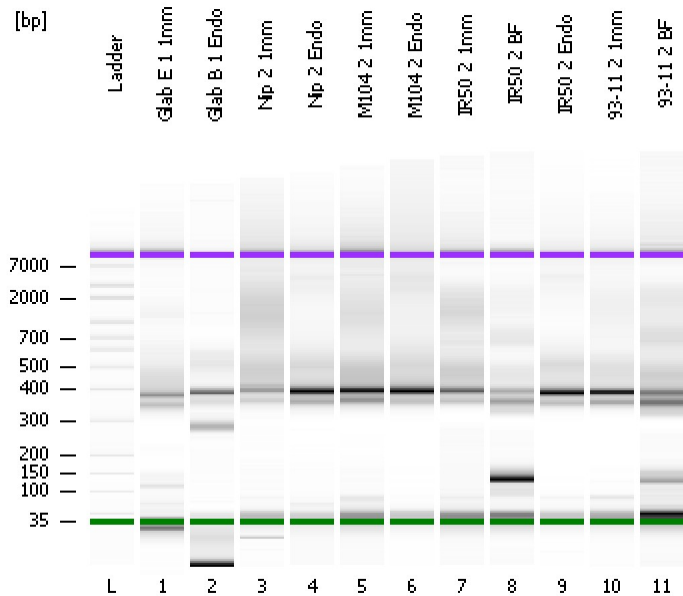


Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-10\2013-07-10_005.xad

Created: 7/10/2013 2:21:27 PM
 Modified: 7/10/2013 3:08:58 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

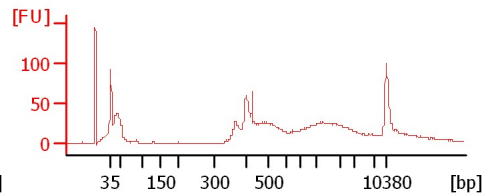
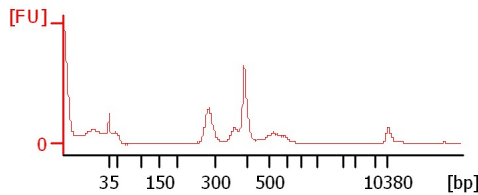
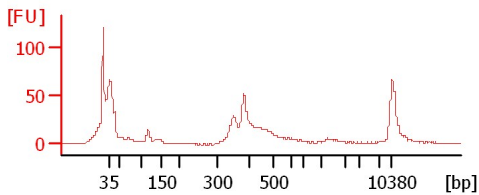
Chip Information:

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

Glab E 1 1mm

Glab B 1 Endo

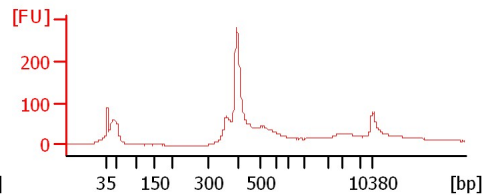
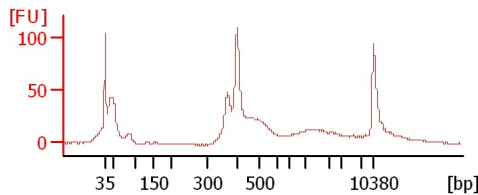
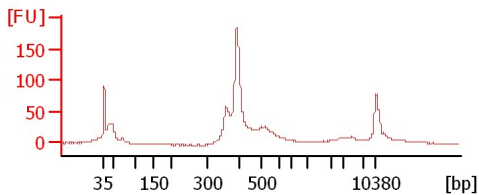
Nip 2 1mm



Nip 2 Endo

M104 2 1mm

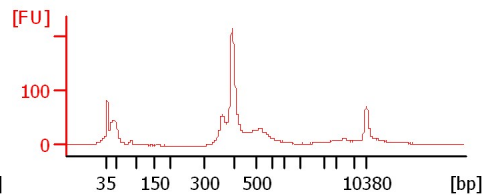
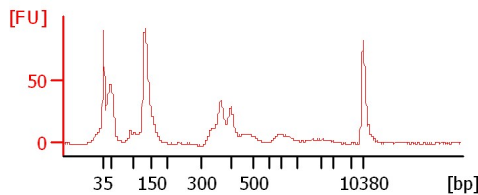
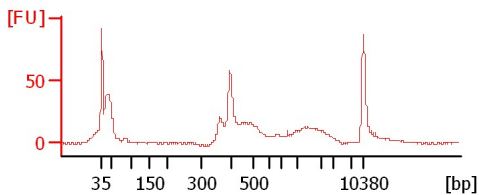
M104 2 Endo



IR50 2 1mm

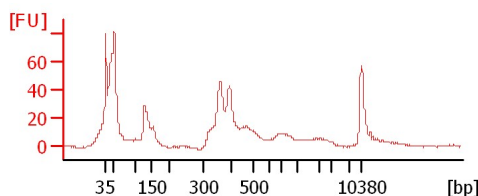
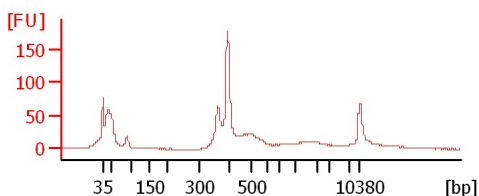
IR50 2 BF

IR50 2 Endo



93-11 2 1mm

93-11 2 BF



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-10\2013-07-10_005.xad

Created: 7/10/2013 2:21:27 PM
 Modified: 7/10/2013 3:08:58 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
Glab E 1 1mm		<input type="checkbox"/>	✓			
Glab B 1 Endo		<input type="checkbox"/>	✓			
Nip 2 1mm		<input type="checkbox"/>	✓			
Nip 2 Endo		<input type="checkbox"/>	✓			
M104 2 1mm		<input type="checkbox"/>	✓			
M104 2 Endo		<input type="checkbox"/>	✓			
IR50 2 1mm		<input type="checkbox"/>	✓			
IR50 2 BF		<input type="checkbox"/>	✓			
IR50 2 Endo		<input type="checkbox"/>	✓			
93-11 2 1mm		<input type="checkbox"/>	✓			
93-11 2 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\2013-07-10\2013-07-10_005.xad

Created: 7/10/2013 2:21:27 PM
Modified: 7/10/2013 3:08:58 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

