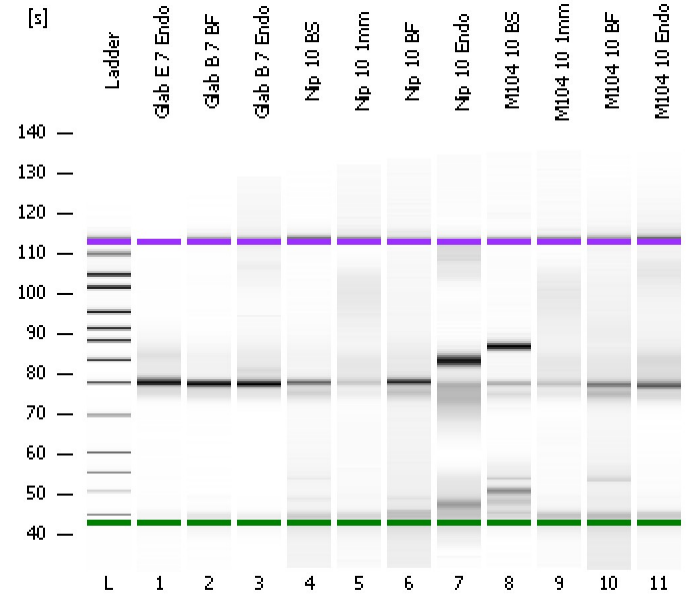
Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-11\2013-06-11_006.xad

Created: 6/11/2013 1:15:15 PM
Modified: 6/11/2013 1:56:21 PM

Electrophoresis File Run Summary



Instrument Information:

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

Assay Information:

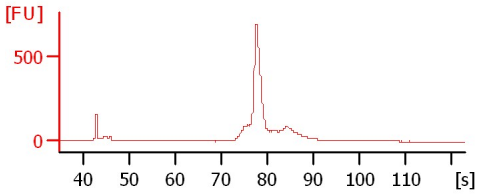
Assay Origin Path: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\assays\dsDNA\High Sensitivity DNA.xsy

Assay Class: High Sensitivity DNA Assay
Version: 1.03
Assay Comments: Copyright © 2003-2010 Agilent Technologies

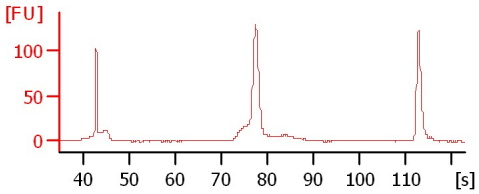
Chip Information:

