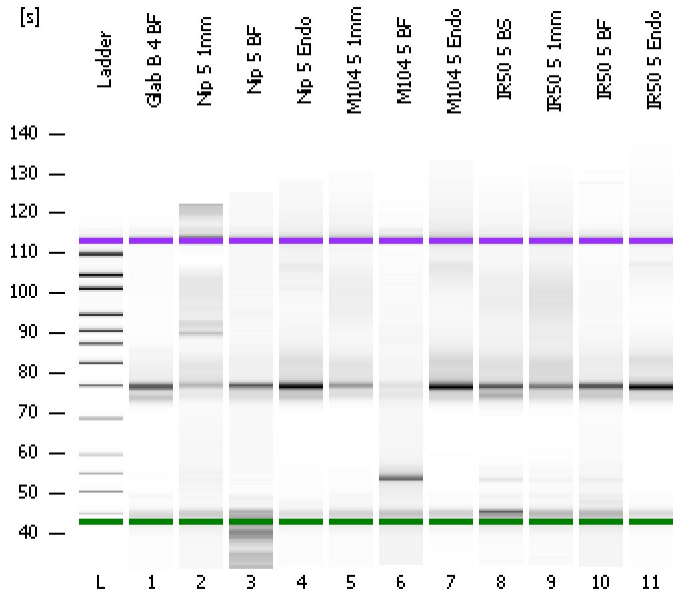


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-07\2013-06-07_002.xad

Created: 6/7/2013 3:14:14 PM
Modified: 6/7/2013 3:55:07 PM

Electrophoresis File Run Summary



Instrument Information:

Instrument Name: DE13701086 Firmware: C.01.069
Serial#: DE13701086 Type: G2938B

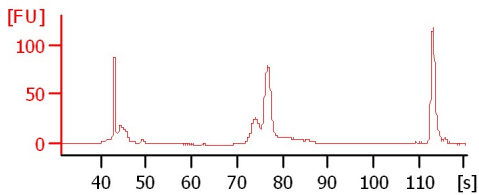
Assay Information:

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

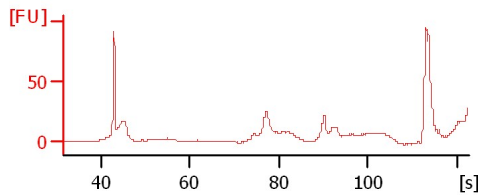
Chip Information:

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

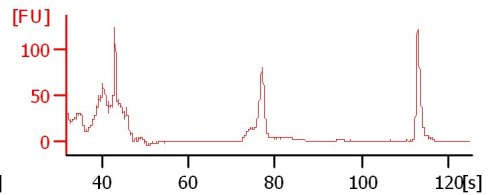
Glab B 4 BF



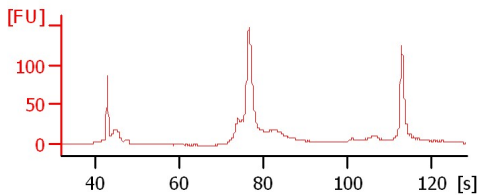
Nip 5 1mm



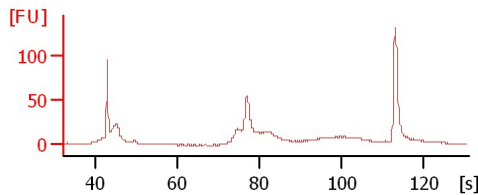
Nip 5 BF



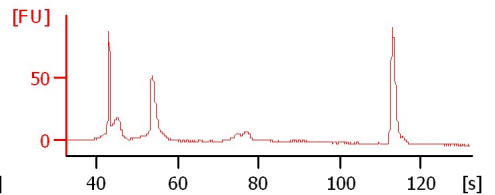
Nip 5 Endo



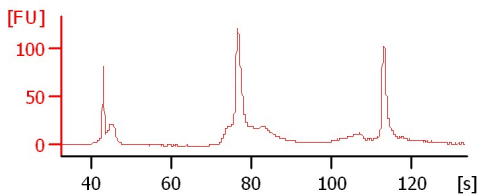
M104 5 1mm



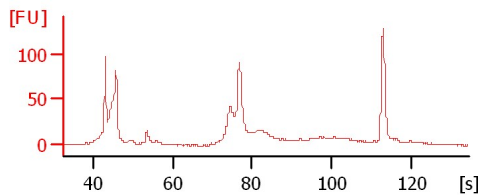
M104 5 BF



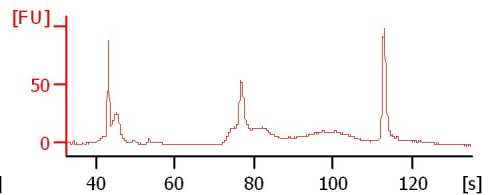
M104 5 Endo



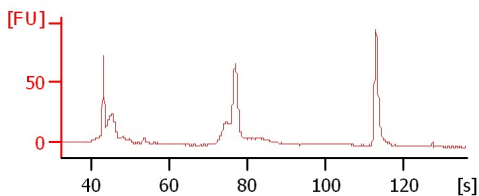
IR50 5 BS



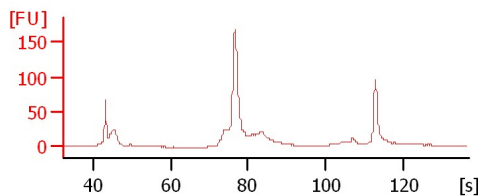
IR50 5 1mm



IR50 5 BF



IR50 5 Endo



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-07\2013-06-07_002.xad

Created: 6/7/2013 3:14:14 PM
Modified: 6/7/2013 3:55:07 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
Glab B 4 BF		<input type="checkbox"/>	✓			
Nip 5 1mm		<input type="checkbox"/>	✓			
Nip 5 BF		<input type="checkbox"/>	✓			
Nip 5 Endo		<input type="checkbox"/>	✓			
M104 5 1mm		<input type="checkbox"/>	✓			
M104 5 BF		<input type="checkbox"/>	✓			
M104 5 Endo		<input type="checkbox"/>	✓			
IR50 5 BS		<input type="checkbox"/>	✓			
IR50 5 1mm		<input type="checkbox"/>	✓			
IR50 5 BF		<input type="checkbox"/>	✓			
IR50 5 Endo		<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\2013-06-07\2013-06-07_002.xad

