified: 7/12/2012 12:56:16 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

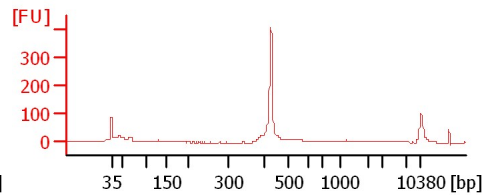
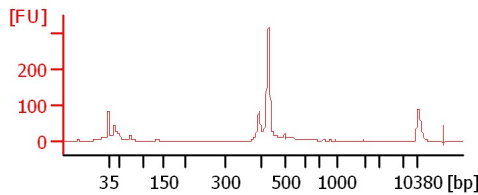
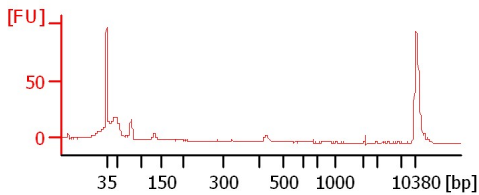
Chip Information:

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

IR50-2 1mm

IR502 BF-1

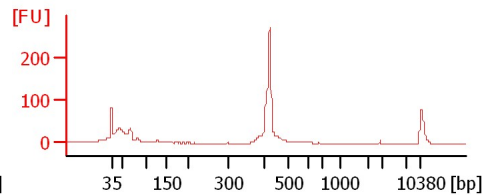
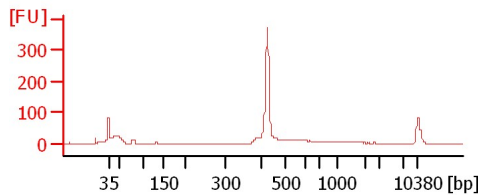
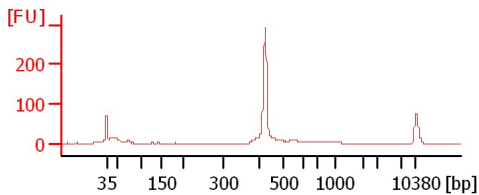
IR50-2 Endo-1



IR50-2 Endo-2

Kitaake-2 1mm

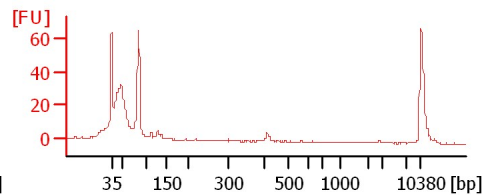
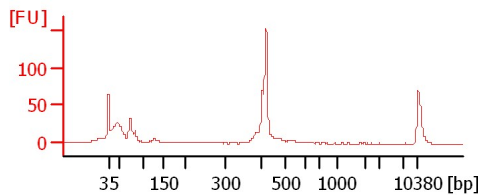
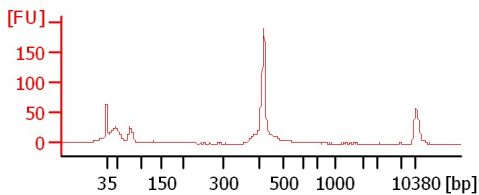
Kitaake-2 BF-1



Kitaake-2 BF-2

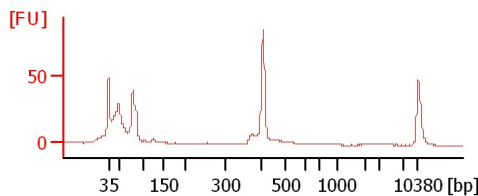
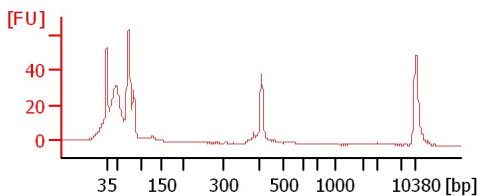
Kitaake-2 Endo-2

M104-2 1mm



M104-2 BF-1

M104-2 BF-2



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-07-12\2012-07-12_005.xad

Created: 7/12/2012 12:14:54 PM
 Modified: 7/12/2012 12:56:16 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
IR50-2 1mm		<input type="checkbox"/>	✓			
IR502 BF-1		<input type="checkbox"/>	✓			
IR50-2 Endo-1		<input type="checkbox"/>	✓			
IR50-2 Endo-2		<input type="checkbox"/>	✓			
Kitaake-2 1mm		<input type="checkbox"/>	✓			
Kitaake-2 BF-1		<input type="checkbox"/>	✓			
Kitaake-2 BF-2		<input type="checkbox"/>	✓			
Kitaake-2 Endo-2		<input type="checkbox"/>	✓			
M104-2 1mm		<input type="checkbox"/>	✓			
M104-2 BF-1		<input type="checkbox"/>	✓			
M104-2 BF-2		<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\2012-07-12\2012-07-12_005.xad

Created: 7/12/2012 12:14:54 PM
Modified: 7/12/2012 12:56:16 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