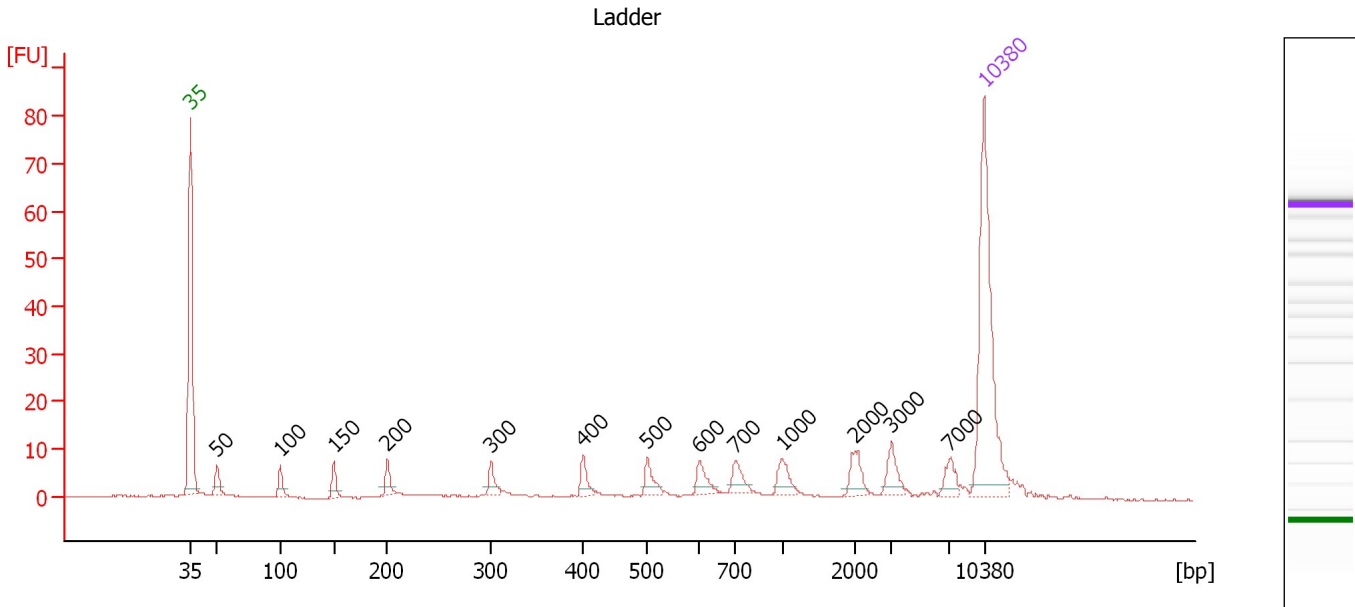
Ladder

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\2013-07-10\2013-07-10_005.xad

Created: 7/10/2013 2:21:27 PM
 Modified: 7/10/2013 3:08:58 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

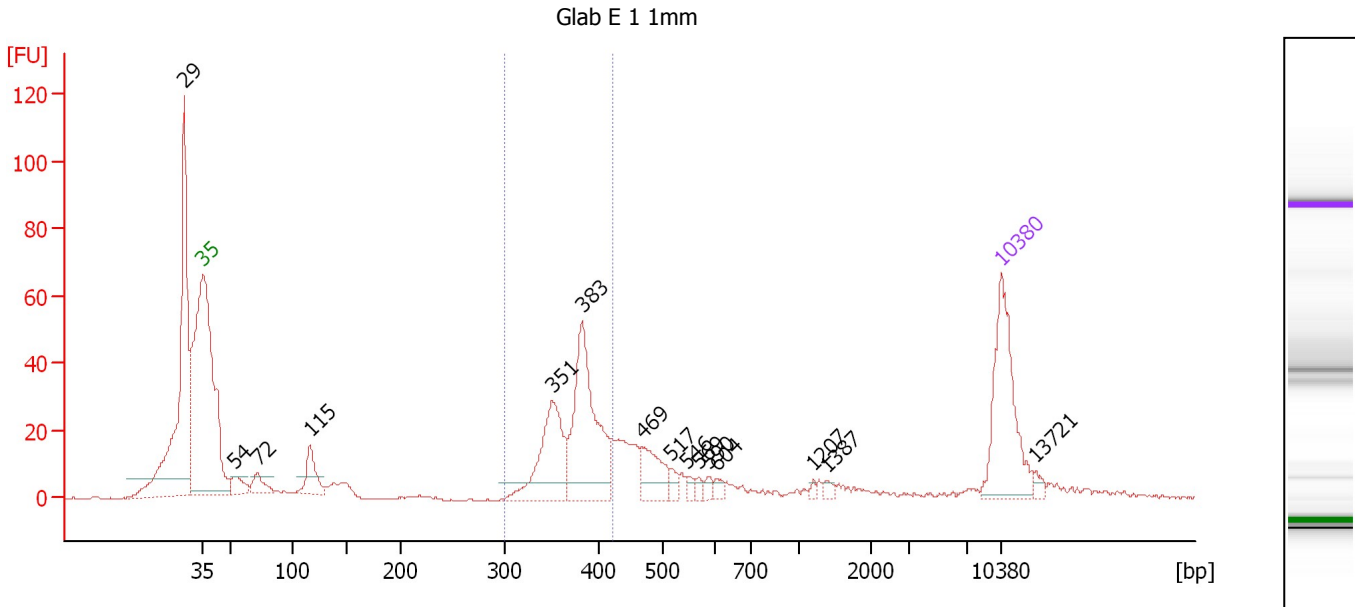
Peak table for Ladder

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\2013-07-10\2013-07-10_005.xad

Created: 7/10/2013 2:21:27 PM
 Modified: 7/10/2013 3:08:58 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : Glab E 1 1mm

Number of peaks found: 15 Corr. Area 1: 234.5
 Noise: 0.2

Peak table for sample 1 : Glab E 1 1mm

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	29	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	54	18.11	509.6	
4	72	17.47	368.4	
5	115	33.69	442.2	
6	351	90.26	390.0	
7	383	136.98	541.7	
8	469	35.94	116.2	
9	517	7.48	21.9	
10	546	4.57	12.7	
11	569	3.77	10.0	
12	590	5.14	13.2	
13	604	5.05	12.7	
14	1,207	2.45	3.1	
15	1,387	3.92	4.3	
16	10,380	75.00	10.9	Upper Marker
17	13,721	0.00	0.0	