Created: 6/7/2013 3:14:14 PM
Modified: 6/7/2013 3:55:07 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

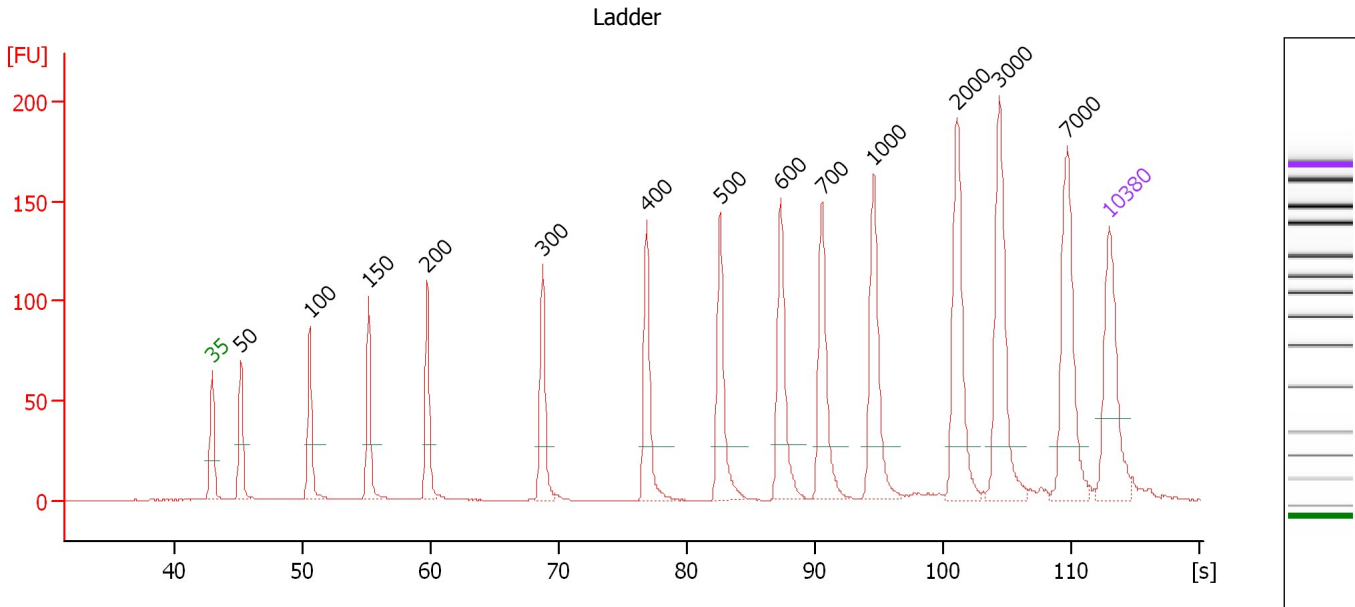
Ladder

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\2013-06-07\2013-06-07_002.xad

Created: 6/7/2013 3:14:14 PM
 Modified: 6/7/2013 3:55:07 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

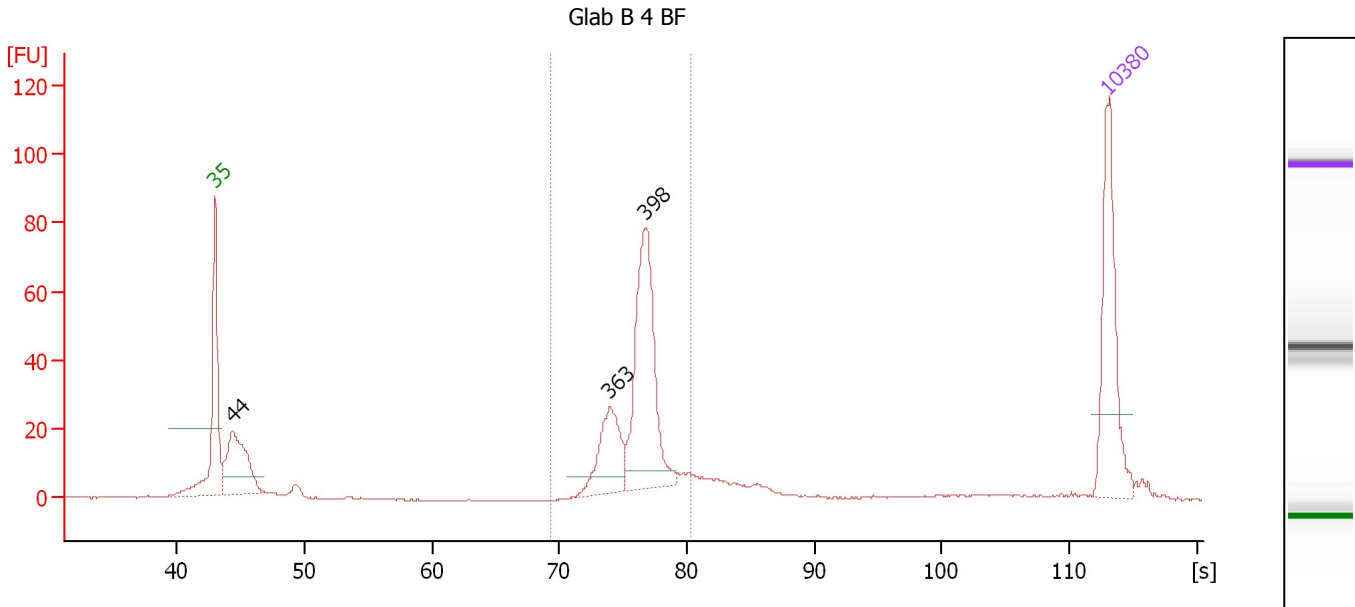
Peak table for Ladder

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\2013-06-07\2013-06-07_002.xad

Created: 6/7/2013 3:14:14 PM
 Modified: 6/7/2013 3:55:07 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : Glab B 4 BF

Number of peaks found: 3 Corr. Area 1: 286.6
 Noise: 0.2

Peak table for sample 1 : Glab B 4 BF

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	44	106.57	3,675.0	
3	363	62.85	262.2	
4	398	154.78	589.1	
5	10,380	75.00	10.9	Upper Marker