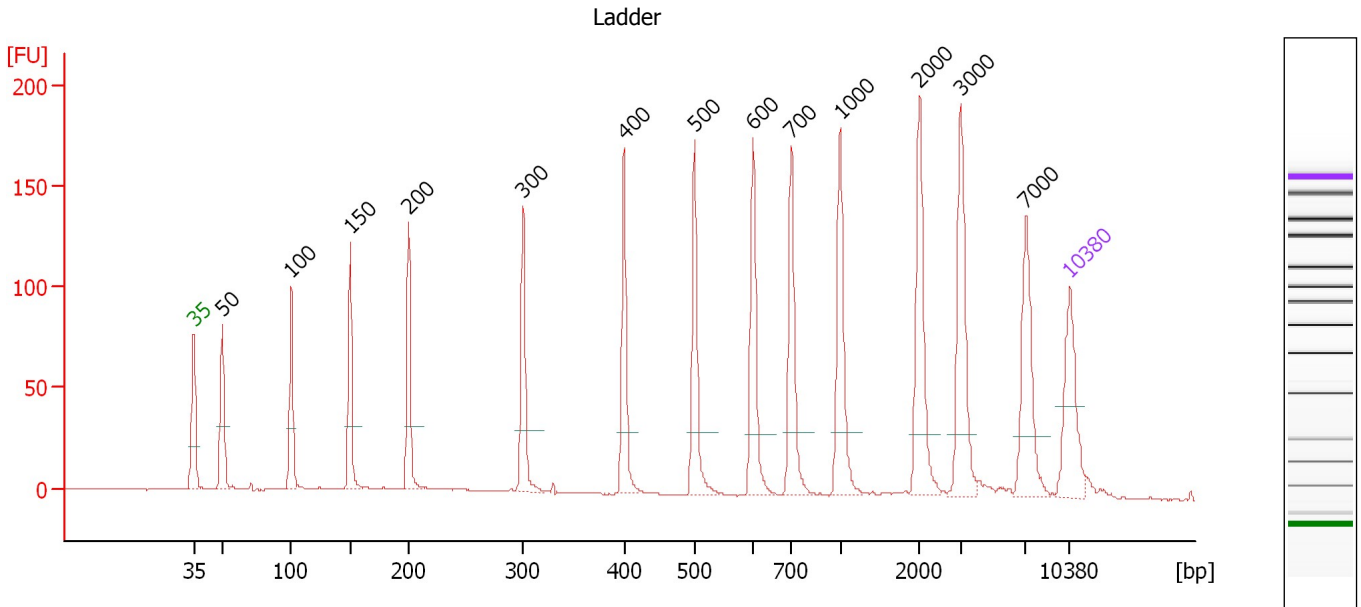
Ladder

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\2012-07-12\2012-07-12_005.xad

Created: 7/12/2012 12:14:54 PM
 Modified: 7/12/2012 12:56:16 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

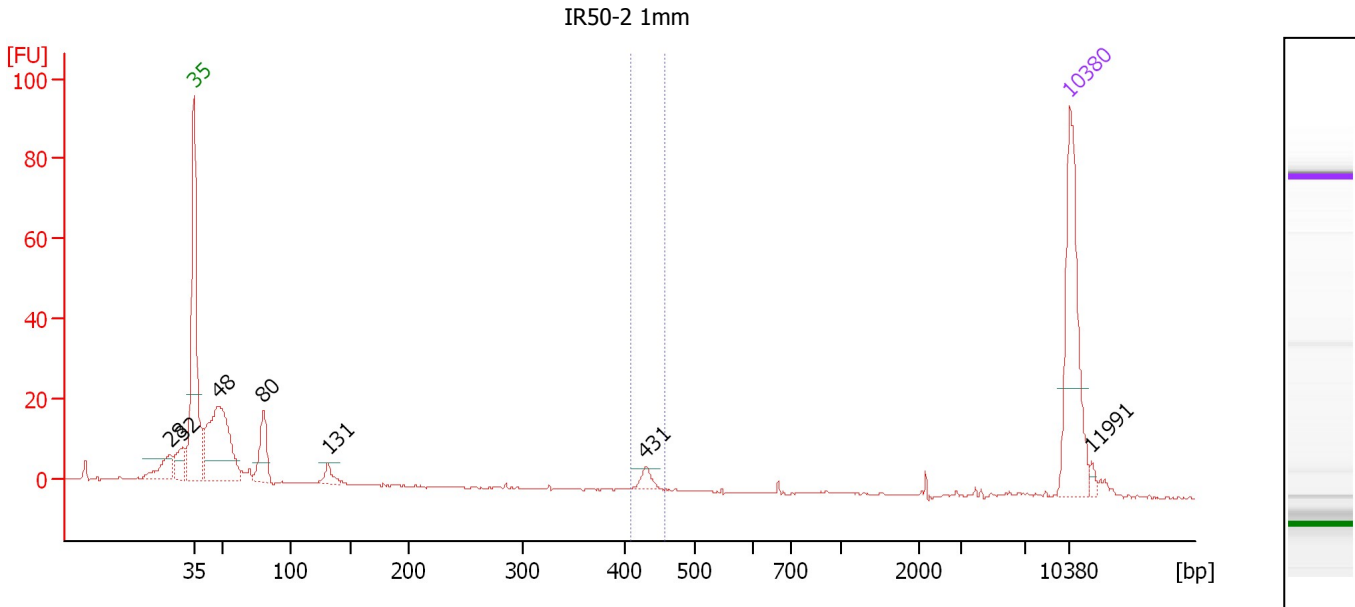
Peak table for Ladder

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\2012-07-12\2012-07-12_005.xad

Created: 7/12/2012 12:14:54 PM
 Modified: 7/12/2012 12:56:16 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : IR50-2 1mm

Number of peaks found: 7 Corr. Area 1: 6.9
 Noise: 0.1

Peak table for sample 1 : IR50-2 1mm

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	28	0.00	0.0	
2	32	0.00	0.0	
3	35	125.00	5,411.3	Lower Marker
4	48	142.10	4,497.7	
5	80	40.47	767.6	
6	131	10.58	122.1	
7	431	7.96	28.0	
8	10,380	75.00	10.9	Upper Marker
9	11,991	0.00	0.0	