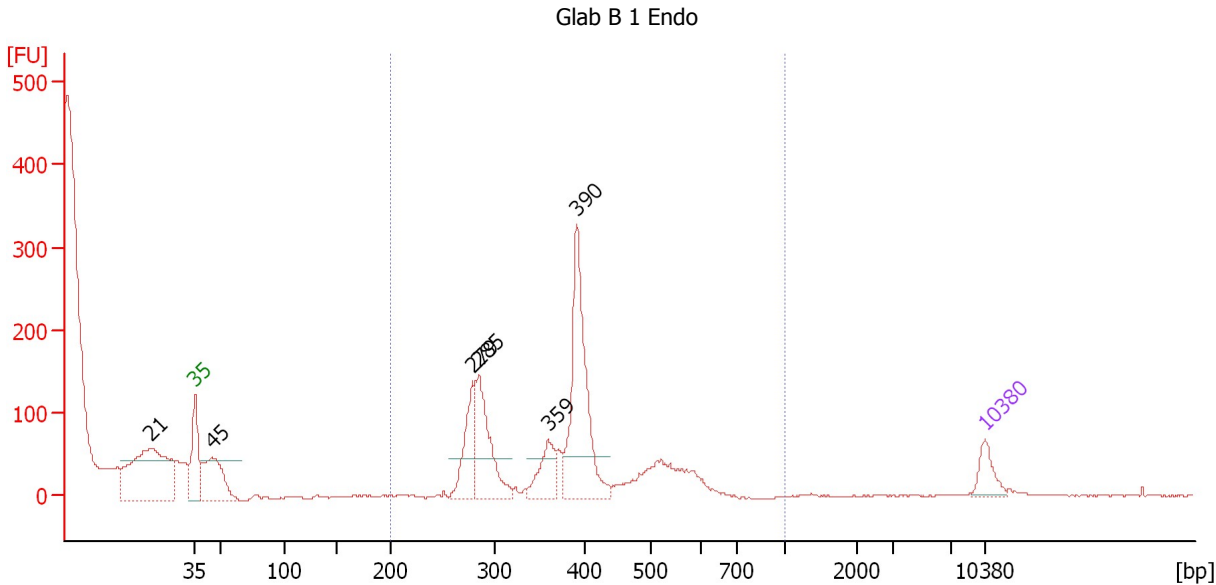
Region table for sample 1 : Glab E 1 1mm

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
299	423	374	905.7	223.11	234.5	30	6.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-10\2013-07-10_005.xad

Created: 7/10/2013 2:21:27 PM
 Modified: 7/10/2013 3:08:58 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 2 : Glab B 1 Endo

Height Threshold [FU] : 50

Overall Results for sample 2 : Glab B 1 Endo

Number of peaks found: 6 Corr. Area 1: 81.8
 Noise: 0.5

Peak table for sample 2 : Glab B 1 Endo

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	21	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	45	446.98	15,207.2	
4	279	311.42	1,689.9	
5	285	435.78	2,313.5	
6	359	188.26	794.5	
7	390	754.42	2,928.0	
8	10,380	75.00	10.9	Upper Marker

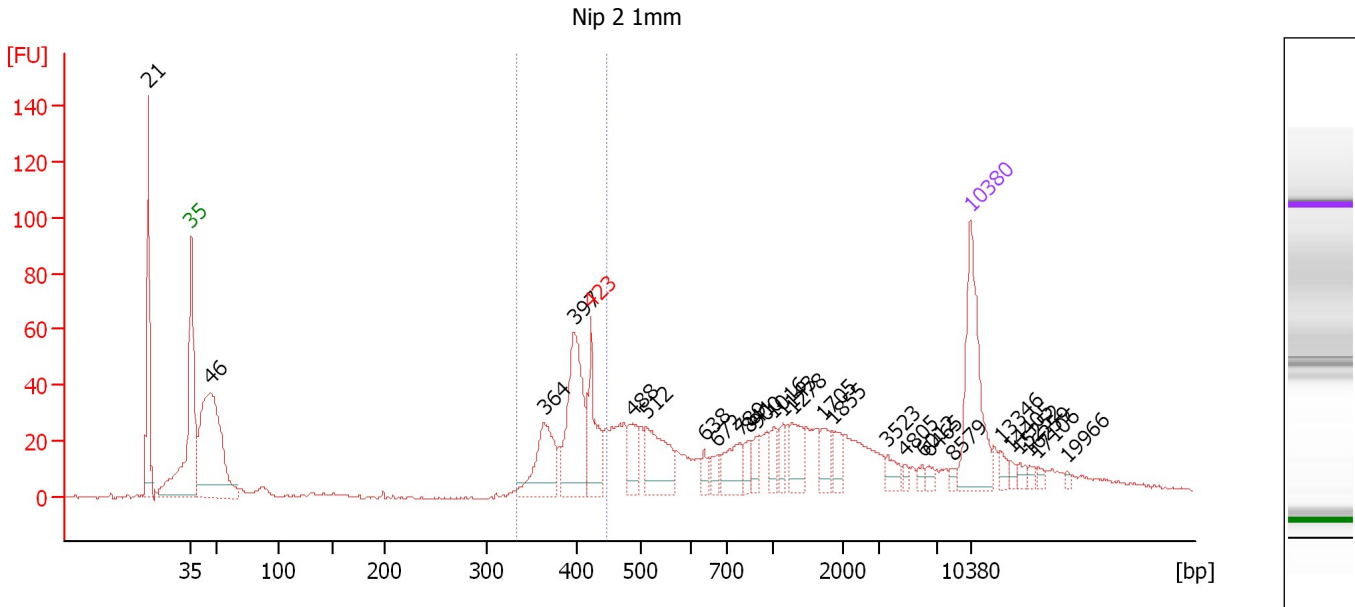
Region table for sample 2 : Glab B 1 Endo

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	391	376.2	97.11	81.8	100	0.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-10\2013-07-10_005.xad

Created: 7/10/2013 2:21:27 PM
 Modified: 7/10/2013 3:08:58 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : Nip 2 1mm

Number of peaks found: 27 Corr. Area 1: 257.3
 Noise: 0.4

Peak table for sample 3 : Nip 2 1mm

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	21	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	46	249.13	8,166.0	
4	364	66.09	275.3	
5	397	112.94	430.8	
6	423	51.75	185.3	excluded peak
7	488	28.80	89.4	
8	512	57.52	170.2	
9	638	8.14	19.3	
10	672	9.19	20.7	
11	789	27.83	53.5	
12	841	10.68	19.2	
13	900	11.90	20.0	
14	1,016	12.16	18.1	
15	1,143	11.44	15.2	
16	1,278	23.38	27.7	
17	1,705	14.82	13.2	
18	1,855	12.94	10.6	
19	3,523	10.22	4.4	
20	4,805	3.89	1.2	
21	6,012	4.35	1.1	
22	6,465	4.06	1.0	
23	8,579	3.52	0.6	
24	10,380	75.00	10.9	Upper Marker
25	13,346	0.00	0.0	
26	14,405	0.00	0.0	


