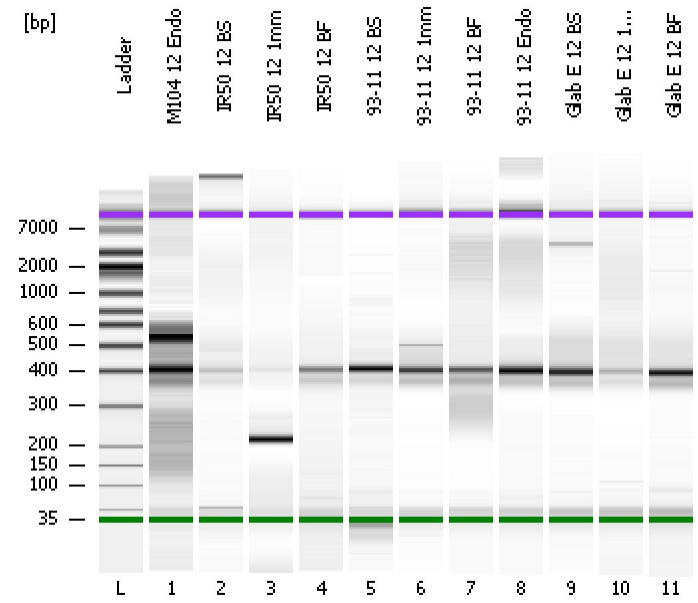
Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-12\2013-06-12_001.xad

Created: 6/12/2013 9:26:08 AM
Modified: 6/12/2013 10:08:02 AM

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

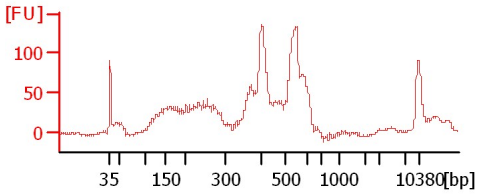
Chip Information:

Chip Lot #:

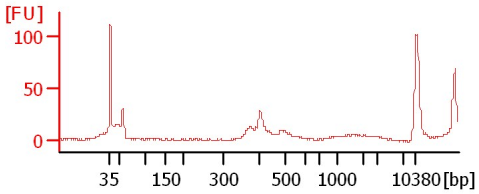
Reagent Kit Lot #:

Chip Comments:

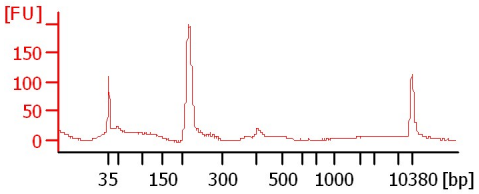
M104 12 Endo



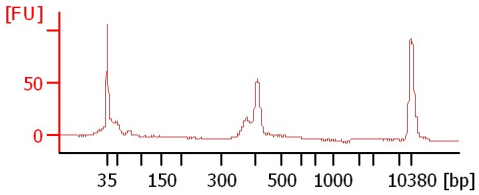
IR50 12 BS



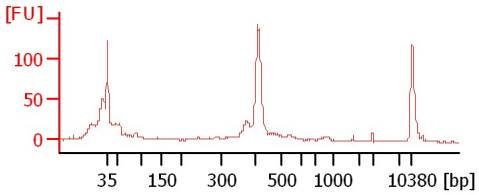
IR50 12 1mm



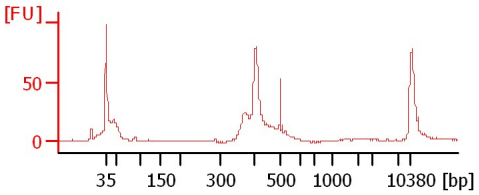
IR50 12 BF



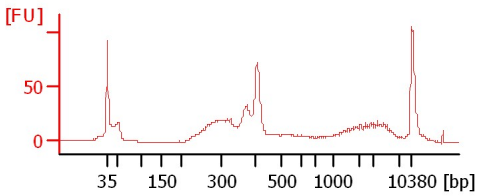
93-11 12 BS



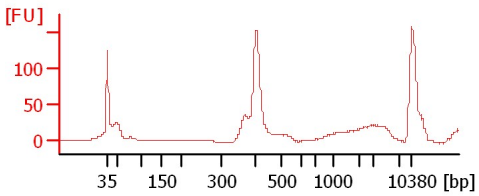
93-11 12 1mm



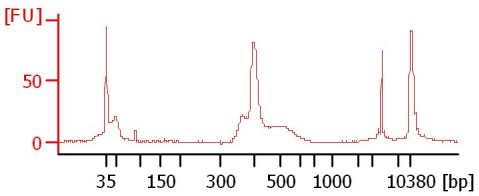
93-11 12 BF



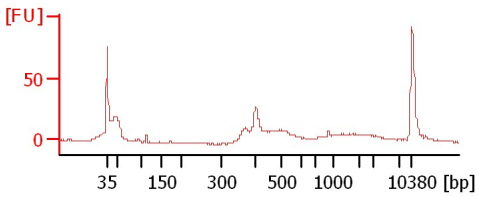
93-11 12 Endo



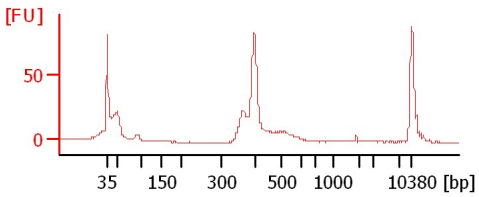
Glab E 12 BS



Glab E 12 1mm



Glab E 12 BF



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-12\2013-06-12_001.xad

Created: 6/12/2013 9:26:08 AM
Modified: 6/12/2013 10:08:02 AM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
M104 12 Endo		☐	✔			
IR50 12 BS		☐	✔			
IR50 12 1mm		☐	✔			
IR50 12 BF		☐	✔			
93-11 12 BS		☐	✔			
93-11 12 1mm		☐	✔			
93-11 12 BF		☐	✔			
93-11 12 Endo		☐	✔			
Glab E 12 BS		☐	✔			
Glab E 12 1mm		☐	✔			
Glab E 12 BF		☐	✔			
Ladder		☐	✔			