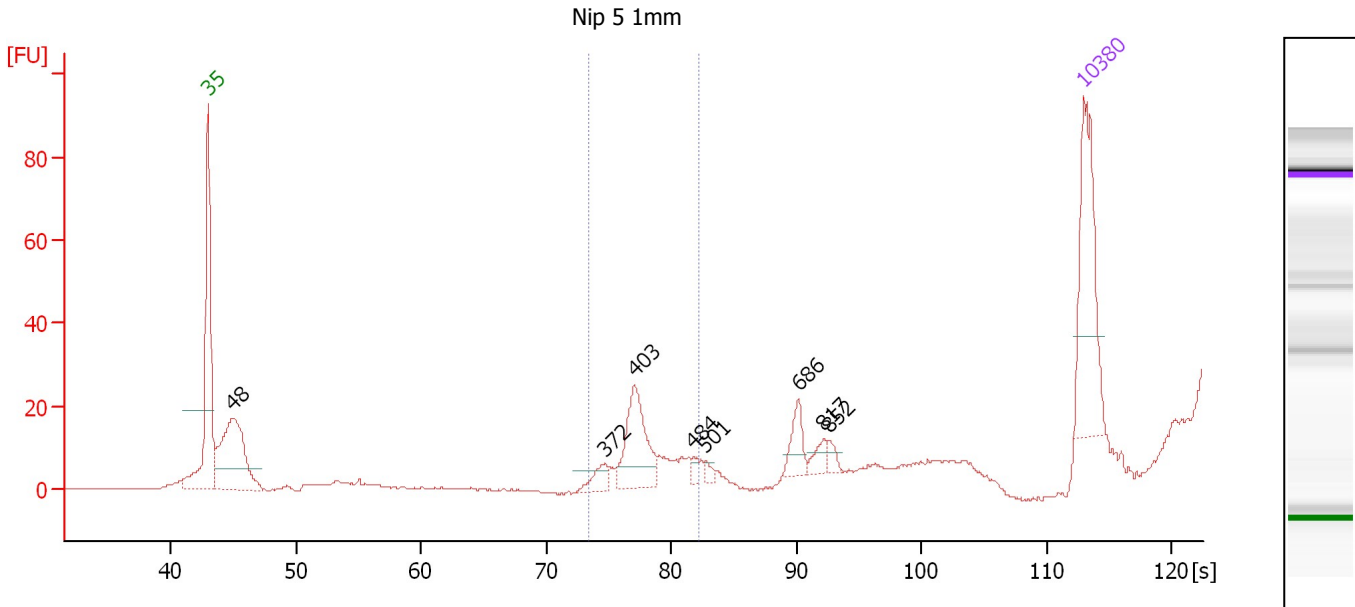
Region table for sample 1 : Glab B 4 BF

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area % of Total	Size distribution in CV [%]	Color
69.26	80.39	392	958.5	247.43	286.6 63	5.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-07\2013-06-07_002.xad

Created: 6/7/2013 3:14:14 PM
 Modified: 6/7/2013 3:55:07 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : Nip 5 1mm

Number of peaks found: 8 Corr. Area 1: 23.0
 Noise: 0.1

Peak table for sample 2 : Nip 5 1mm

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	48	142.08	4,503.6	
3	372	14.41	58.7	
4	403	66.40	249.7	
5	484	5.57	17.4	
6	501	4.43	13.4	
7	686	20.73	45.8	
8	817	9.41	17.5	
9	852	6.36	11.3	
10	10,380	75.00	10.9	Upper Marker

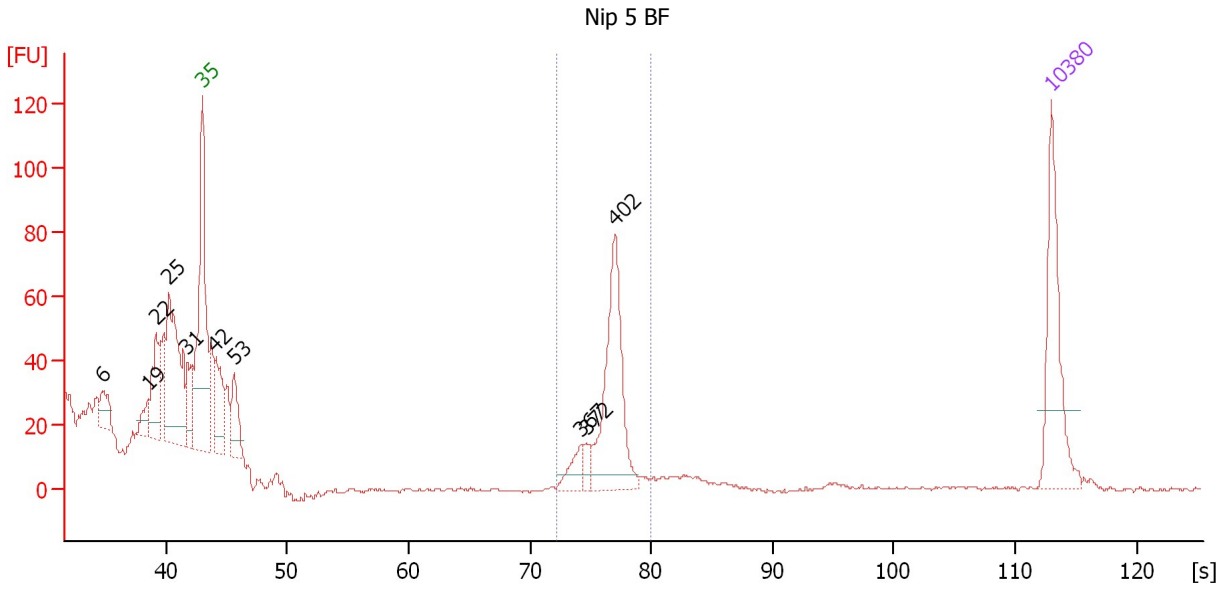
Region table for sample 2 : Nip 5 1mm

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area % of Total	Size distribution in CV [%]	Color
73.34	82.17	404	90.2	24.06	23.0	24	1.7

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-07\2013-06-07_002.xad

Created: 6/7/2013 3:14:14 PM
 Modified: 6/7/2013 3:55:07 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : Nip 5 BF