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-10\2013-07-10_005.xad

Created: 7/10/2013 2:21:27 PM
Modified: 7/10/2013 3:08:58 PM

Electropherogram Summary Continued ...**... Peak table for sample 3 : Nip 2 1mm**

Peak	Size [bp]	Conc. [pg/ μ l]	Molarity [pmol/l]	Observations
27	15,252	0.00	0.0	
28	16,259	0.00	0.0	
29	17,106	0.00	0.0	
30	19,966	0.00	0.0	

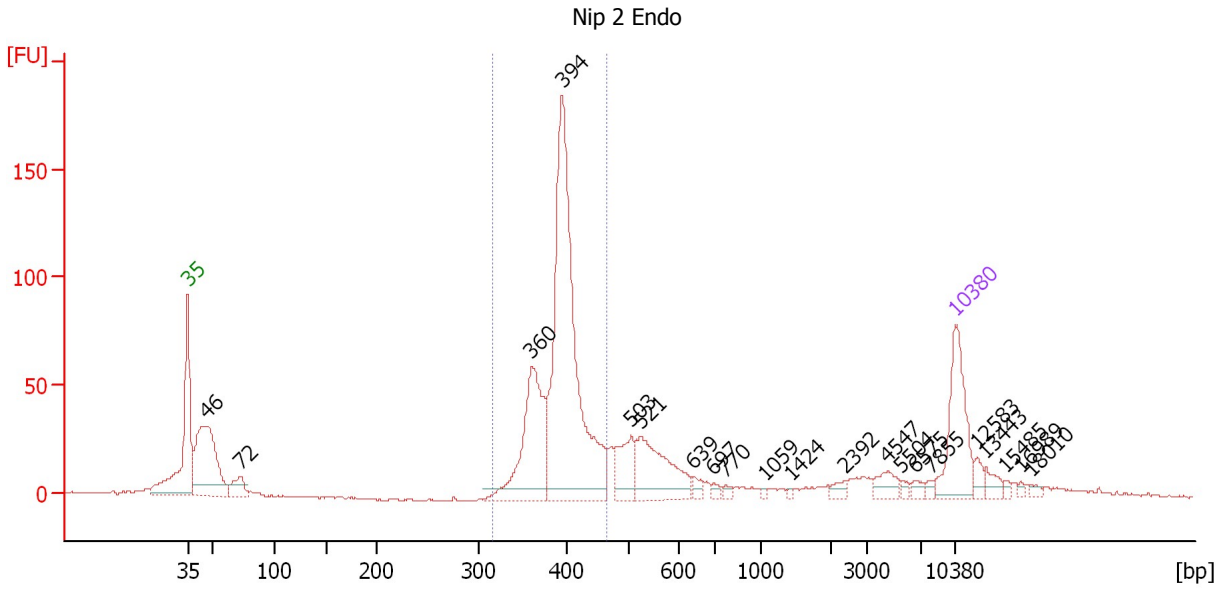
Region table for sample 3 : Nip 2 1mm

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/ μ l]	Corr. Area	% of Total	Size distribution in CV [%]	Color
333	447	398	884.1	231.29	257.3	22	6.3	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-10\2013-07-10_005.xad

Created: 7/10/2013 2:21:27 PM
 Modified: 7/10/2013 3:08:58 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : Nip 2 Endo

Number of peaks found: 21 Corr. Area 1: 671.7
 Noise: 0.5

Peak table for sample 4 : Nip 2 Endo

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	46	202.94	6,674.2	
3	72	28.79	602.6	
4	360	168.55	709.7	
5	394	465.49	1,790.6	
6	503	47.86	144.2	
7	521	103.50	301.0	
8	639	8.23	19.5	
9	697	5.87	12.8	
10	770	5.18	10.2	
11	1,059	2.39	3.4	
12	1,424	2.04	2.2	
13	2,392	7.47	4.7	
14	4,547	15.86	5.3	
15	5,504	3.97	1.1	
16	6,575	6.04	1.4	
17	7,855	3.90	0.8	
18	10,380	75.00	10.9	Upper Marker
19	12,583	0.00	0.0	
20	13,443	0.00	0.0	
21	15,485	0.00	0.0	
22	16,989	0.00	0.0	
23	18,010	0.00	0.0	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-10\2013-07-10_005.xad

Created: 7/10/2013 2:21:27 PM
Modified: 7/10/2013 3:08:58 PM

Electropherogram Summary Continued ...

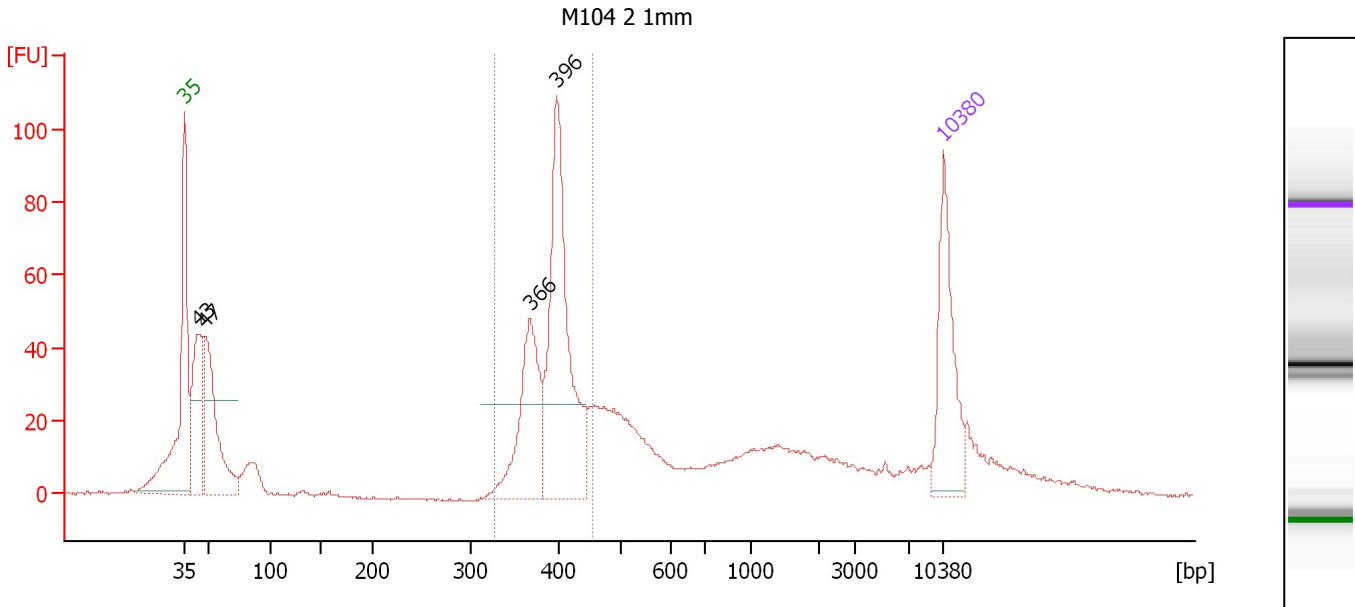
... Region table for sample 4 : Nip 2 Endo