Chip Lot # **Reagent Kit Lot #**

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-12\2013-06-12_001.xad

Created: 6/12/2013 9:26:08 AM
Modified: 6/12/2013 10:08:02 AM

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

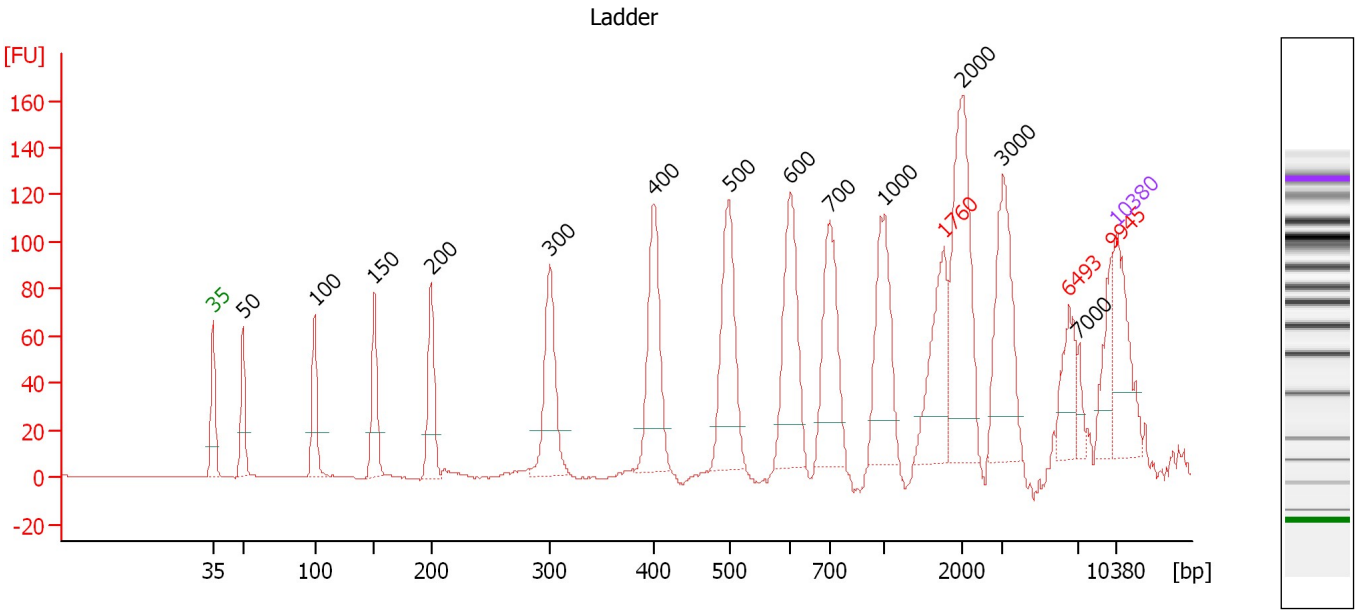
Ladder

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\2013-06-12\2013-06-12_001.xad

Created: 6/12/2013 9:26:08 AM
Modified: 6/12/2013 10:08:02 AM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

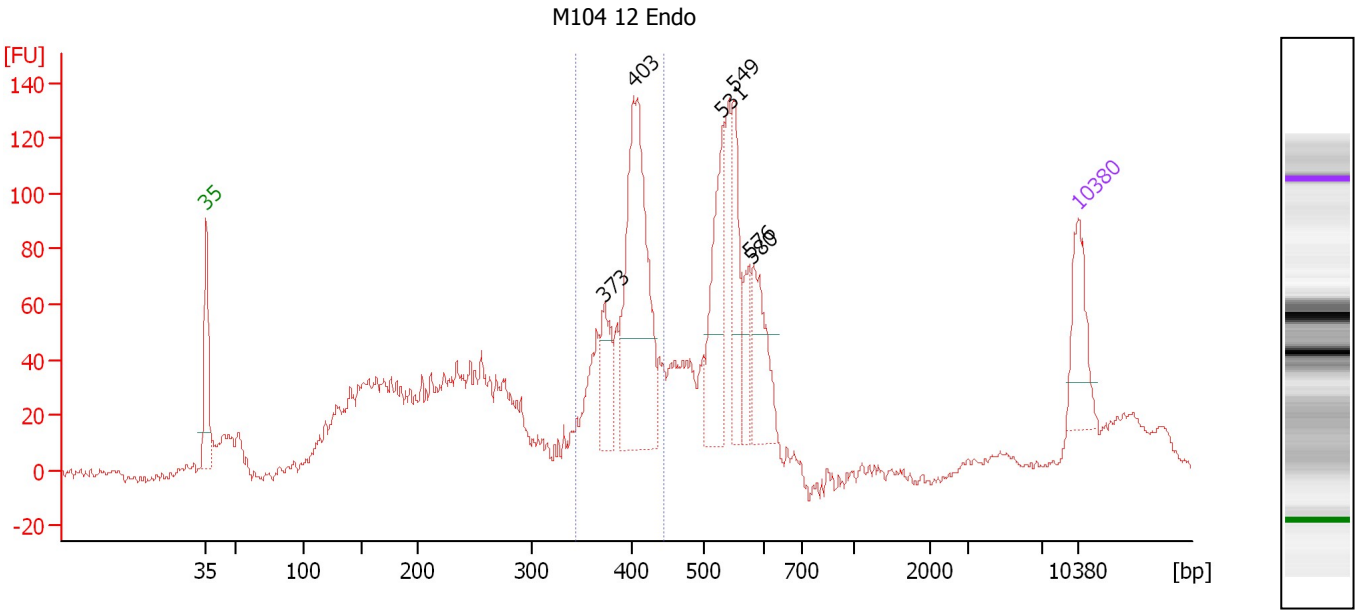
Peak table for Ladder

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		1,760	0.00	0.0	excluded peak
13		2,000	150.00	113.6	Ladder Peak
14		3,000	150.00	75.8	Ladder Peak
15		6,493	0.00	0.0	excluded peak
16		7,000	150.00	32.5	Ladder Peak
17		9,945	0.00	0.0	excluded peak
18		10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-12\2013-06-12_001.xad

Created: 6/12/2013 9:26:08 AM
Modified: 6/12/2013 10:08:02 AM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 1 : M104 12 Endo

Height Threshold [FU] : 40

Overall Results for sample 1 : M104 12 Endo

Number of peaks found:	6	Corr. Area 1:	580.7
Noise:	1.8		

Peak table for sample 1 : M104 12 Endo

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	373	88.51	360.0	
3	403	388.63	1,460.6	
4	531	174.66	498.6	
5	549	112.34	310.2	
6	576	54.71	144.0	
7	580	111.54	291.2	
8	10,380	75.00	10.9	Upper Marker