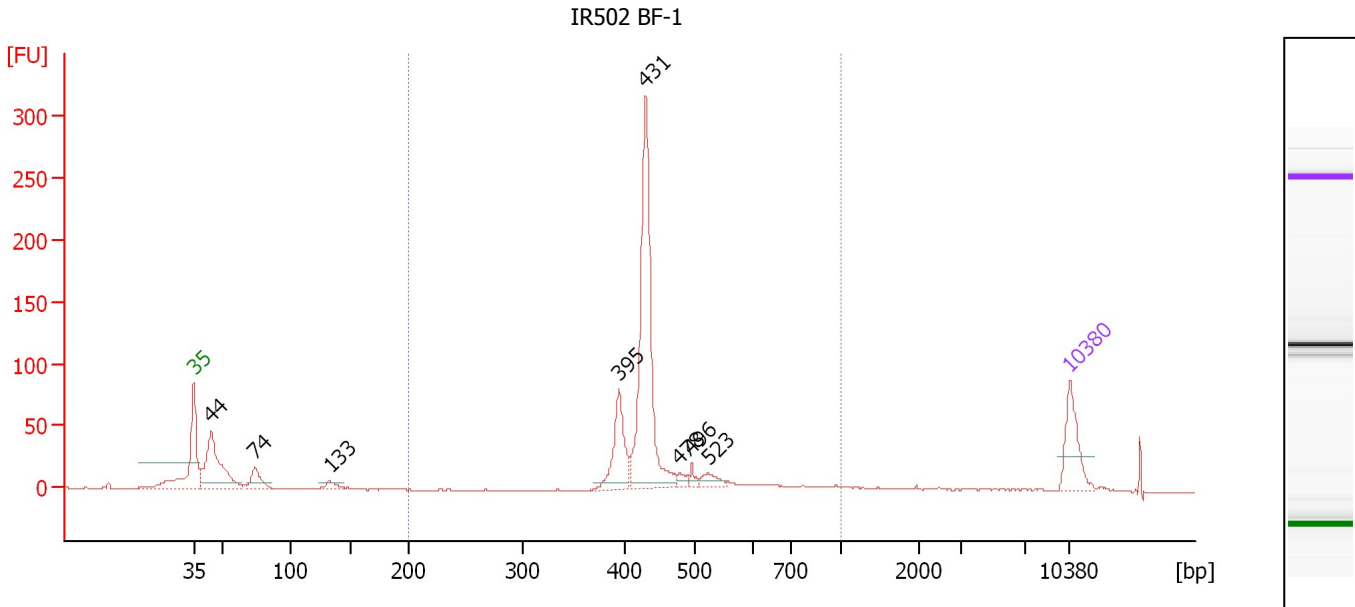
Region table for sample 1 : IR50-2 1mm

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
409	458	432	25.7	7.33	6.9	3	1.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-07-12\2012-07-12_005.xad

Created: 7/12/2012 12:14:54 PM
 Modified: 7/12/2012 12:56:16 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : IR502 BF-1

Number of peaks found: 8 Corr. Area 1: 618.7
 Noise: 0.1

Peak table for sample 2 : IR502 BF-1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	44	254.62	8,726.4	
3	74	54.98	1,131.4	
4	133	19.32	220.7	
5	395	126.89	486.7	
6	431	464.15	1,632.6	
7	478	13.84	43.8	
8	496	12.87	39.3	
9	523	22.27	64.6	
10	10,380	75.00	10.9	Upper Marker

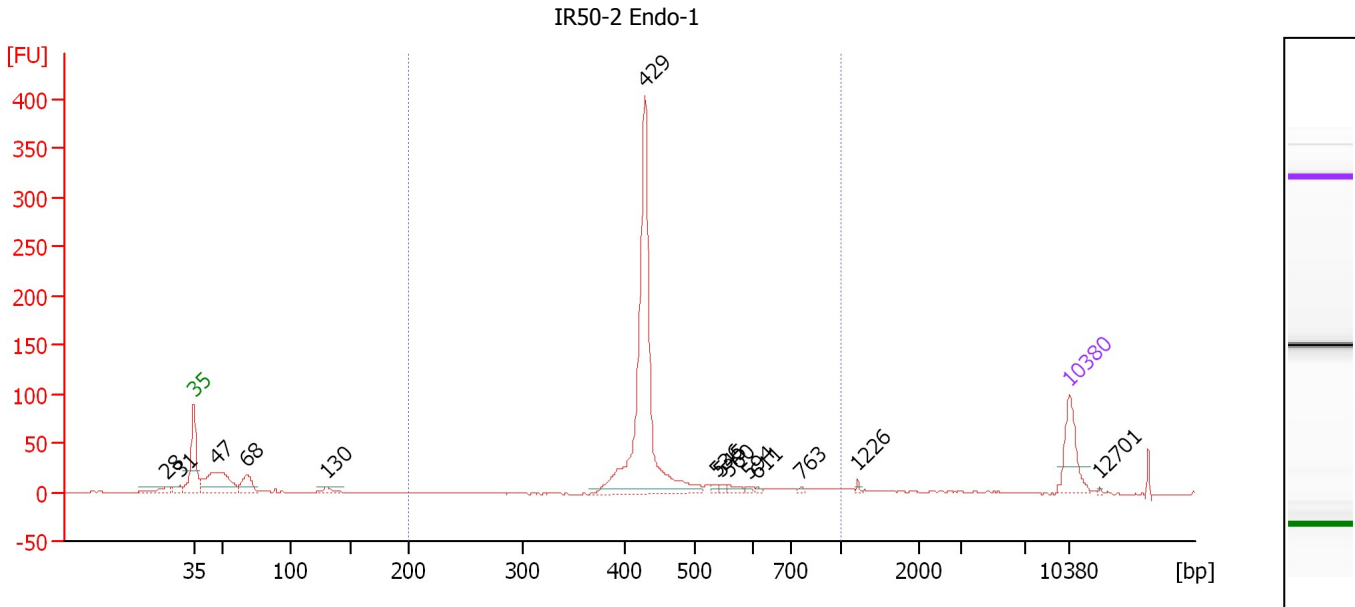
Region table for sample 2 : IR502 BF-1

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	453	2,459.5	715.52	618.7	71	18.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-07-12\2012-07-12_005.xad

Created: 7/12/2012 12:14:54 PM
 Modified: 7/12/2012 12:56:16 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : IR50-2 Endo-1

Number of peaks found: 14 Corr. Area 1: 665.8
 Noise: 0.3

Peak table for sample 3 : IR50-2 Endo-1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	28	0.00	0.0	
2	31	0.00	0.0	
3	35	125.00	5,411.3	Lower Marker
4	47	181.21	5,855.8	
5	68	60.71	1,352.2	
6	130	16.39	191.3	
7	429	643.69	2,271.0	
8	536	8.45	23.9	
9	545	7.18	20.0	
10	560	11.25	30.5	
11	594	4.41	11.2	
12	611	4.72	11.7	
13	763	3.56	7.1	
14	1,226	3.24	4.0	
15	10,380	75.00	10.9	Upper Marker
16	12,701	0.00	0.0	