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
317	462	393	2,284.4	590.37	671.7	55	6.5	■

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-10\2013-07-10_005.xad

Created: 7/10/2013 2:21:27 PM
 Modified: 7/10/2013 3:08:58 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 5 : M104 2 1mm

Height Threshold [FU] : 26

Overall Results for sample 5 : M104 2 1mm

Number of peaks found: 4 Corr. Area 1: 418.0
 Noise: 0.4

Peak table for sample 5 : M104 2 1mm

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	43	134.18	4,727.5	
3	47	158.08	5,078.4	
4	366	123.16	509.5	
5	396	234.56	896.4	
6	10,380	75.00	10.9	Upper Marker

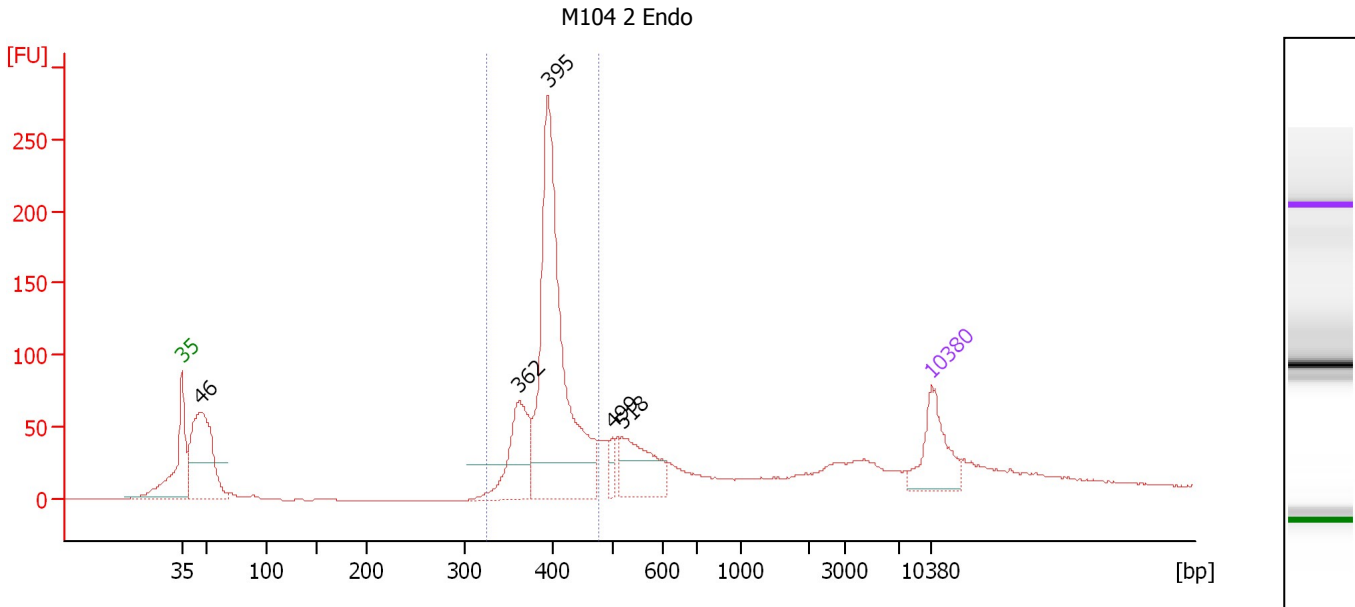
Region table for sample 5 : M104 2 1mm

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
326	454	394	1,365.7	353.45	418.0	37	6.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-10\2013-07-10_005.xad

Created: 7/10/2013 2:21:27 PM
 Modified: 7/10/2013 3:08:58 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 6 : M104 2 Endo

Height Threshold [FU] : 25

Overall Results for sample 6 : M104 2 Endo

Number of peaks found: 5 Corr. Area 1: 987.9
 Noise: 0.2

Peak table for sample 6 : M104 2 Endo

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	46	320.99	10,495.5	
3	362	149.60	626.5	
4	395	579.69	2,224.5	
5	499	21.67	65.8	
6	518	117.11	342.8	
7	10,380	75.00	10.9	Upper Marker