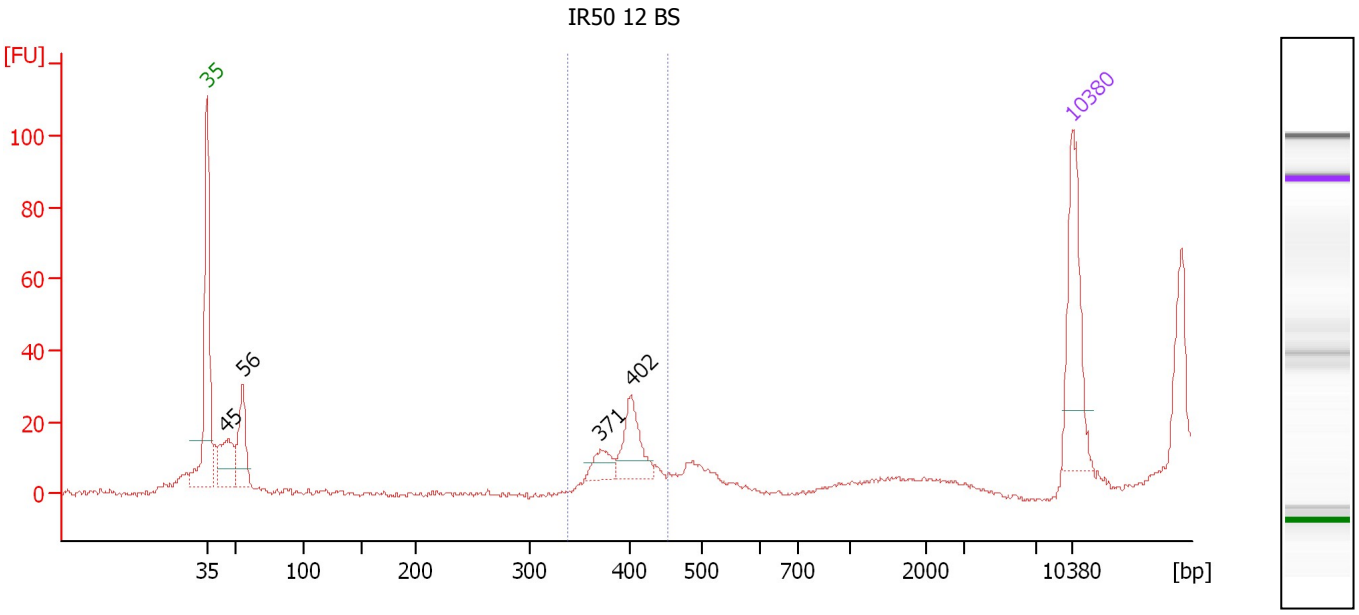
Region table for sample 1 : M104 12 Endo

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
344	445	397	2,581.9	674.34	580.7	26	5.9	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-12\2013-06-12_001.xad

Created: 6/12/2013 9:26:08 AM
Modified: 6/12/2013 10:08:02 AM

Electropherogram Summary Continued ...



Overall Results for sample 2 : IR50 12 BS

Number of peaks found:	4	Corr. Area 1:	0.5
Noise:	0.7		

Peak table for sample 2 : IR50 12 BS

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	45	65.72	2,201.1	
3	56	68.98	1,882.7	
4	371	22.19	90.6	
5	402	51.55	194.1	
6	10,380	75.00	10.9	Upper Marker

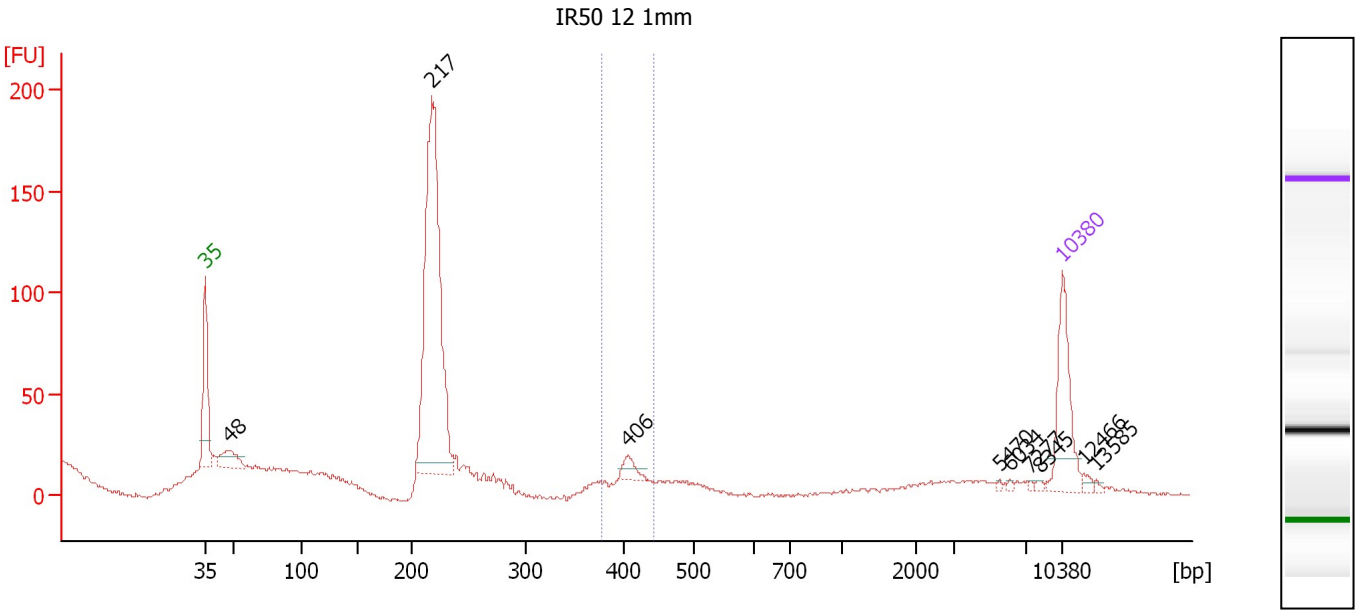
Region table for sample 2 : IR50 12 BS

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
338	454	402	1.9	0.49	0.5	1	0.4	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-12\2013-06-12_001.xad

Created: 6/12/2013 9:26:08 AM
Modified: 6/12/2013 10:08:02 AM

Electropherogram Summary Continued ...