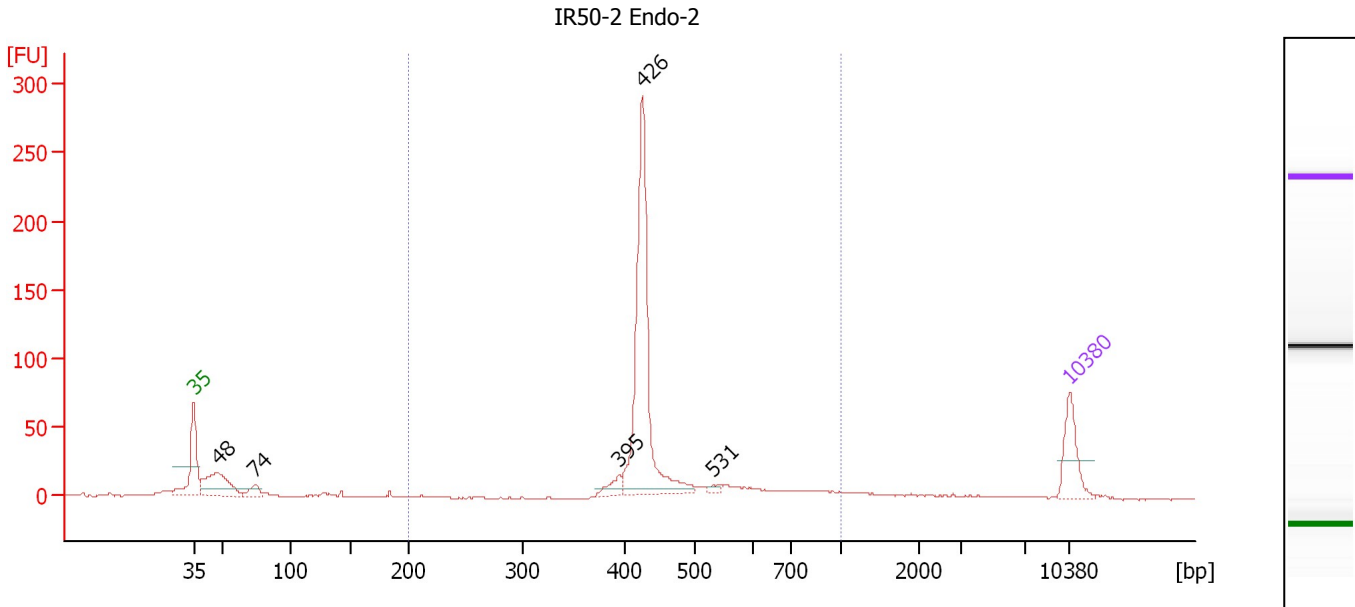
Region table for sample 3 : IR50-2 Endo-1

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	463	2,491.3	733.03	665.8	70	21.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-07-12\2012-07-12_005.xad

Created: 7/12/2012 12:14:54 PM
 Modified: 7/12/2012 12:56:16 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : IR50-2 Endo-2

Number of peaks found: 5 Corr. Area 1: 535.5
 Noise: 0.3

Peak table for sample 4 : IR50-2 Endo-2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	48	167.97	5,328.6	
3	74	33.12	677.6	
4	395	31.55	120.9	
5	426	539.34	1,918.4	
6	531	8.53	24.3	
7	10,380	75.00	10.9	Upper Marker

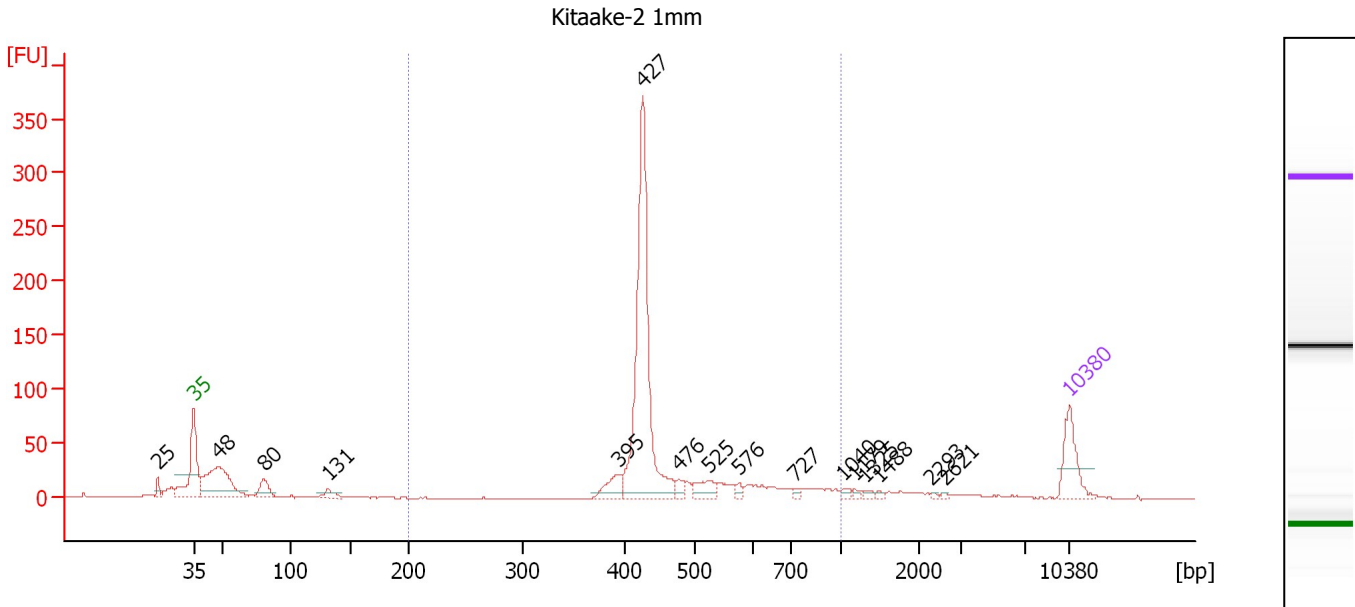
Region table for sample 4 : IR50-2 Endo-2

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	467	2,381.4	704.40	535.5	75	22.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-07-12\2012-07-12_005.xad

Created: 7/12/2012 12:14:54 PM
 Modified: 7/12/2012 12:56:16 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : Kitaake-2 1mm

Number of peaks found: 16 Corr. Area 1: 747.0
 Noise: 0.3

Peak table for sample 5 : Kitaake-2 1mm

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	25	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	48	257.44	8,128.8	
4	80	53.15	1,004.5	
5	131	25.04	288.5	
6	395	50.47	193.6	
7	427	621.93	2,208.5	
8	476	17.31	55.1	
9	525	42.26	122.0	
10	576	10.95	28.8	
11	727	7.63	15.9	
12	1,040	7.07	10.3	
13	1,179	5.36	6.9	
14	1,325	6.77	7.7	
15	1,488	5.32	5.4	
16	2,293	2.74	1.8	
17	2,621	3.34	1.9	
18	10,380	75.00	10.9	Upper Marker