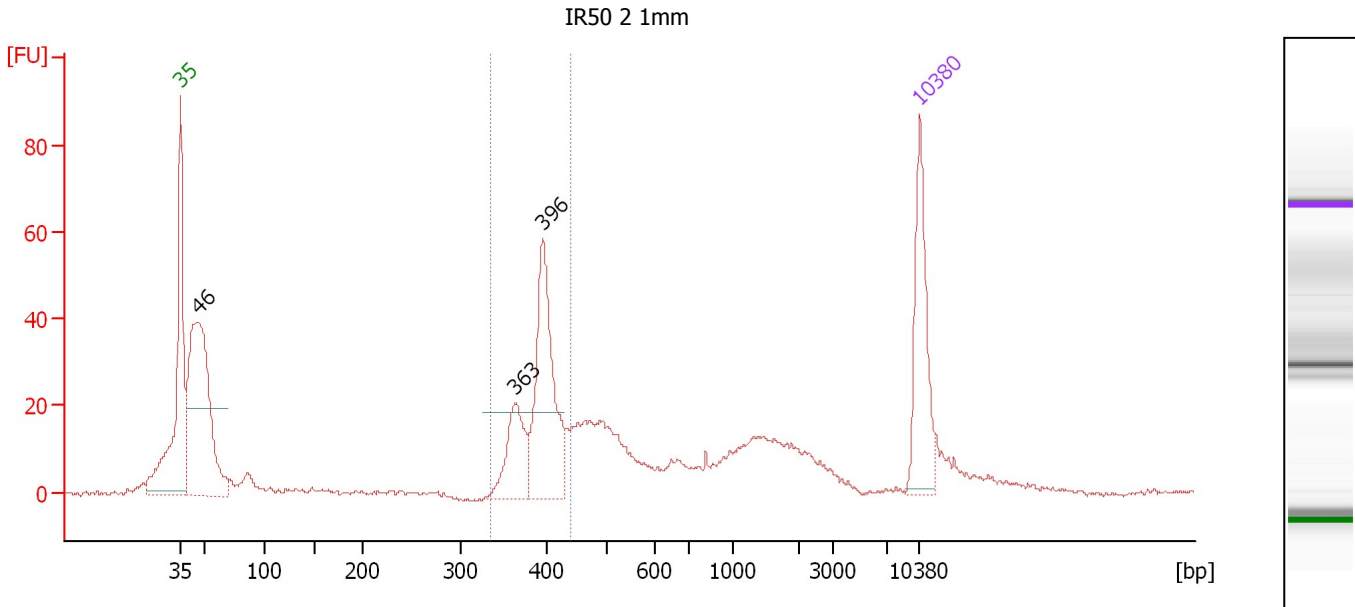
Region table for sample 6 : M104 2 Endo

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
325	477	400	2,596.9	682.98	987.9	51	7.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-10\2013-07-10_005.xad

Created: 7/10/2013 2:21:27 PM
 Modified: 7/10/2013 3:08:58 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 7 : IR50 2 1mm

Height Threshold [FU] : 20

Overall Results for sample 7 : IR50 2 1mm

Number of peaks found: 3 Corr. Area 1: 197.5
 Noise: 0.6

Peak table for sample 7 : IR50 2 1mm

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	46	341.66	11,373.1	
3	363	68.28	284.9	
4	396	159.04	608.6	
5	10,380	75.00	10.9	Upper Marker

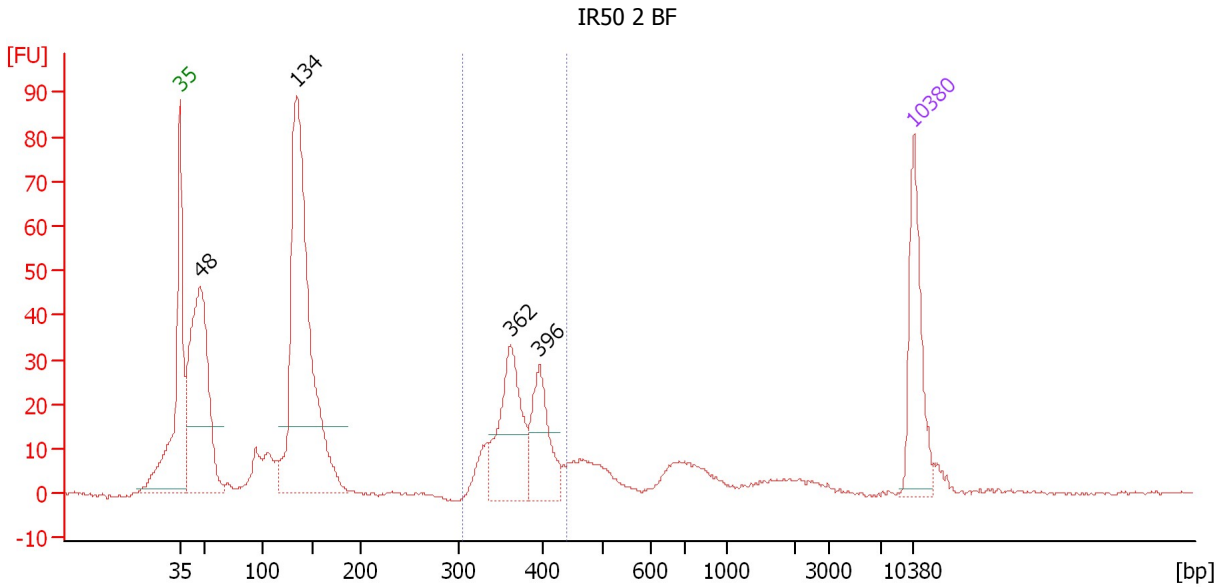
Region table for sample 7 : IR50 2 1mm

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
335	442	393	852.4	220.69	197.5	27	5.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-10\2013-07-10_005.xad

Created: 7/10/2013 2:21:27 PM
 Modified: 7/10/2013 3:08:58 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 8 : IR50 2 BF

Height Threshold [FU] : 15

Overall Results for sample 8 : IR50 2 BF

Number of peaks found: 4 Corr. Area 1: 191.5
 Noise: 0.3

Peak table for sample 8 : IR50 2 BF

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	48	359.80	11,457.7	
3	134	544.44	6,137.1	
4	362	131.94	552.1	
5	396	87.25	334.0	
6	10,380	75.00	10.9	Upper Marker