Overall Results for sample 3 : IR50 12 1mm

Number of peaks found:	9	Corr. Area 1:	19.5
Noise:	0.9		

Peak table for sample 3 : IR50 12 1mm

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	48	45.32	1,432.6	
3	217	528.22	3,680.5	
4	406	17.61	65.7	
5	5,470	1.56	0.4	
6	6,034	1.96	0.5	
7	7,277	1.79	0.4	
8	8,345	2.36	0.4	
9	10,380	75.00	10.9	Upper Marker
10	12,466	0.00	0.0	
11	13,585	0.00	0.0	

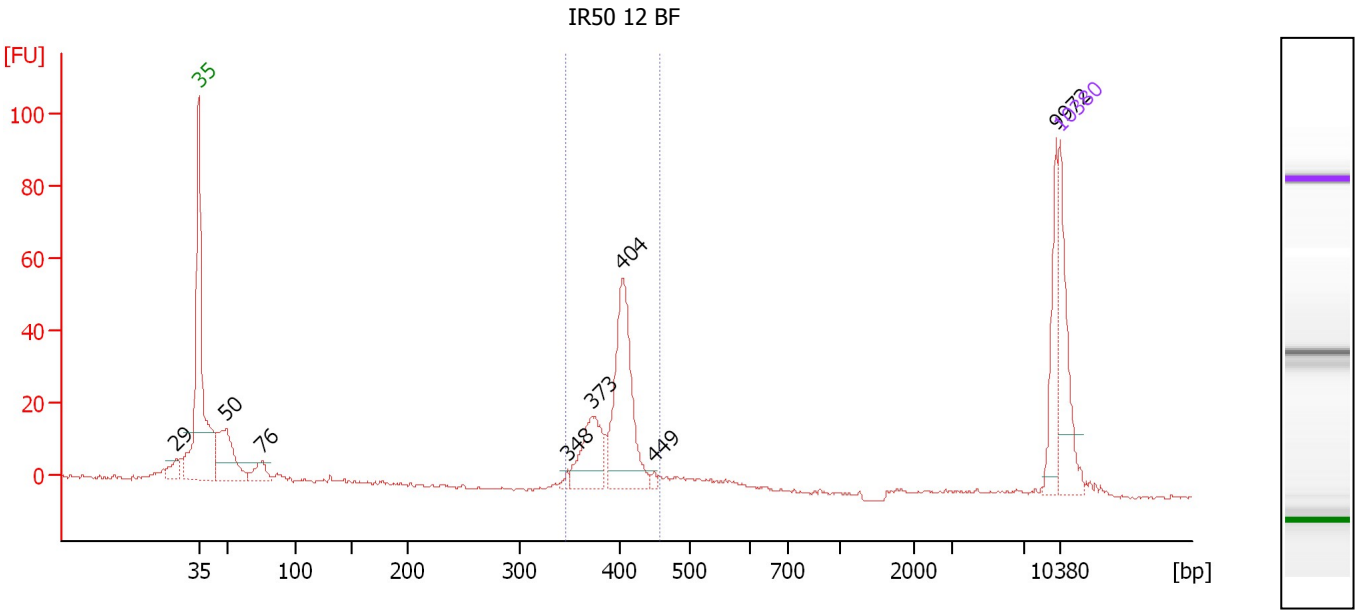
Region table for sample 3 : IR50 12 1mm

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
377	444	410	67.4	18.20	19.5	3	2.0	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-12\2013-06-12_001.xad

Created: 6/12/2013 9:26:08 AM
Modified: 6/12/2013 10:08:02 AM

Electropherogram Summary Continued ...



Overall Results for sample 4 : IR50 12 BF

Number of peaks found:	8	Corr. Area 1:	186.4
Noise:	0.3		

Peak table for sample 4 : IR50 12 BF

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		50	109.61	3,342.3	
4		76	30.45	608.7	
5		348	5.82	25.4	
6		373	82.03	333.3	
7		404	182.15	682.4	
8		449	4.73	16.0	
9		9,972	55.16	8.4	
10	▶	10,380	75.00	10.9	Upper Marker

Region table for sample 4 : IR50 12 BF

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
347	457	397	1,049.4	274.41	186.4	49	5.3	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-12\2013-06-12_001.xad

Created: 6/12/2013 9:26:08 AM
Modified: 6/12/2013 10:08:02 AM

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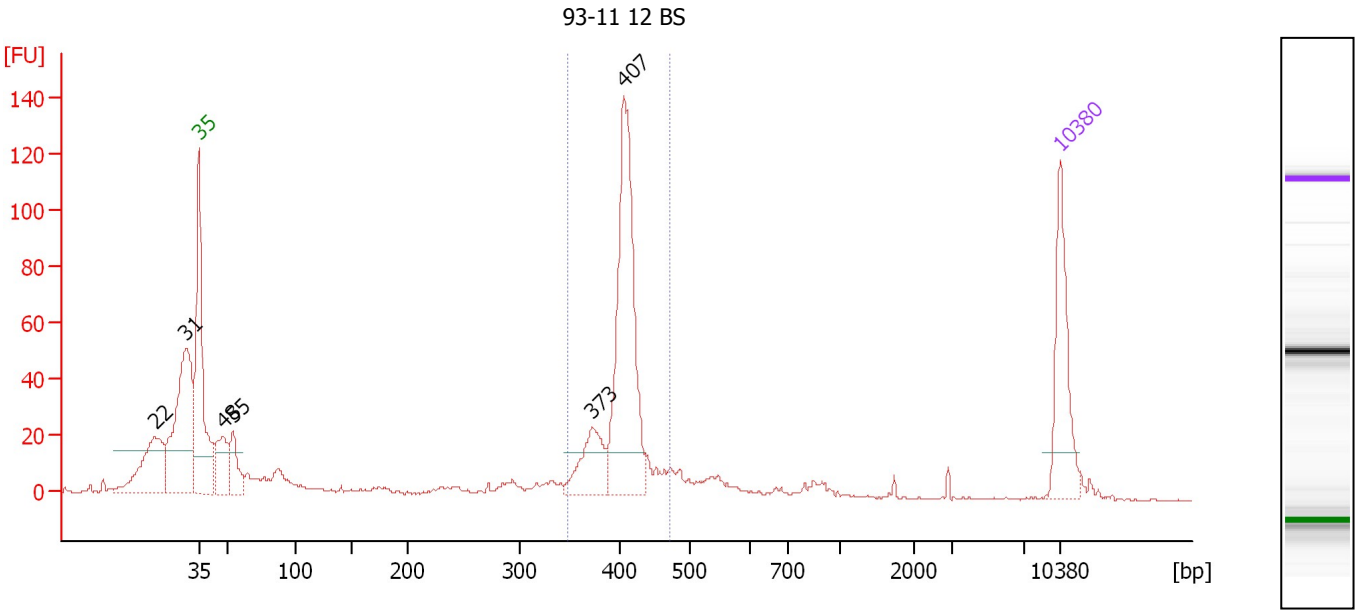