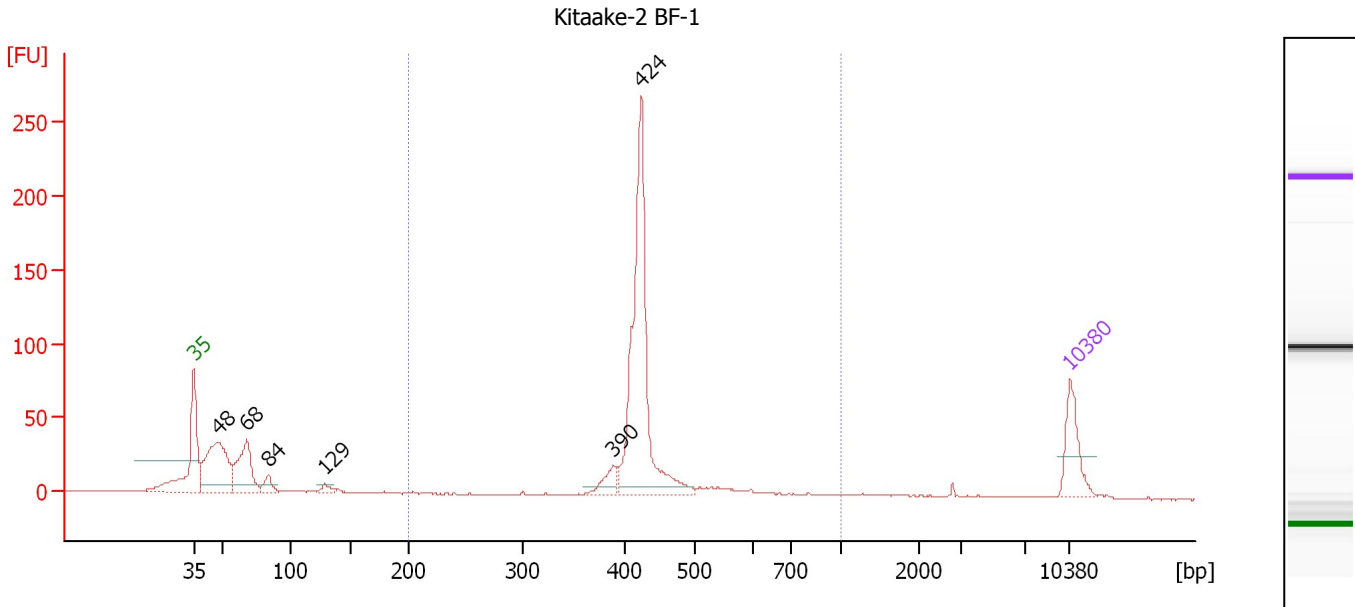
Region table for sample 5 : Kitaake-2 1mm

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	479	2,922.6	878.66	747.0	68	24.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-07-12\2012-07-12_005.xad

Created: 7/12/2012 12:14:54 PM
 Modified: 7/12/2012 12:56:16 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : Kitaake-2 BF-1

Number of peaks found: 6 Corr. Area 1: 506.9
 Noise: 0.2

Peak table for sample 6 : Kitaake-2 BF-1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	48	294.46	9,322.0	
3	68	179.18	4,000.8	
4	84	34.21	619.5	
5	129	17.23	203.2	
6	390	42.98	167.1	
7	424	550.27	1,965.2	
8	10,380	75.00	10.9	Upper Marker

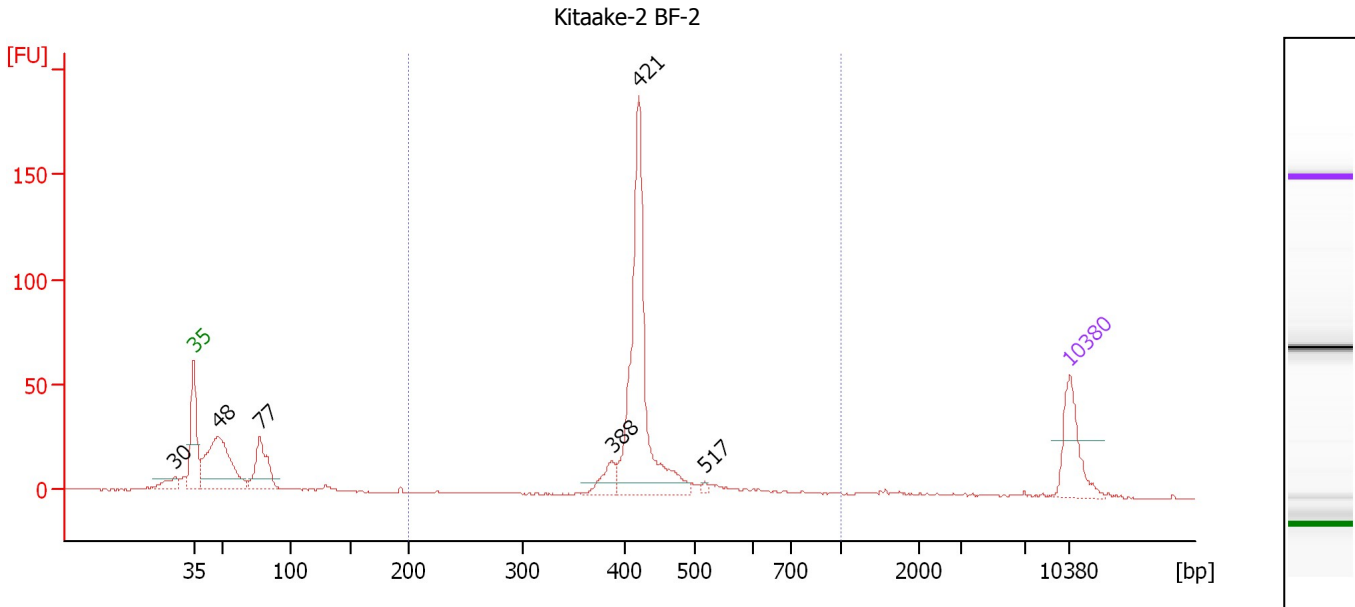
Region table for sample 6 : Kitaake-2 BF-1