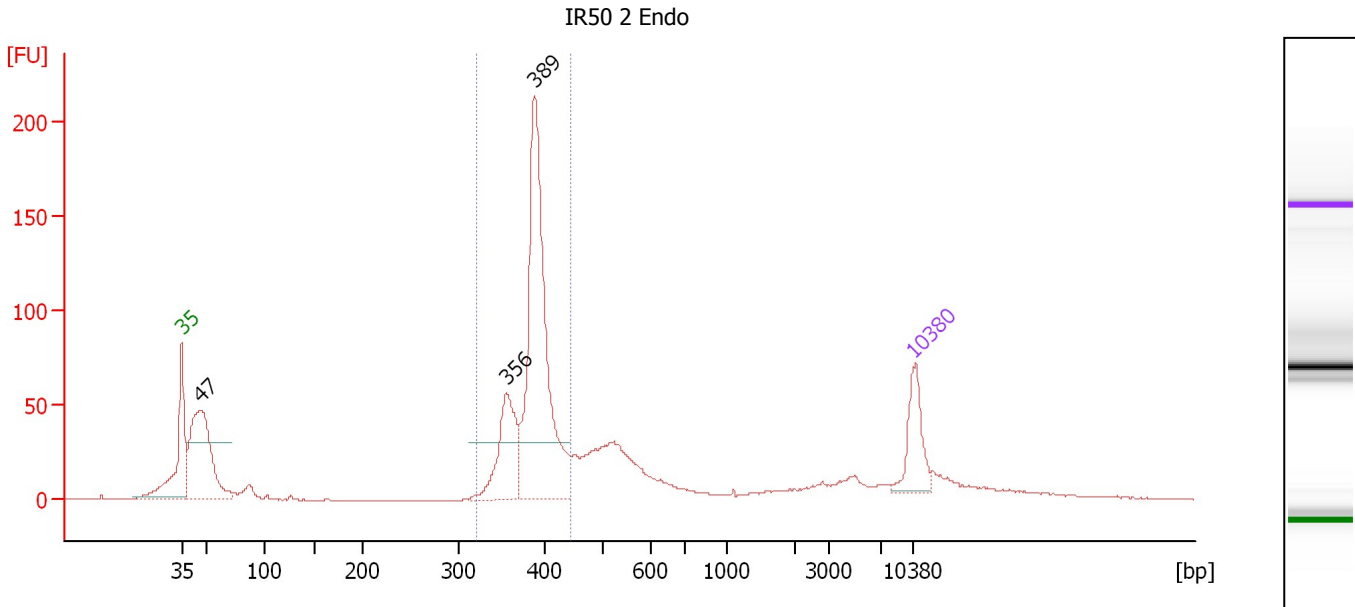
Region table for sample 8 : IR50 2 BF

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
305	438	373	924.1	226.99	191.5	22	7.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-10\2013-07-10_005.xad

Created: 7/10/2013 2:21:27 PM
 Modified: 7/10/2013 3:08:58 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 9 : IR50 2 Endo

Height Threshold [FU] : 30

Overall Results for sample 9 : IR50 2 Endo

Number of peaks found: 3 Corr. Area 1: 670.8
 Noise: 0.2

Peak table for sample 9 : IR50 2 Endo

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	47	412.01	13,392.7	
3	356	184.95	787.0	
4	389	613.95	2,389.6	
5	10,380	75.00	10.9	Upper Marker

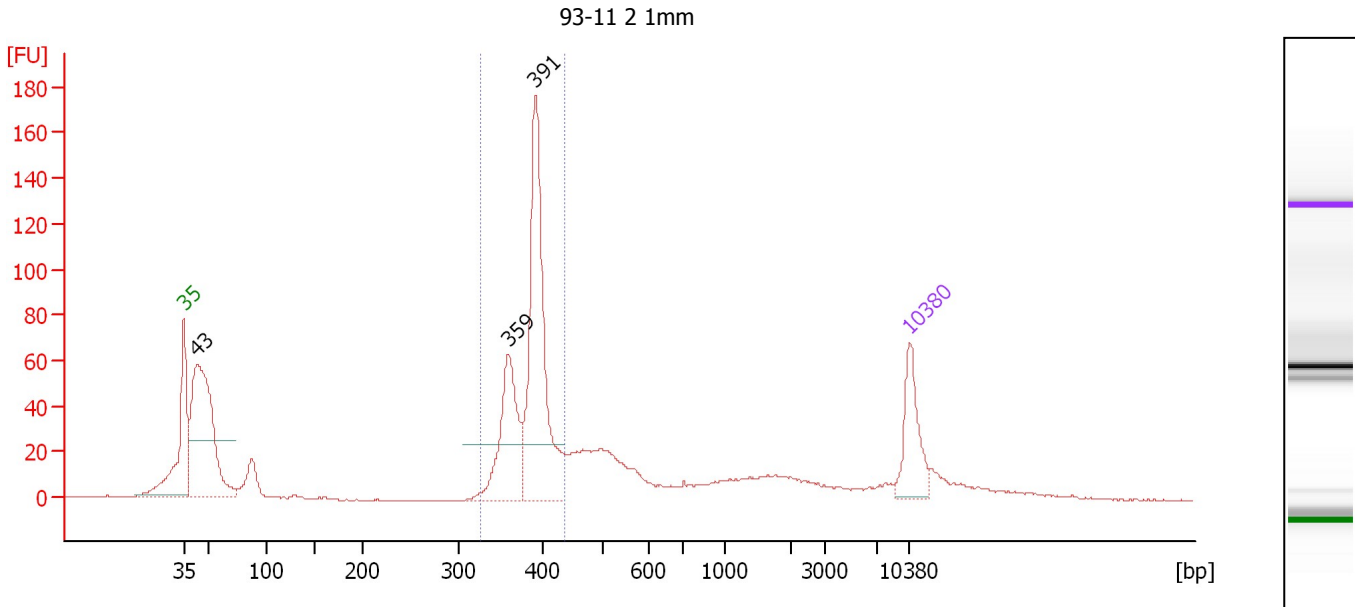
Region table for sample 9 : IR50 2 Endo

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
322	445	387	3,072.7	783.88	670.8	49	5.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-10\2013-07-10_005.xad

Created: 7/10/2013 2:21:27 PM
 Modified: 7/10/2013 3:08:58 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 10 : 93-11 2 1mm

Height Threshold [FU] : 25

Overall Results for sample 10 : 93-11 2 1mm

Number of peaks found: 3 Corr. Area 1: 514.7
 Noise: 0.2

Peak table for sample 10 : 93-11 2 1mm

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	43	509.63	17,805.4	
3	359	198.50	838.2	
4	391	408.66	1,583.4	
5	10,380	75.00	10.9	Upper Marker

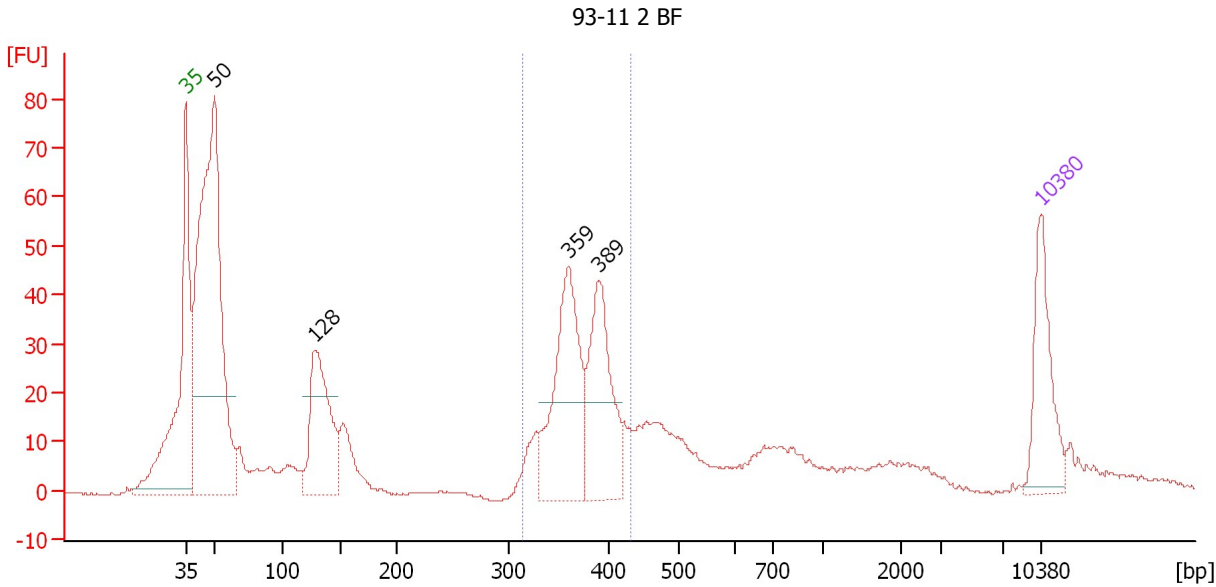
Region table for sample 10 : 93-11 2 1mm