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

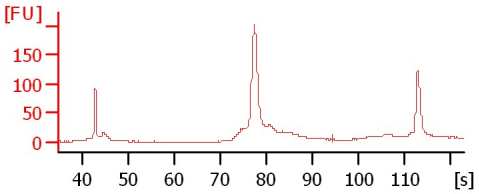
Glab E 7 Endo



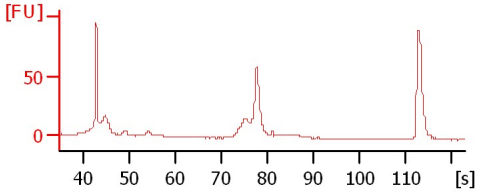
Glab B 7 BF



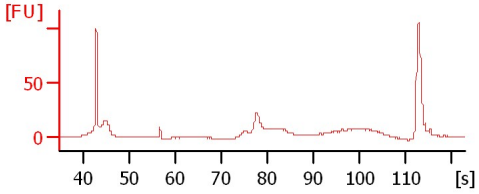
Glab B 7 Endo



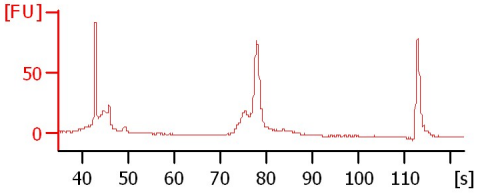
Nip 10 BS



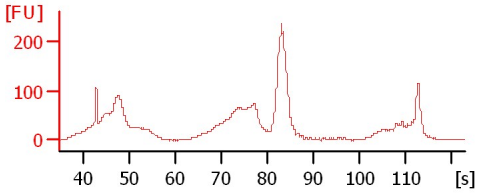
Nip 10 1mm



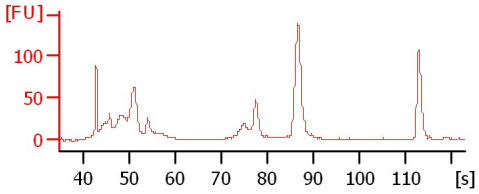
Nip 10 BF



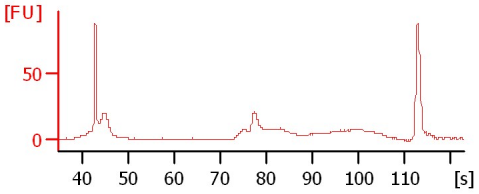
Nip 10 Endo



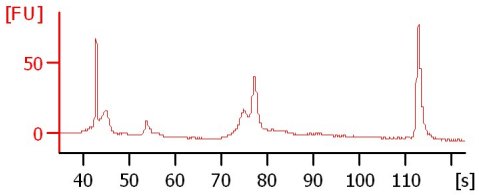
M104 10 BS



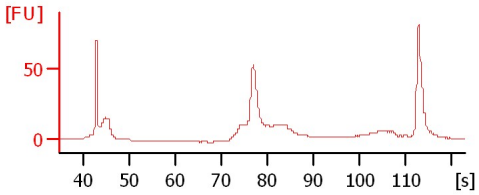
M104 10 1mm



M104 10 BF



M104 10 Endo



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-11\2013-06-11_006.xad

Created: 6/11/2013 1:15:15 PM
Modified: 6/11/2013 1:56:21 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
Glab E 7 Endo		☐	✔			
Glab B 7 BF		☐	✔			
Glab B 7 Endo		☐	✔			
Nip 10 BS		☐	✔			
Nip 10 1mm		☐	✔			
Nip 10 BF		☐	✔			
Nip 10 Endo		☐	✔			
M104 10 BS		☐	✔			
M104 10 1mm		☐	✔			
M104 10 BF		☐	✔			
M104 10 Endo		☐	✔			
Ladder		☐	✔			

Chip Lot # **Reagent Kit Lot #**

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-11\2013-06-11_006.xad

Created: 6/11/2013 1:15:15 PM
Modified: 6/11/2013 1:56:21 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

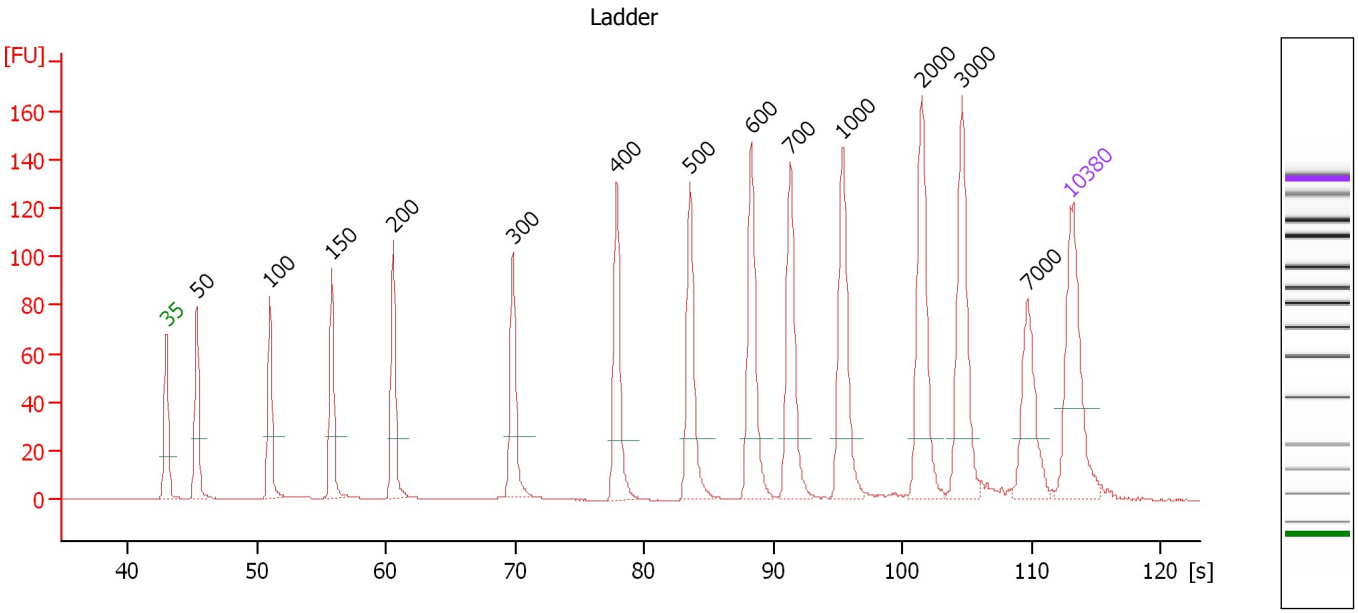
Ladder

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\2013-06-11\2013-06-11_006.xad

Created: 6/11/2013 1:15:15 PM
Modified: 6/11/2013 1:56:21 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