Number of peaks found: 10 Corr. Area 1: 109.6
 Noise: 0.5

Peak table for sample 3 : Nip 5 BF

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	6	0.00	0.0	
2	19	0.00	0.0	
3	22	0.00	0.0	
4	25	0.00	0.0	
5	31	0.00	0.0	
6	35	125.00	5,411.3	Lower Marker
7	42	74.57	2,706.4	
8	53	48.53	1,391.5	
9	367	21.67	89.4	
10	372	10.42	42.5	
11	402	146.98	553.4	
12	10,380	75.00	10.9	Upper Marker

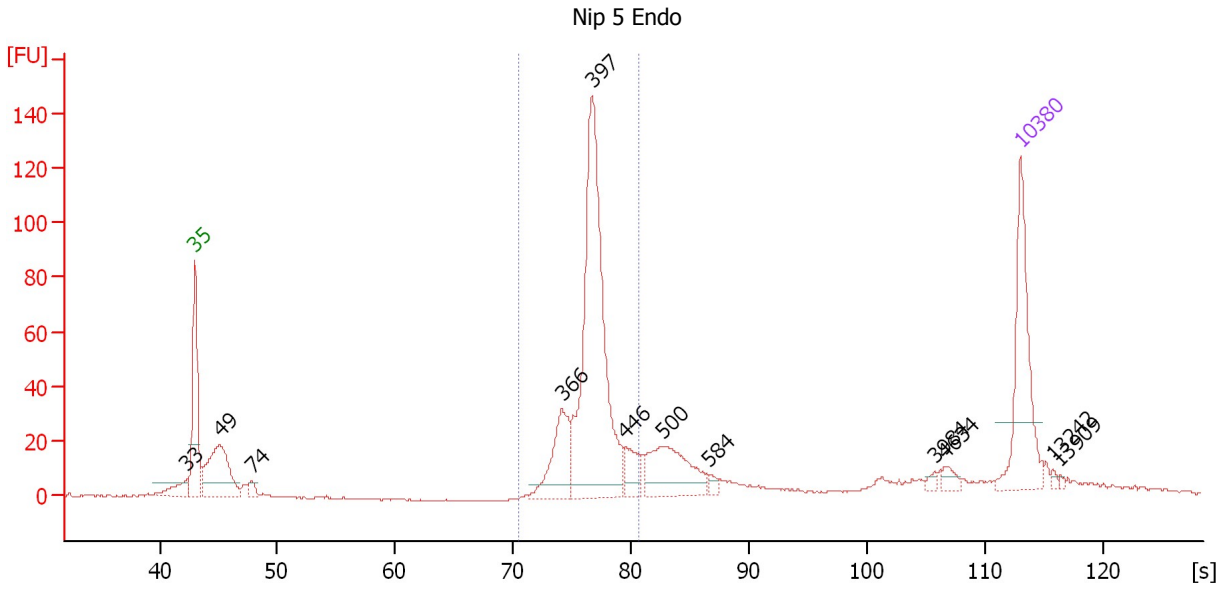
Region table for sample 3 : Nip 5 BF

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area % of Total	Size distribution in CV [%]	Color
72.17	80.05	400	365.9	96.68	109.6 23	2.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-07\2013-06-07_002.xad

Created: 6/7/2013 3:14:14 PM
 Modified: 6/7/2013 3:55:07 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : Nip 5 Endo

Number of peaks found: 12 Corr. Area 1: 474.3
 Noise: 0.3

Peak table for sample 4 : Nip 5 Endo

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	49	105.91	3,282.8	
4	74	9.53	194.3	
5	366	62.39	258.3	
6	397	293.63	1,119.4	
7	446	25.22	85.8	
8	500	72.63	220.0	
9	584	4.57	11.9	
10	3,984	3.02	1.1	
11	4,634	6.10	2.0	
12	10,380	75.00	10.9	Upper Marker
13	13,242	0.00	0.0	
14	13,909	0.00	0.0	

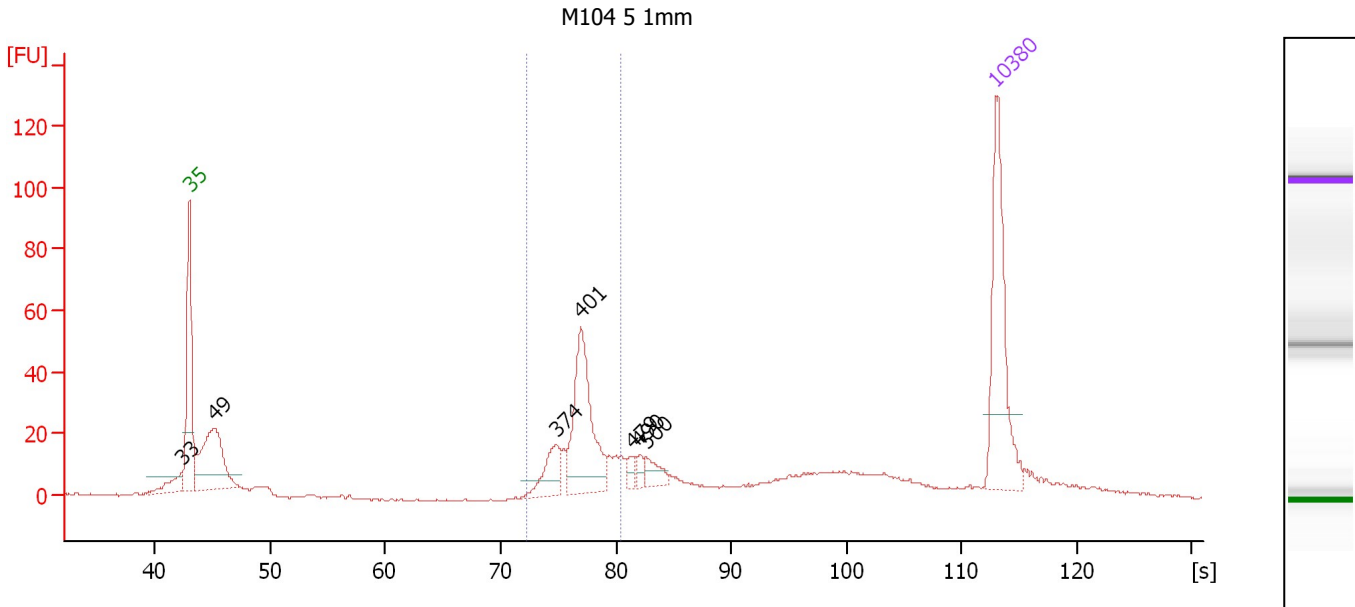
Region table for sample 4 : Nip 5 Endo

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
70.41	80.73	399	1,406.8	369.55	474.3	56	5.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-07\2013-06-07_002.xad