Setpoint Deviations for sample 5 : 93-11 12 BS

Height Threshold [FU] : 15

Overall Results for sample 5 : 93-11 12 BS

Number of peaks found:	6	Corr. Area 1:	379.0
Noise:	0.3		

Peak table for sample 5 : 93-11 12 BS

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	22	0.00	0.0	
2	31	0.00	0.0	
3	35	125.00	5,411.3	Lower Marker
4	48	66.06	2,079.9	
5	55	54.05	1,500.3	
6	373	67.68	274.6	
7	407	260.93	972.4	
8	10,380	75.00	10.9	Upper Marker

Region table for sample 5 : 93-11 12 BS

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
347	469	406	1,281.0	342.17	379.0	41	5.2	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-12\2013-06-12_001.xad

Created: 6/12/2013 9:26:08 AM
Modified: 6/12/2013 10:08:02 AM

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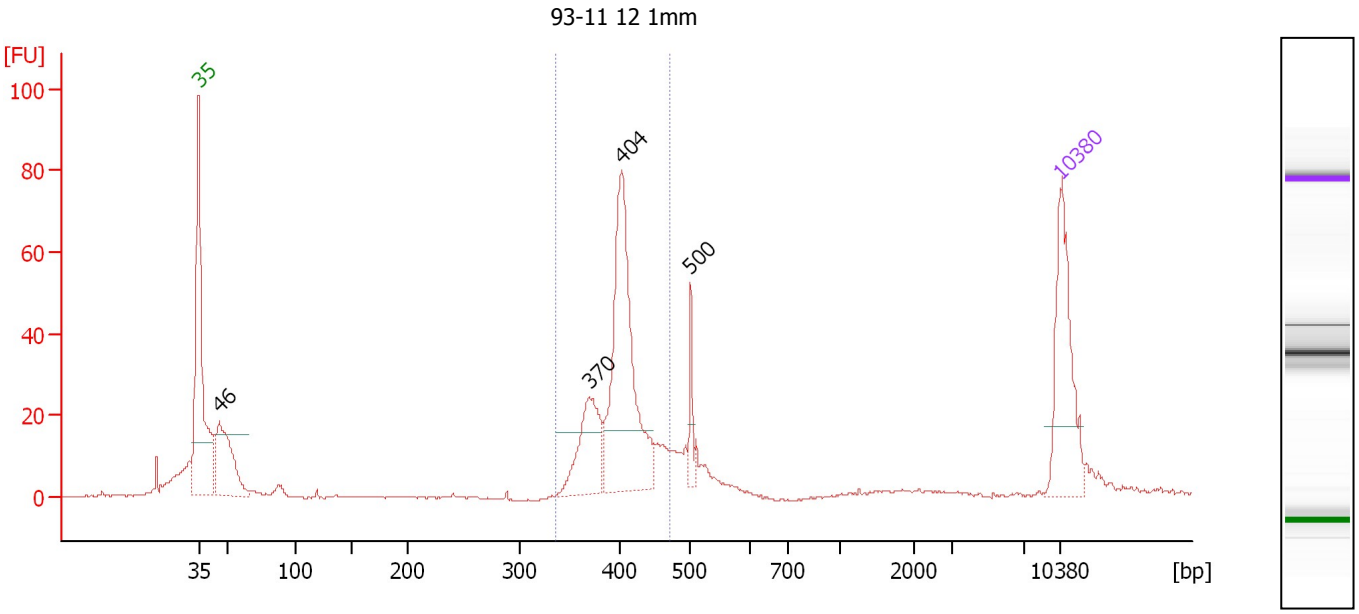


Setpoint Deviations for sample 6 : 93-11 12 1mm

Height Threshold [FU] : 15

Overall Results for sample 6 : 93-11 12 1mm

Number of peaks found:	4	Corr. Area 1:	282.2
Noise:	0.2		

Peak table for sample 6 : 93-11 12 1mm

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	46	100.15	3,292.7	
3	370	72.20	295.9	
4	404	202.38	759.9	
5	500	17.80	53.9	
6	10,380	75.00	10.9	Upper Marker

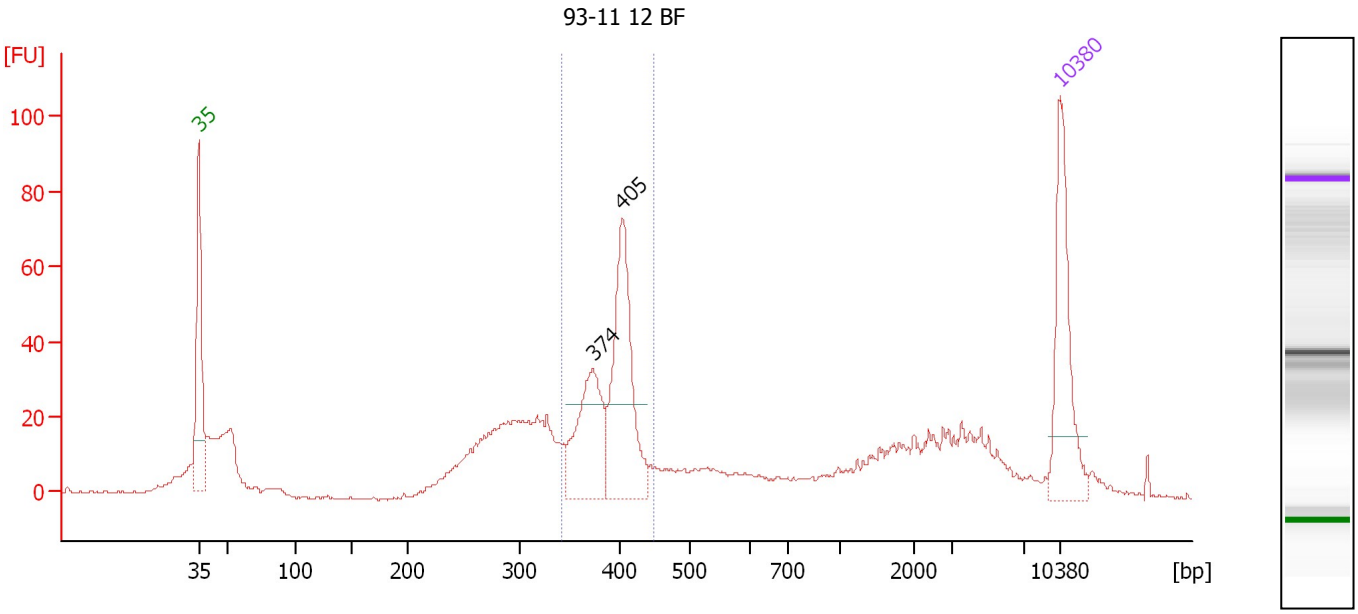
Region table for sample 6 : 93-11 12 1mm