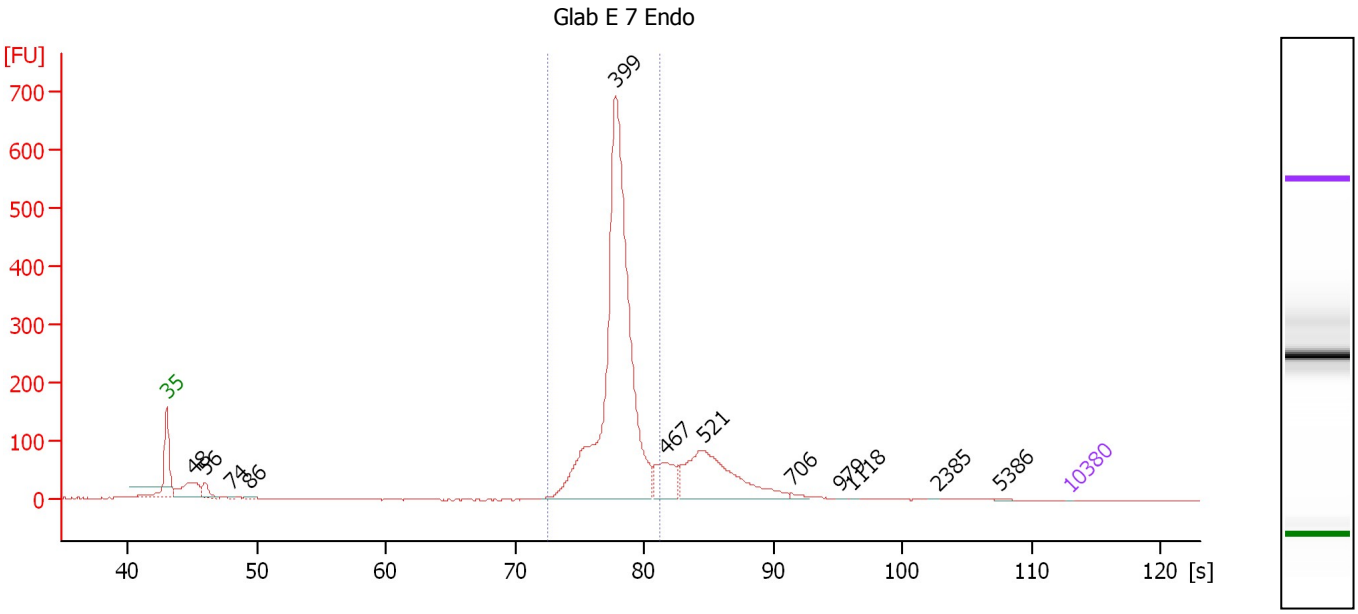
Peak table for Ladder

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\2013-06-11\2013-06-11_006.xad

Created: 6/11/2013 1:15:15 PM
Modified: 6/11/2013 1:56:21 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 1 : Glab E 7 Endo

Height Threshold [FU] : 0.5

Overall Results for sample 1 : Glab E 7 Endo

Number of peaks found:	12	Corr. Area 1:	1,927.7
Noise:	0.2		

Peak table for sample 1 : Glab E 7 Endo

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	48	42,535.43	1,337,994.6	
3	56	16,231.66	442,744.4	
4	74	662.85	13,548.9	
5	86	1,345.10	23,742.9	
6	399	523,901.09	1,987,618.0	
7	467	39,808.58	129,092.6	
8	521	123,647.16	359,333.3	
9	706	3,015.86	6,469.3	
10	979	305.36	472.4	
11	1,118	118.99	161.2	
12	2,385	127.16	80.8	
13	5,386	511.69	143.9	
14	10,380	75.00	10.9	Upper Marker