Created: 6/7/2013 3:14:14 PM
 Modified: 6/7/2013 3:55:07 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : M104 5 1mm

Number of peaks found: 7 Corr. Area 1: 199.4
 Noise: 0.3

Peak table for sample 5 : M104 5 1mm

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	49	109.75	3,379.4	
4	374	28.57	115.8	
5	401	94.33	356.3	
6	479	7.14	22.6	
7	490	6.70	20.7	
8	500	12.71	38.5	
9	10,380	75.00	10.9	Upper Marker

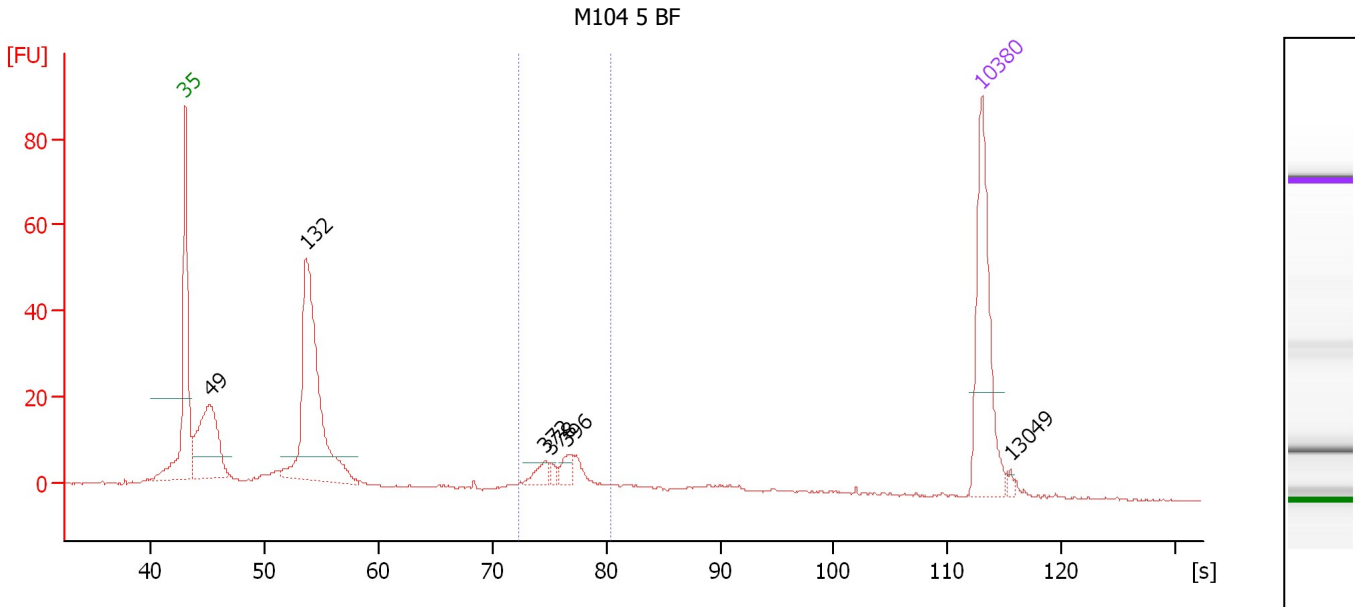
Region table for sample 5 : M104 5 1mm

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area % of Total	Size distribution in CV [%]	Color
72.21	80.35	403	560.4	148.51	199.4 32	6.1	■

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-07\2013-06-07_002.xad

Created: 6/7/2013 3:14:14 PM
 Modified: 6/7/2013 3:55:07 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : M104 5 BF

Number of peaks found: 6 Corr. Area 1: 51.9
 Noise: 0.2

Peak table for sample 6 : M104 5 BF

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	49	116.79	3,583.0	
3	132	233.11	2,666.8	
4	372	9.56	39.0	
5	378	3.97	15.9	
6	396	9.81	37.5	
7	10,380	75.00	10.9	Upper Marker
8	13,049	0.00	0.0	

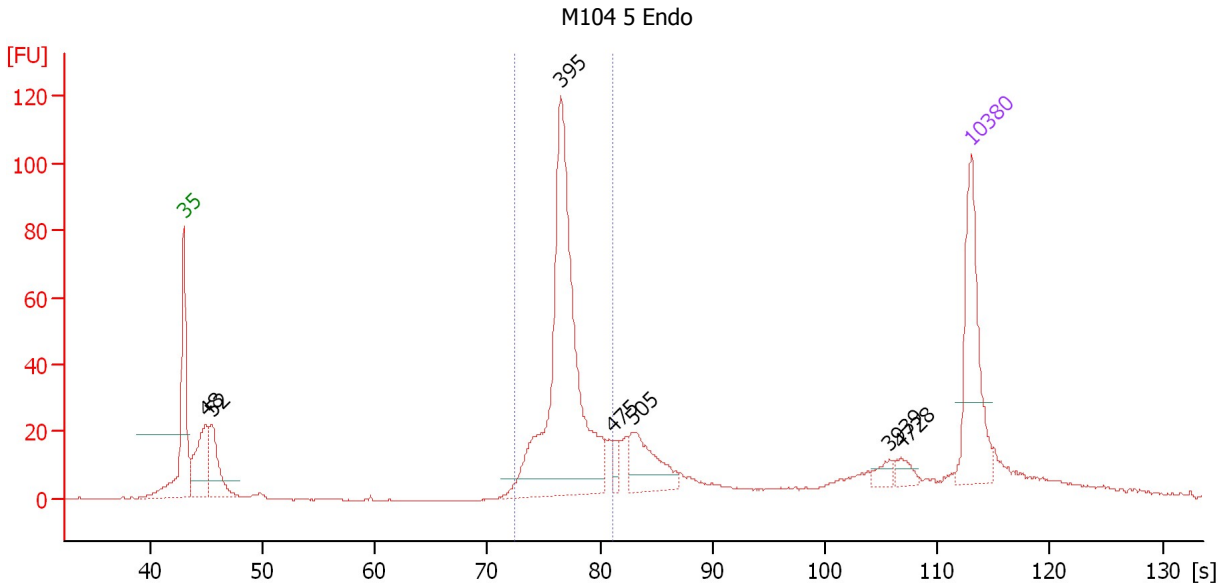
Region table for sample 6 : M104 5 BF

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
72.26	80.33	392	201.0	51.76	51.9	12	6.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-07\2013-06-07_002.xad