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
336	470	403	1,142.2	302.49	282.2	58	6.5	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-12\2013-06-12_001.xad

Created: 6/12/2013 9:26:08 AM
Modified: 6/12/2013 10:08:02 AM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 7 : 93-11 12 BF

Height Threshold [FU] : 25

Overall Results for sample 7 : 93-11 12 BF

Number of peaks found:	2	Corr. Area 1:	290.4
Noise:	0.4		

Peak table for sample 7 : 93-11 12 BF

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	374	101.08	409.7	
3	405	146.79	549.8	
4	10,380	75.00	10.9	Upper Marker

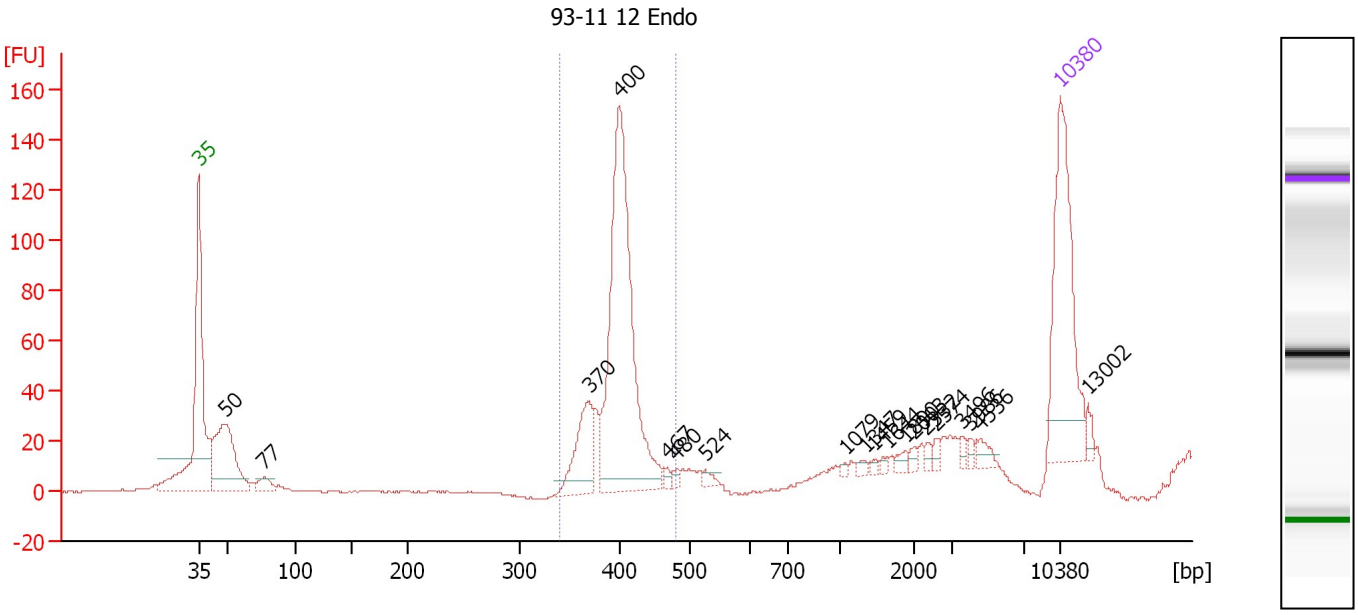
Region table for sample 7 : 93-11 12 BF

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
342	448	391	997.2	256.64	290.4	29	6.0	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-12\2013-06-12_001.xad

Created: 6/12/2013 9:26:08 AM
Modified: 6/12/2013 10:08:02 AM

Electropherogram Summary Continued ...



Overall Results for sample 8 : 93-11 12 Endo

Number of peaks found:	19	Corr. Area 1:	450.1
Noise:	0.2		

Peak table for sample 8 : 93-11 12 Endo

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	50	84.25	2,578.2	
3	77	10.07	196.8	
4	370	39.37	161.4	
5	400	197.92	749.2	
6	467	2.88	9.3	
7	480	2.64	8.3	
8	524	3.33	9.6	
9	1,079	1.45	2.0	
10	1,347	2.15	2.4	
11	1,459	1.54	1.6	
12	1,644	1.85	1.7	
13	1,890	3.12	2.5	
14	2,003	2.38	1.8	
15	2,332	2.24	1.5	
16	2,574	2.68	1.6	
17	3,496	2.66	1.2	
18	3,986	2.30	0.9	
19	4,536	5.06	1.7	
20	10,380	75.00	10.9	Upper Marker
21	13,002	0.00	0.0	

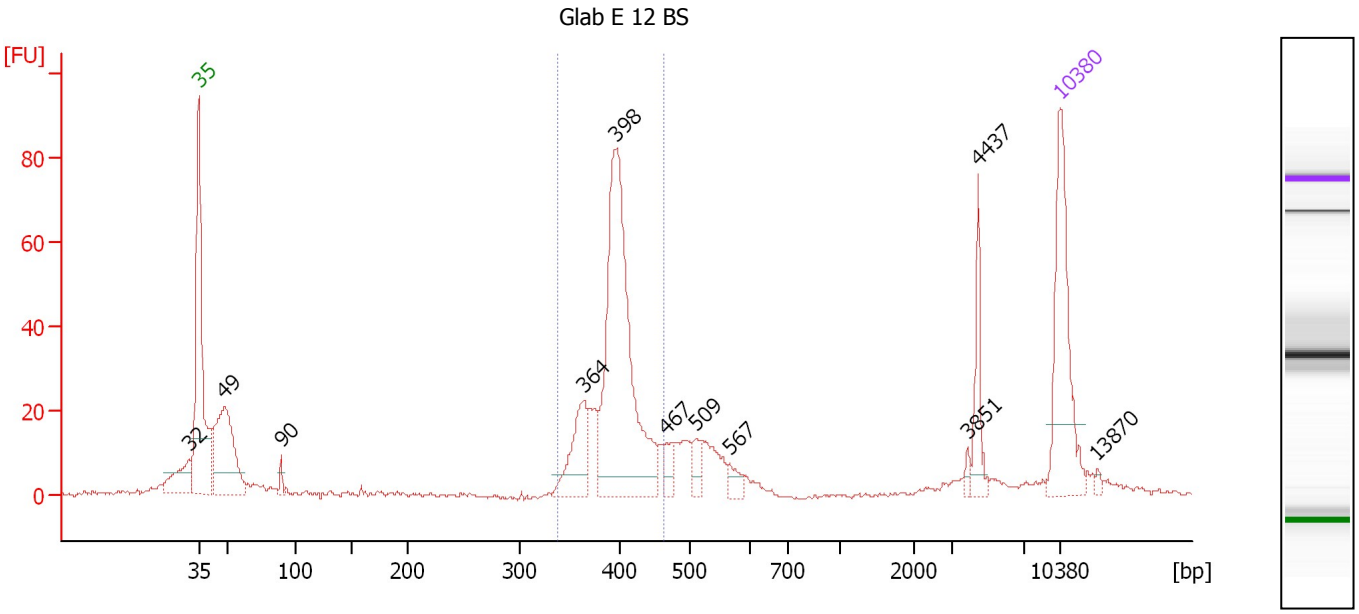
Region table for sample 8 : 93-11 12 Endo