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	438	2,337.7	660.66	506.9	61	15.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-07-12\2012-07-12_005.xad

Created: 7/12/2012 12:14:54 PM
 Modified: 7/12/2012 12:56:16 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : Kitaake-2 BF-2

Number of peaks found: 6 Corr. Area 1: 359.9
 Noise: 0.1

Peak table for sample 7 : Kitaake-2 BF-2

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	48	275.68	8,693.7	
4	77	120.04	2,358.1	
5	388	38.21	149.1	
6	421	432.06	1,555.4	
7	517	5.44	15.9	
8	10,380	75.00	10.9	Upper Marker

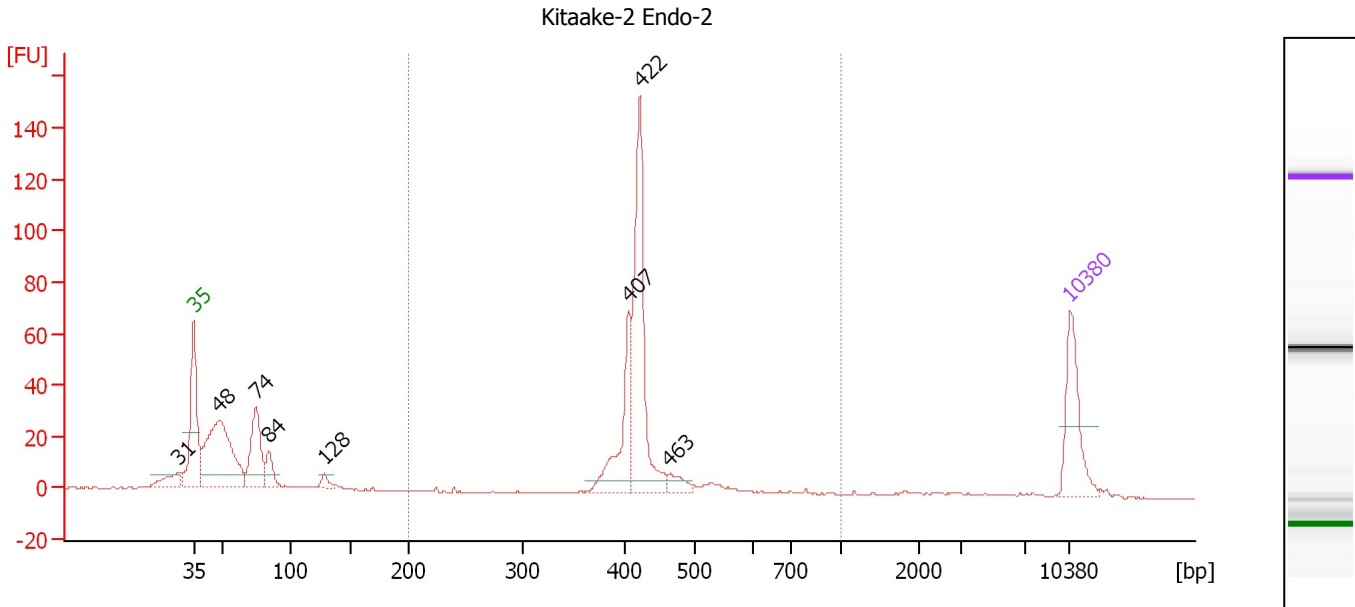
Region table for sample 7 : Kitaake-2 BF-2

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	442	1,846.7	526.08	359.9	57	17.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-07-12\2012-07-12_005.xad

Created: 7/12/2012 12:14:54 PM
 Modified: 7/12/2012 12:56:16 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : Kitaake-2 Endo-2

Number of peaks found: 8 Corr. Area 1: 292.2
 Noise: 0.2

Peak table for sample 8 : Kitaake-2 Endo-2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	31	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	48	277.30	8,701.3	
4	74	117.76	2,402.3	
5	84	36.81	663.4	
6	128	12.66	149.4	
7	407	116.04	432.1	
8	422	246.56	884.4	
9	463	19.68	64.5	
10	10,380	75.00	10.9	Upper Marker

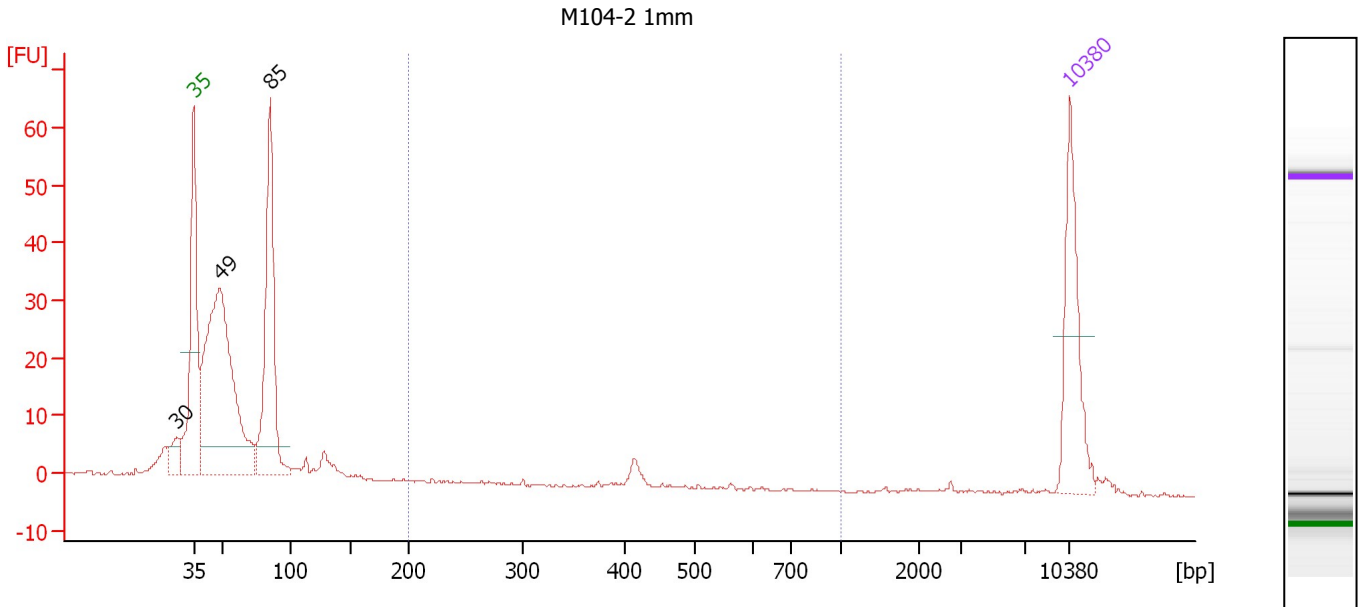
Region table for sample 8 : Kitaake-2 Endo-2