Created: 6/7/2013 3:14:14 PM
 Modified: 6/7/2013 3:55:07 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : M104 5 Endo

Number of peaks found: 7 Corr. Area 1: 400.4
 Noise: 0.1

Peak table for sample 7 : M104 5 Endo

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	48	82.82	2,616.3	
3	52	57.31	1,654.7	
4	395	334.42	1,281.2	
5	475	10.48	33.4	
6	505	52.32	157.0	
7	3,939	7.59	2.9	
8	4,728	7.93	2.5	
9	10,380	75.00	10.9	Upper Marker

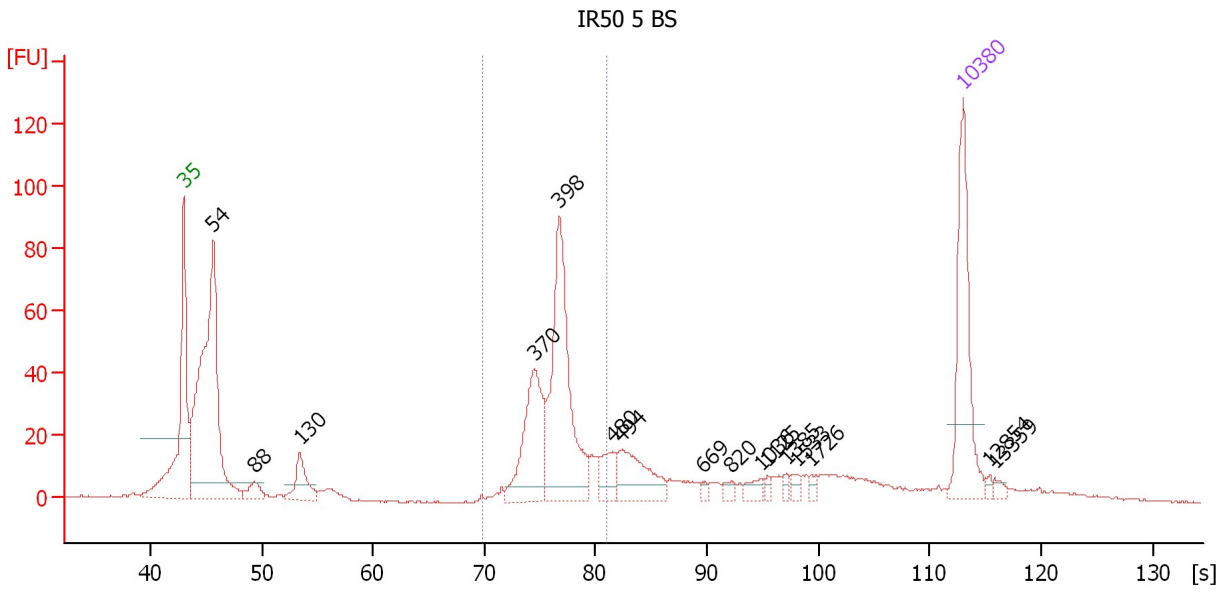
Region table for sample 7 : M104 5 Endo

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area % of Total	Size distribution in CV [%]	Color
72.37	81.05	403	1,314.8	348.47	400.4 48	6.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-07\2013-06-07_002.xad

Created: 6/7/2013 3:14:14 PM
 Modified: 6/7/2013 3:55:07 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : IR50 5 BS

Number of peaks found: 16 Corr. Area 1: 356.4
 Noise: 0.4

Peak table for sample 8 : IR50 5 BS

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	54	358.05	10,118.2	
3	88	17.52	302.5	
4	130	37.12	432.0	
5	370	95.28	390.2	
6	398	169.89	646.8	
7	480	22.17	70.0	
8	494	51.76	158.8	
9	669	3.50	7.9	
10	820	5.39	10.0	
11	1,036	7.84	11.5	
12	1,125	3.18	4.3	
13	1,385	3.56	3.9	
14	1,533	4.70	4.6	
15	1,726	3.03	2.7	
16	10,380	75.00	10.9	Upper Marker
17	12,854	0.00	0.0	
18	13,359	0.00	0.0	