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
341	479	400	828.9	218.28	450.1	65	5.0	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-12\2013-06-12_001.xad

Created: 6/12/2013 9:26:08 AM
Modified: 6/12/2013 10:08:02 AM

Electropherogram Summary Continued ...



Overall Results for sample 9 : Glab E 12 BS

Number of peaks found:	11	Corr. Area 1:	314.0
Noise:	0.6		

Peak table for sample 9 : Glab E 12 BS

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	32	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	49	125.57	3,903.5	
4	90	6.72	113.6	
5	364	51.20	212.8	
6	398	250.68	955.3	
7	467	13.50	43.8	
8	509	13.68	40.8	
9	567	9.92	26.5	
10	3,851	3.74	1.5	
11	4,437	25.30	8.6	
12	10,380	75.00	10.9	Upper Marker
13	13,870	0.00	0.0	

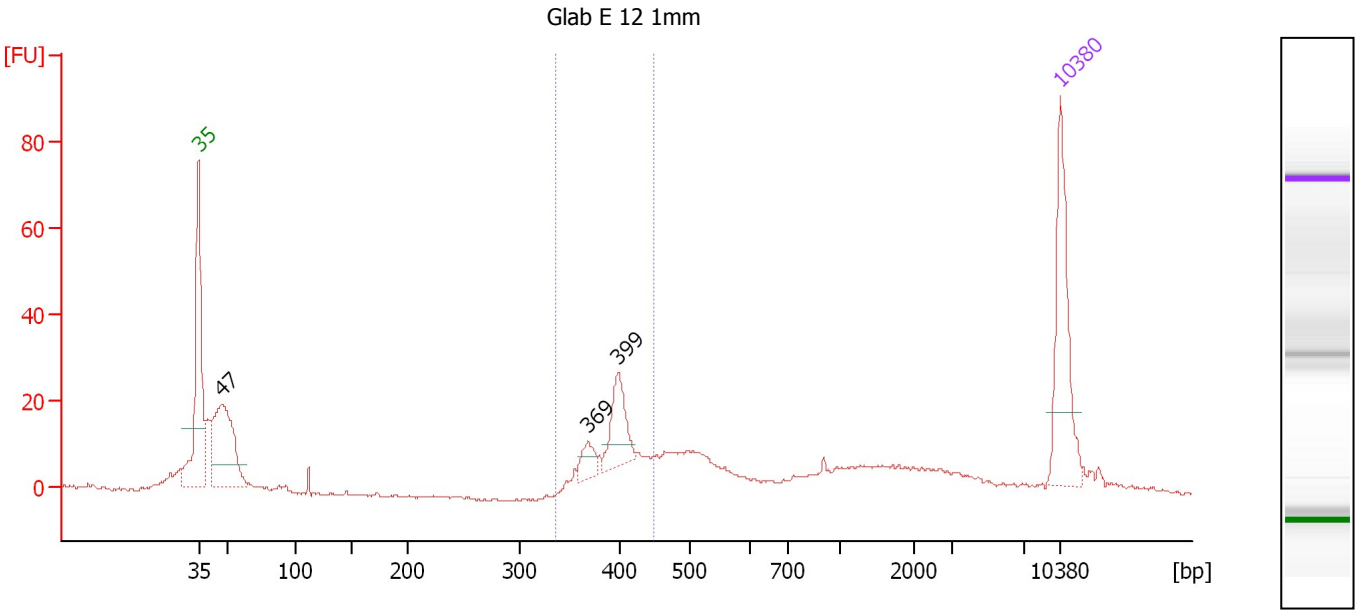
Region table for sample 9 : Glab E 12 BS

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
338	461	397	1,245.8	325.39	314.0	49	6.1	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-12\2013-06-12_001.xad

Created: 6/12/2013 9:26:08 AM
Modified: 6/12/2013 10:08:02 AM

Electropherogram Summary Continued ...



Overall Results for sample 10 : Glab E 12 1mm

Number of peaks found:	3	Corr. Area 1:	108.0
Noise:	0.3		

Peak table for sample 10 : Glab E 12 1mm

Peak		Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	◀	35	125.00	5,411.3	Lower Marker
2		47	147.06	4,707.5	
3		369	17.63	72.4	
4		399	47.78	181.5	
5	▶	10,380	75.00	10.9	Upper Marker

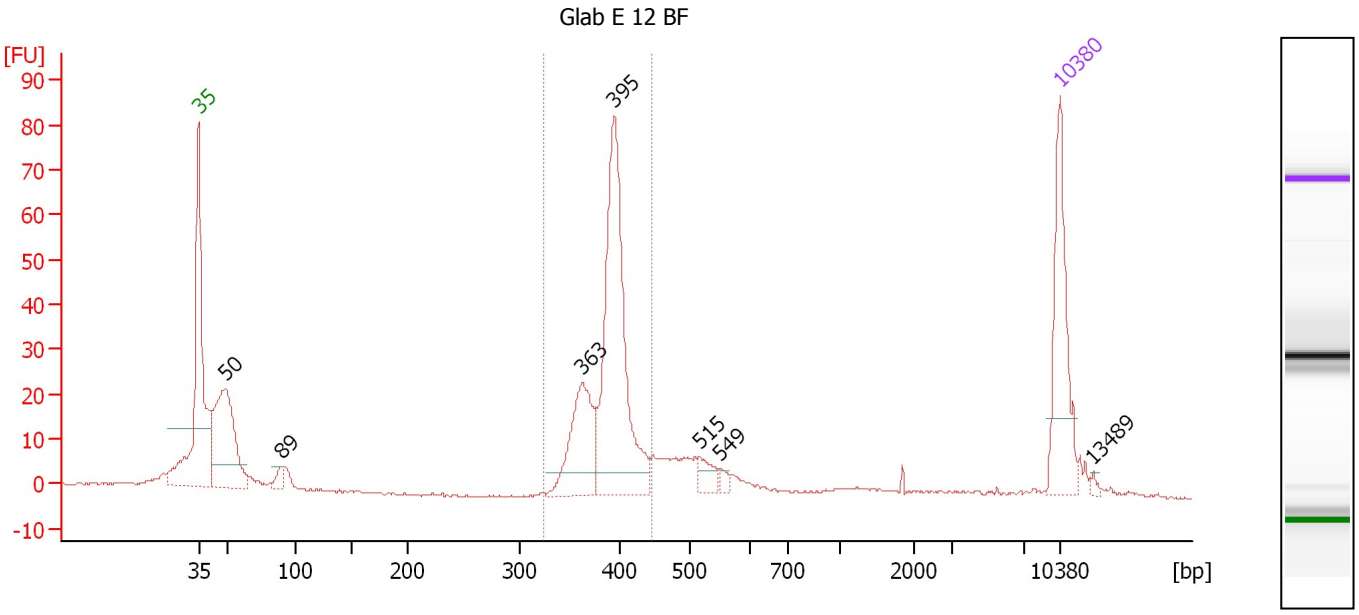
Region table for sample 10 : Glab E 12 1mm