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
327	438	385	2,298.2	582.99	514.7	41	5.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-10\2013-07-10_005.xad

Created: 7/10/2013 2:21:27 PM
 Modified: 7/10/2013 3:08:58 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 11 : 93-11 2 BF

Height Threshold [FU] : 20

Overall Results for sample 11 : 93-11 2 BF

Number of peaks found: 4 Corr. Area 1: 283.2
 Noise: 0.3

Peak table for sample 11 : 93-11 2 BF

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	50	700.46	21,158.5	
3	128	191.26	2,265.2	
4	359	212.29	896.1	
5	389	165.02	642.1	
6	10,380	75.00	10.9	Upper Marker

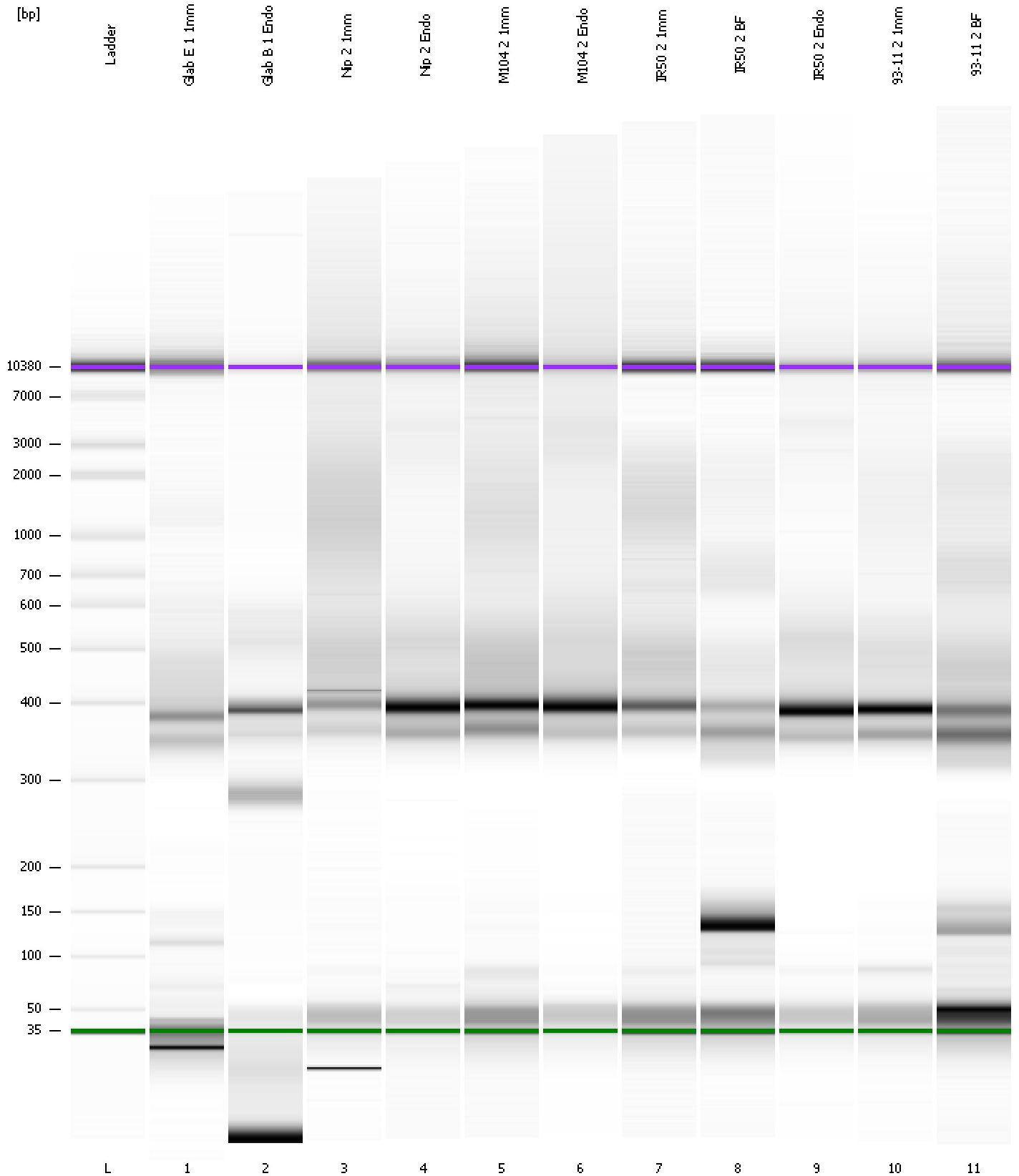
Region table for sample 11 : 93-11 2 BF

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
314	432	372	1,637.0	401.08	283.2	26	7.0	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-10\2013-07-10_005.xad

Created: 7/10/2013 2:21:27 PM
Modified: 7/10/2013 3:08:58 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-10\2013-07-10_005.xad

Created: 7/10/2013 2:21:27 PM
 Modified: 7/10/2013 3:08:58 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		7/10/2013 3:02:46 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-07-10\2013-07-10_005.xad)		Instrument	Run		7/10/2013 2:21:33 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		7/10/2013 2:21:33 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		7/10/2013 2:21:33 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		7/10/2013 2:21:33 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		7/10/2013 2:21:33 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		7/10/2013 2:21:33 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		7/10/2013 2:21:33 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1