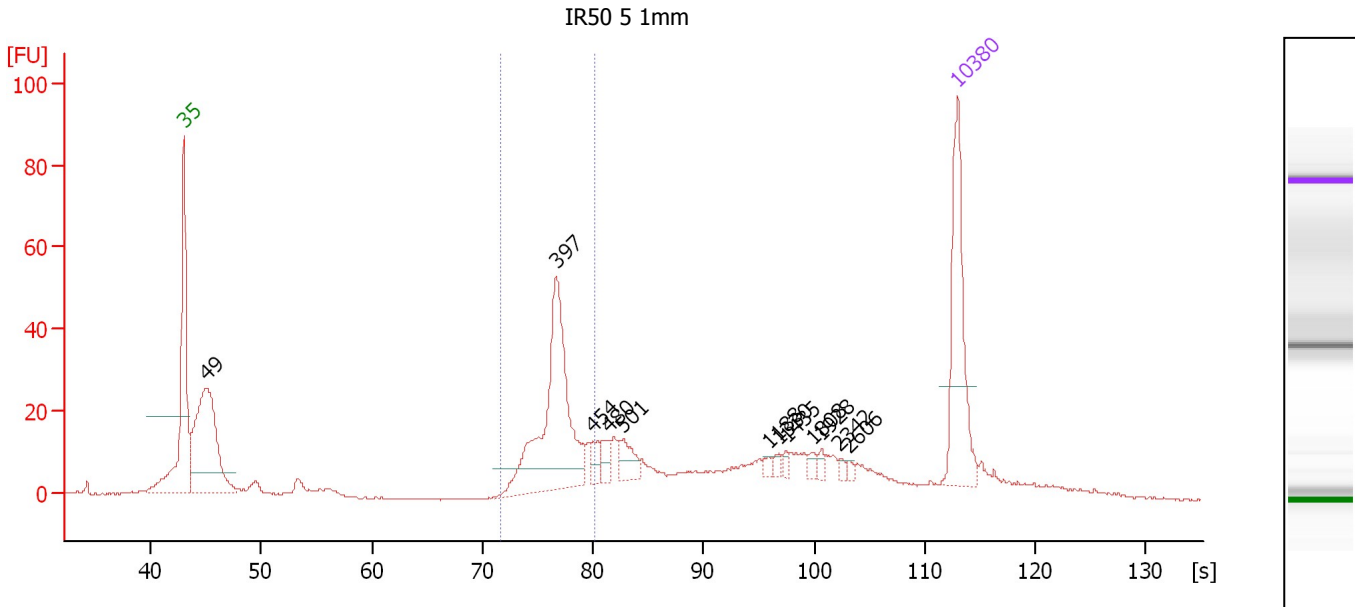
Region table for sample 8 : IR50 5 BS

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution CV [%]	Color
69.81	80.91	395	1,085.5	282.05	356.4	35	7.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-07\2013-06-07_002.xad

Created: 6/7/2013 3:14:14 PM
 Modified: 6/7/2013 3:55:07 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : IR50 5 1mm

Number of peaks found: 12 Corr. Area 1: 191.6
 Noise: 0.2

Peak table for sample 9 : IR50 5 1mm

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	49	206.27	6,358.0	
3	397	178.40	680.4	
4	454	11.37	37.9	
5	480	12.40	39.1	
6	501	19.60	59.2	
7	1,188	3.71	4.7	
8	1,330	3.74	4.3	
9	1,435	3.40	3.6	
10	1,808	4.43	3.7	
11	1,928	3.81	3.0	
12	2,342	2.69	1.7	
13	2,606	2.26	1.3	
14	10,380	75.00	10.9	Upper Marker

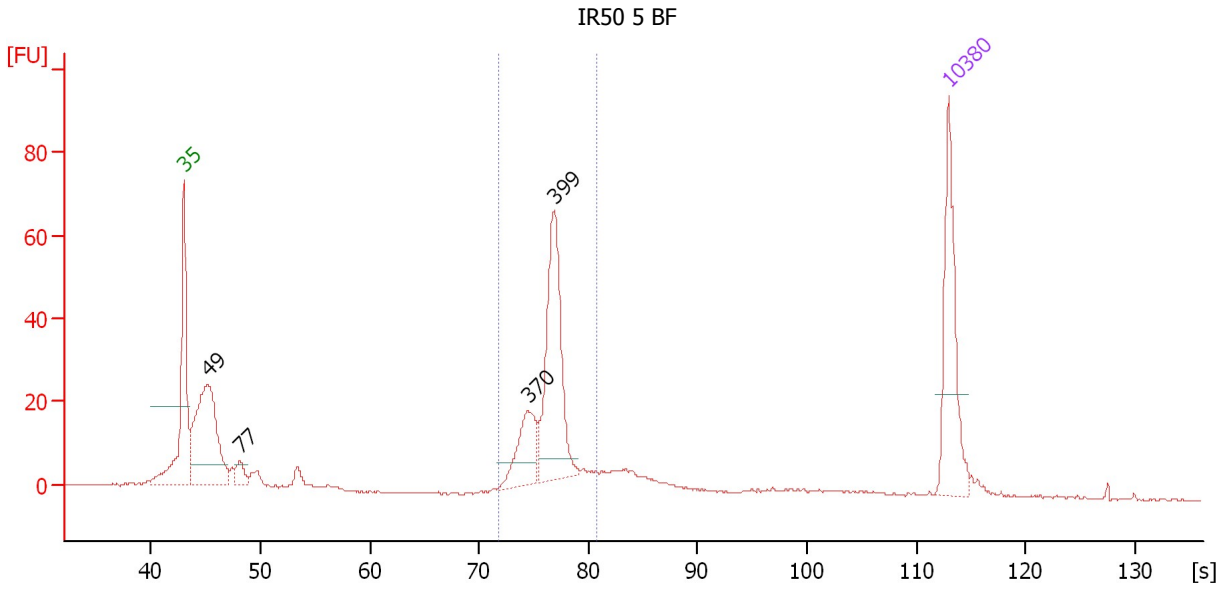
Region table for sample 9 : IR50 5 1mm

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area % of Total	Size distribution in CV [%]	Color
71.62	80.09	399	783.5	205.78	191.6 29	6.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-07\2013-06-07_002.xad

Created: 6/7/2013 3:14:14 PM
 Modified: 6/7/2013 3:55:07 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : IR50 5 BF

Number of peaks found: 4 Corr. Area 1: 212.5
 Noise: 0.2

Peak table for sample 10 : IR50 5 BF

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	49	200.22	6,149.2	
3	77	17.75	351.4	
4	370	54.13	221.8	
5	399	146.71	556.4	
6	10,380	75.00	10.9	Upper Marker