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	431	1,468.8	411.38	292.2	51	13.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-07-12\2012-07-12_005.xad

Created: 7/12/2012 12:14:54 PM
 Modified: 7/12/2012 12:56:16 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : M104-2 1mm

Number of peaks found: 3 Corr. Area 1: 5.5
 Noise: 0.2

Peak table for sample 9 : M104-2 1mm

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	49	398.14	12,361.8	
4	85	236.15	4,220.9	
5	10,380	75.00	10.9	Upper Marker

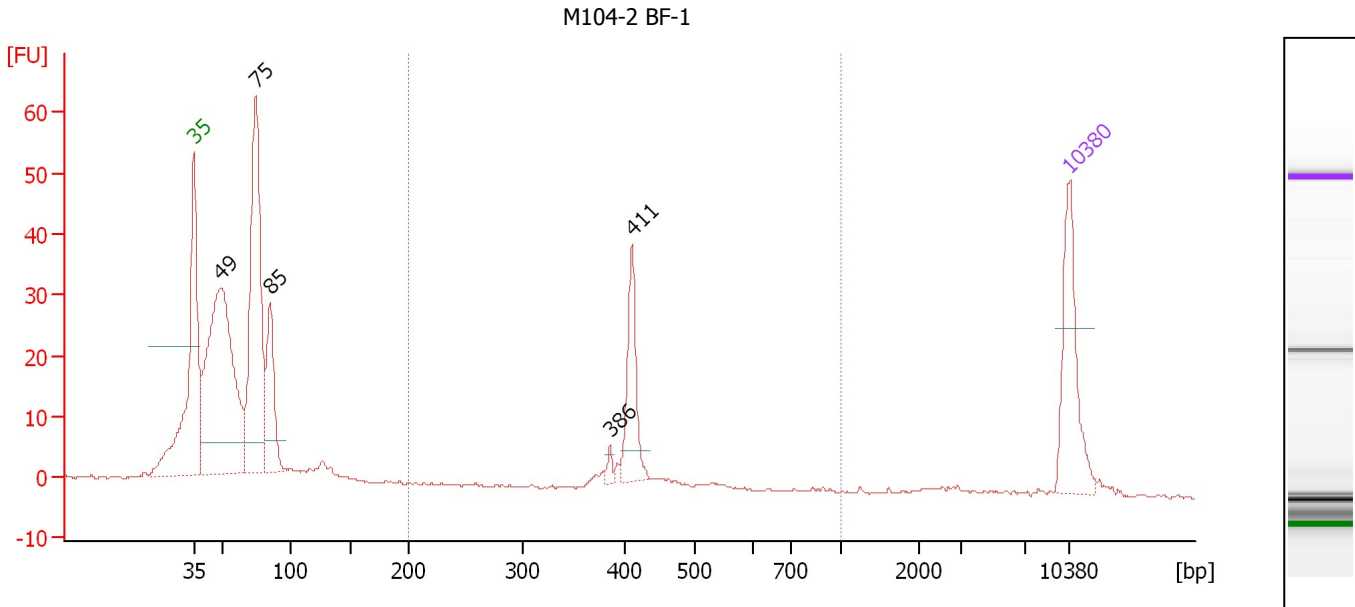
Region table for sample 9 : M104-2 1mm

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	414	31.7	8.53	5.5	2	9.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-07-12\2012-07-12_005.xad

Created: 7/12/2012 12:14:54 PM
 Modified: 7/12/2012 12:56:16 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : M104-2 BF-1

Number of peaks found: 5 Corr. Area 1: 53.8
 Noise: 0.2

Peak table for sample 10 : M104-2 BF-1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	49	430.98	13,229.9	
3	75	329.59	6,697.3	
4	85	104.39	1,858.0	
5	386	6.96	27.3	
6	411	77.05	284.0	
7	10,380	75.00	10.9	Upper Marker

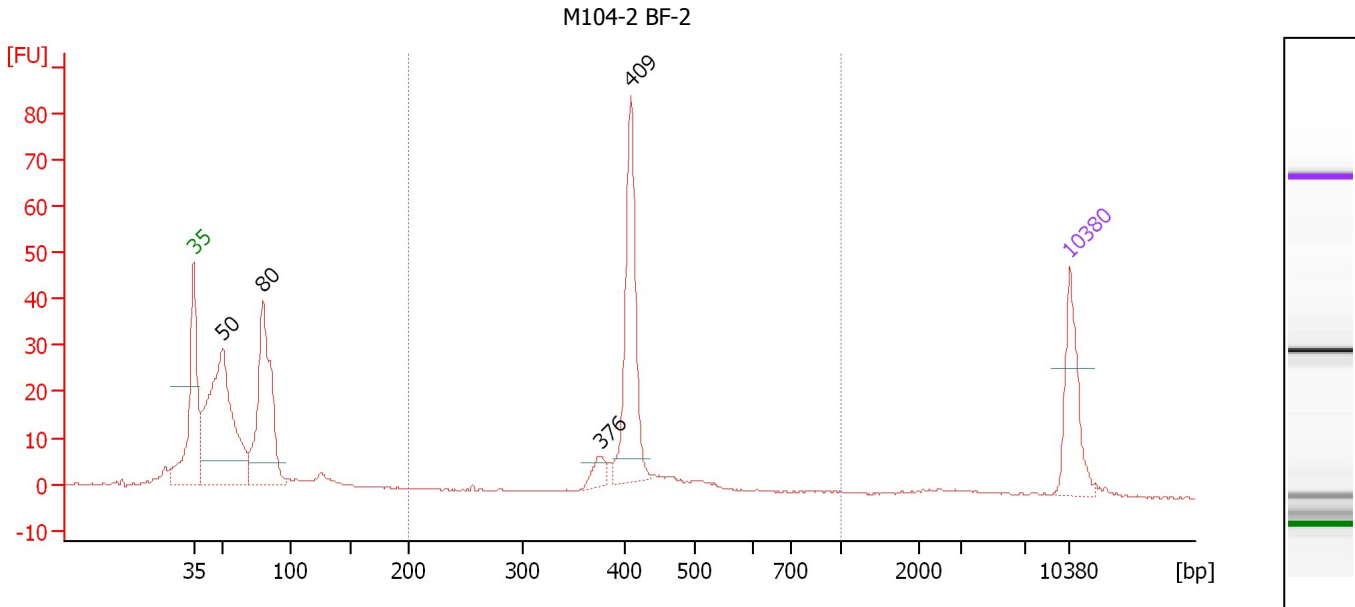
Region table for sample 10 : M104-2 BF-1