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
336	448	397	507.2	132.48	108.0	24	6.0	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-12\2013-06-12_001.xad

Created: 6/12/2013 9:26:08 AM
Modified: 6/12/2013 10:08:02 AM

Electropherogram Summary Continued ...



Overall Results for sample 11 : Glab E 12 BF

Number of peaks found:	7	Corr. Area 1:	263.5
Noise:	0.3		

Peak table for sample 11 : Glab E 12 BF

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	50	163.93	5,014.4	
3	89	10.72	182.0	
4	363	89.62	374.1	
5	395	238.56	914.1	
6	515	14.86	43.7	
7	549	5.75	15.9	
8	10,380	75.00	10.9	Upper Marker
9	13,489	0.00	0.0	

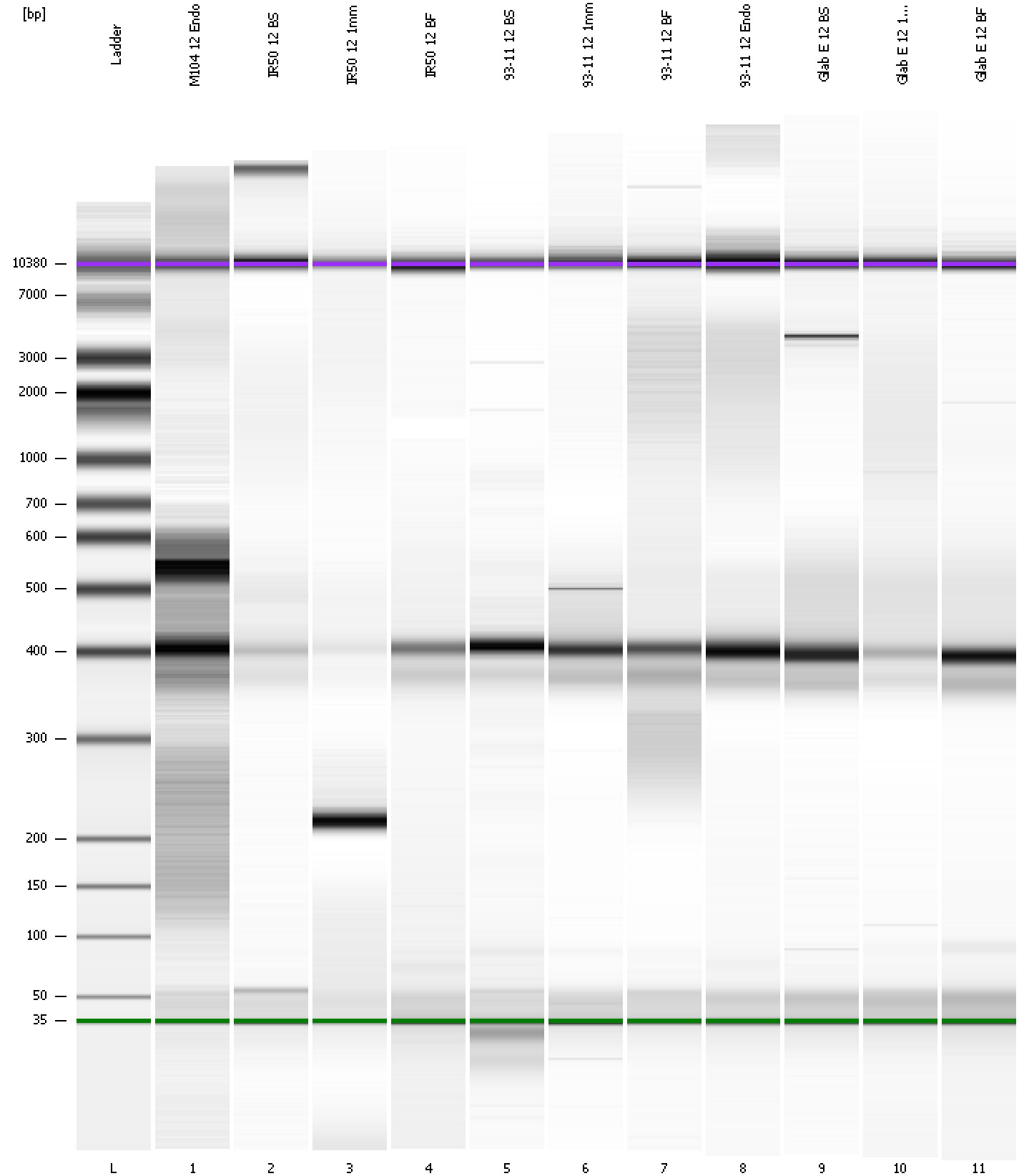
Region table for sample 11 : Glab E 12 BF

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
324	446	390	1,244.2	319.36	263.5	56	5.3	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-12\2013-06-12_001.xad

Created: 6/12/2013 9:26:08 AM
Modified: 6/12/2013 10:08:02 AM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-12\2013-06-12_001.xad

Created: 6/12/2013 9:26:08 AM
Modified: 6/12/2013 10:08:02 AM

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		6/12/2013 10:07:27 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-06-12\2013-06-12_001.xad)		Instrument	Run		6/12/2013 9:26:14 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		6/12/2013 9:26:14 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		6/12/2013 9:26:14 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		6/12/2013 9:26:14 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		6/12/2013 9:26:14 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		6/12/2013 9:26:14 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		6/12/2013 9:26:14 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1