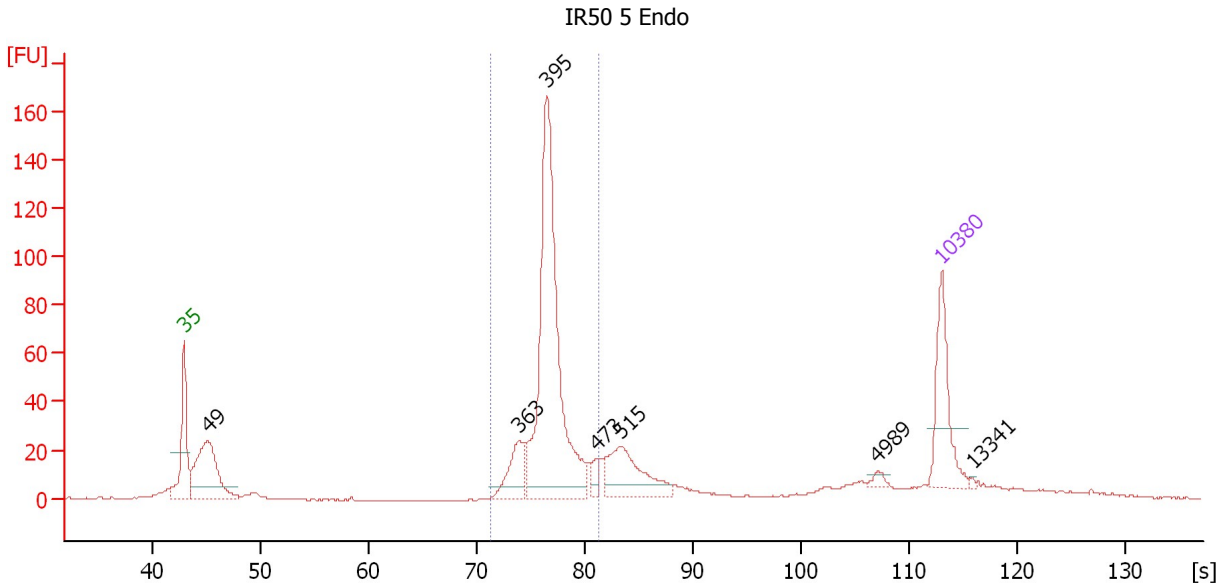
Region table for sample 10 : IR50 5 BF

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area % of Total	Size distribution in CV [%]	Color
71.75	80.69	395	911.0	237.00	212.5 47	5.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-07\2013-06-07_002.xad

Created: 6/7/2013 3:14:14 PM
 Modified: 6/7/2013 3:55:07 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : IR50 5 Endo

Number of peaks found: 7 Corr. Area 1: 490.1
 Noise: 0.2

Peak table for sample 11 : IR50 5 Endo

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	49	182.68	5,595.5	
3	363	58.36	243.3	
4	395	431.08	1,652.0	
5	473	12.81	41.0	
6	515	95.91	281.9	
7	4,989	5.60	1.7	
8	10,380	75.00	10.9	Upper Marker
9	13,341	0.00	0.0	

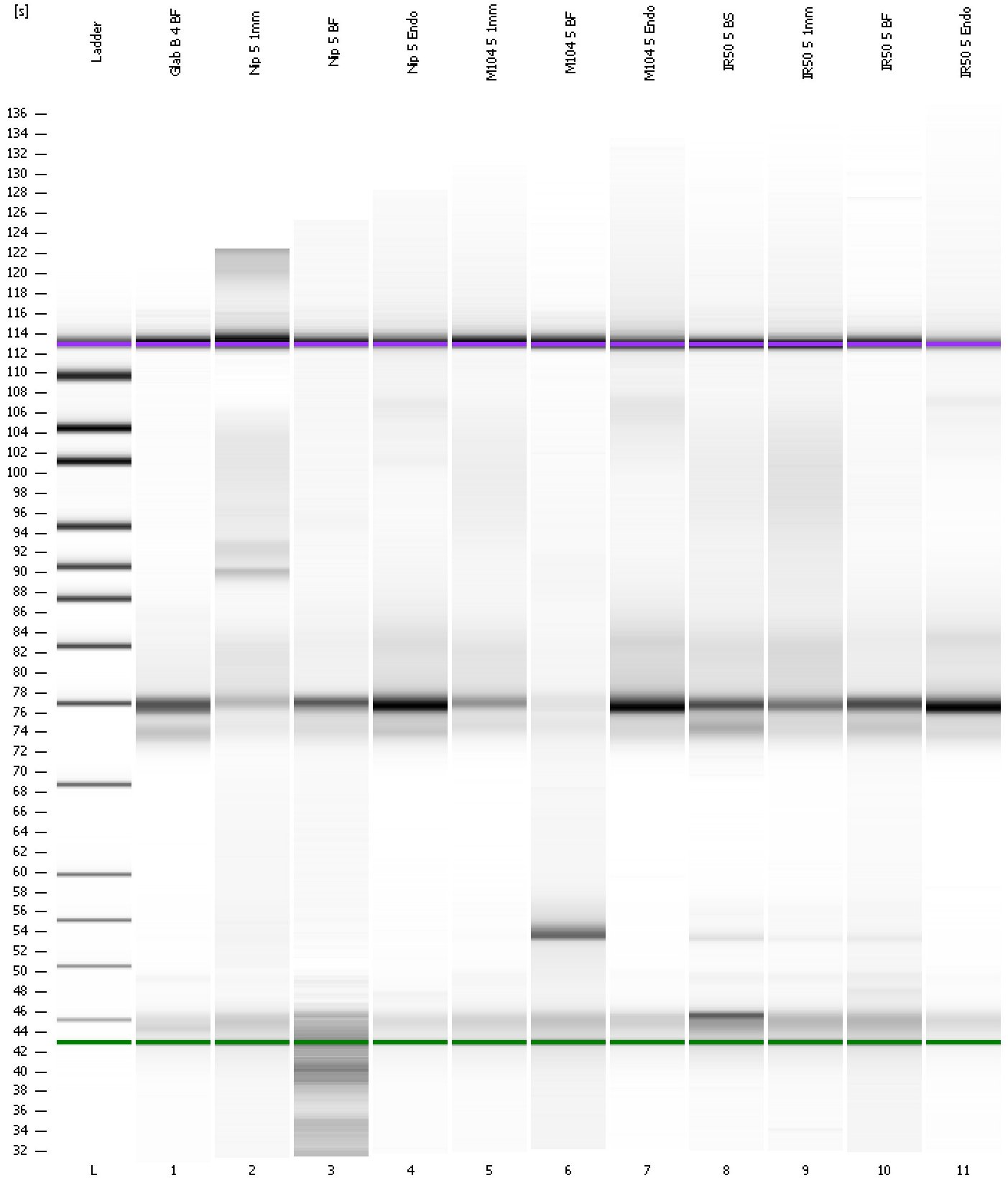
Region table for sample 11 : IR50 5 Endo

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area % of Total	Size distribution in CV [%]	Color
71.27	81.22	400	1,944.6	511.36	490.1 56	6.2	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-07\2013-06-07_002.xad

Created: 6/7/2013 3:14:14 PM
Modified: 6/7/2013 3:55:07 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-07\2013-06-07_002.xad

Created: 6/7/2013 3:14:14 PM
 Modified: 6/7/2013 3:55:07 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		6/7/2013 3:54:43 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-06-07\2013-06-07_002.xad)		Instrument	Run		6/7/2013 3:14:20 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		6/7/2013 3:14:20 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		6/7/2013 3:14:20 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		6/7/2013 3:14:20 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		6/7/2013 3:14:20 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		6/7/2013 3:14:20 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		6/7/2013 3:14:20 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1