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	412	375.7	101.81	53.8	13	5.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-07-12\2012-07-12_005.xad

Created: 7/12/2012 12:14:54 PM
 Modified: 7/12/2012 12:56:16 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : M104-2 BF-2

Number of peaks found: 4 Corr. Area 1: 137.3
 Noise: 0.1

Peak table for sample 11 : M104-2 BF-2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	50	416.71	12,520.1	
3	80	304.38	5,784.9	
4	376	22.58	90.9	
5	409	200.31	741.8	
6	10,380	75.00	10.9	Upper Marker

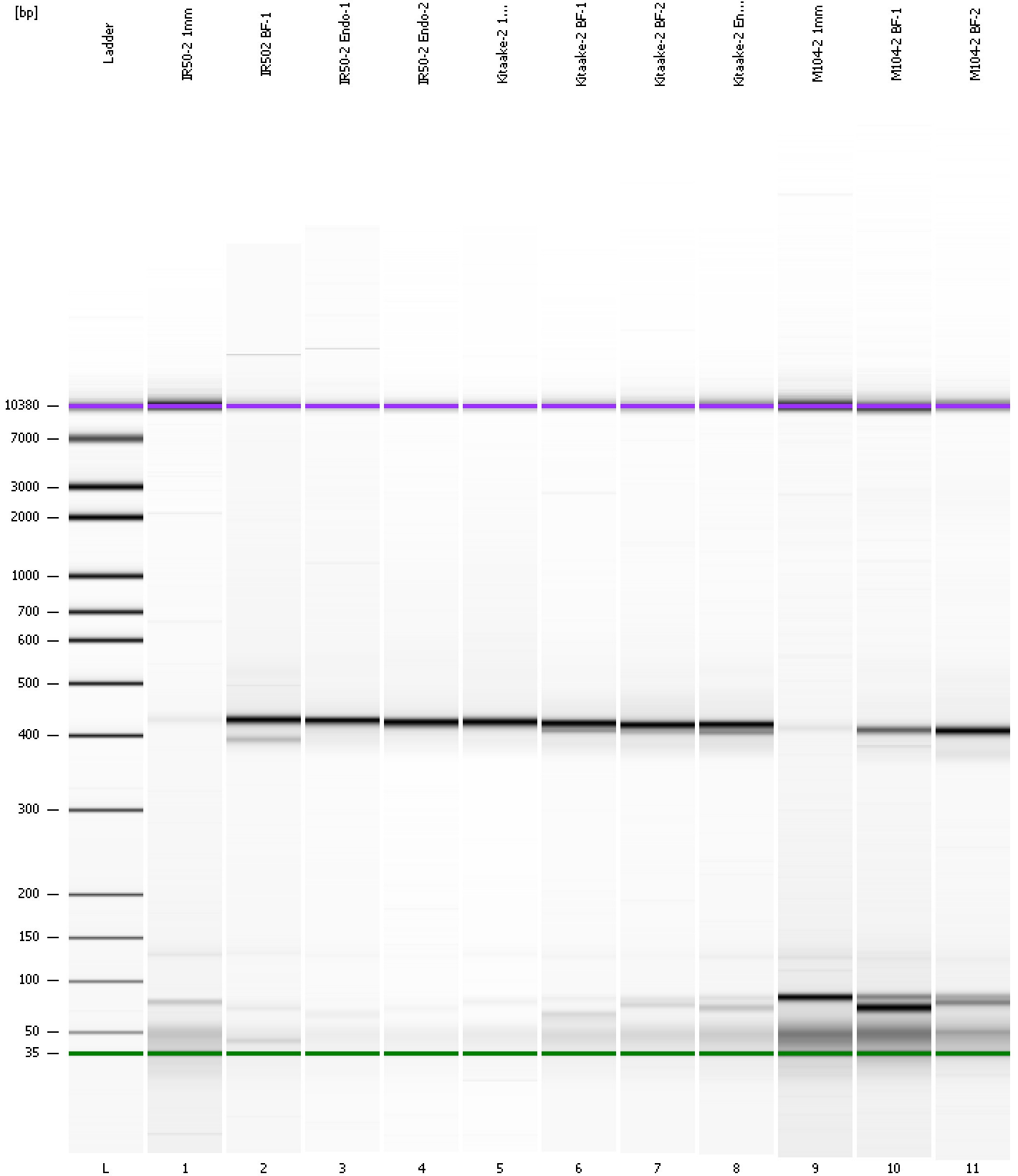
Region table for sample 11 : M104-2 BF-2

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	422	1,064.5	292.09	137.3	33	14.0	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-07-12\2012-07-12_005.xad

Created: 7/12/2012 12:14:54 PM
Modified: 7/12/2012 12:56:16 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-07-12\2012-07-12_005.xad

Created: 7/12/2012 12:14:54 PM
 Modified: 7/12/2012 12:56:16 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		7/12/2012 12:56:13 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2012-07-12\2012-07-12_005.xad)		Instrument	Run		7/12/2012 12:14:59 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		7/12/2012 12:14:59 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		7/12/2012 12:14:59 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		7/12/2012 12:14:59 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		7/12/2012 12:14:59 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		7/12/2012 12:14:59 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		7/12/2012 12:14:59 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1