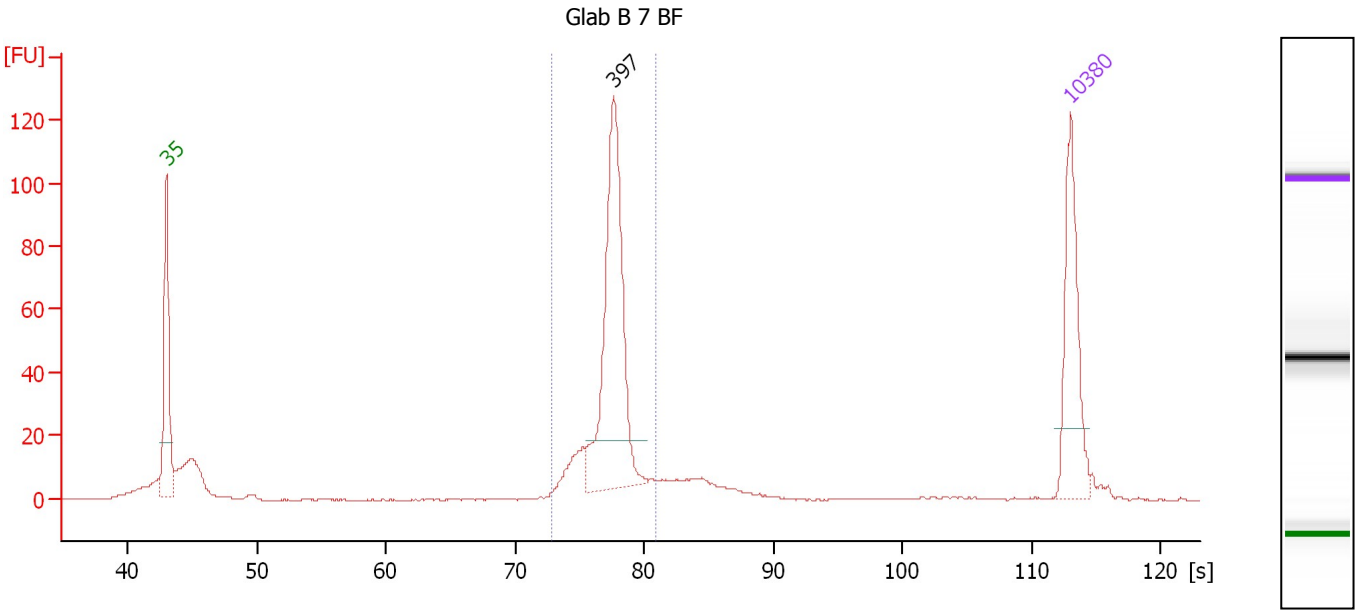
Region table for sample 1 : Glab E 7 Endo

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
72.48	81.18	402	2,046,470.5	541,544.94	1,927.7	71	5.0	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-11\2013-06-11_006.xad

Created: 6/11/2013 1:15:15 PM
Modified: 6/11/2013 1:56:21 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 2 : Glab B 7 BF

Height Threshold [FU] : 15

Overall Results for sample 2 : Glab B 7 BF

Number of peaks found:	1	Corr. Area 1:	332.2
Noise:	0.2		

Peak table for sample 2 : Glab B 7 BF

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	397	223.51	852.7	
3	10,380	75.00	10.9	Upper Marker

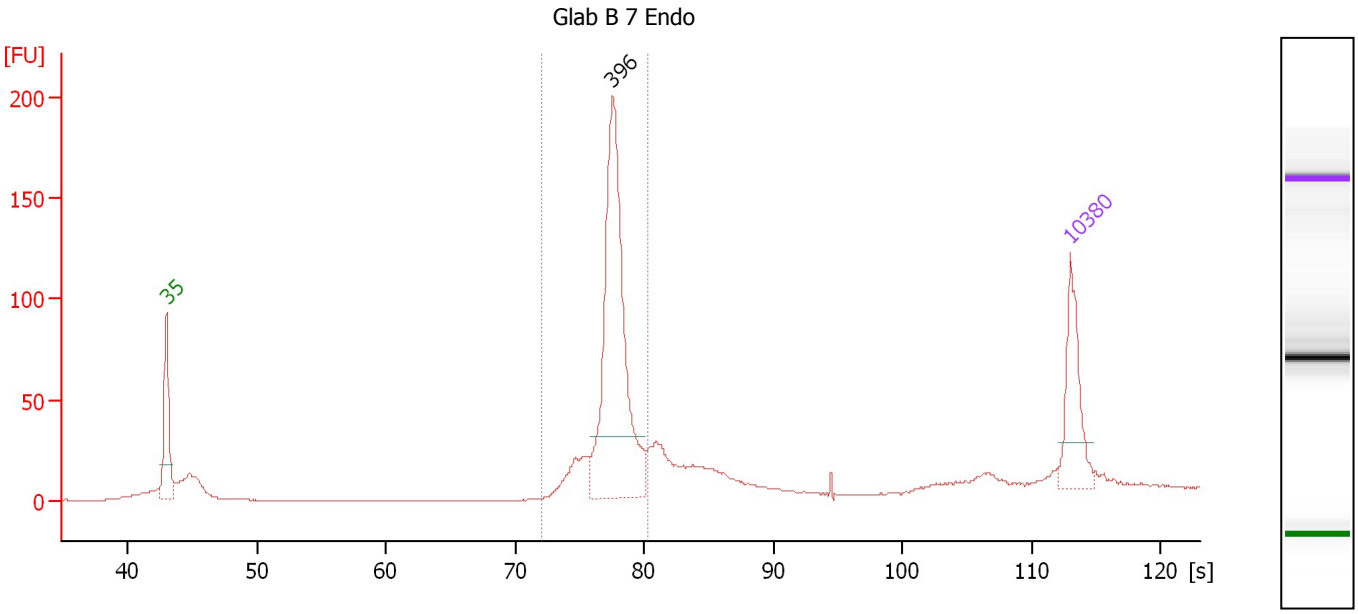
Region table for sample 2 : Glab B 7 BF

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
72.82	80.87	395	1,090.8	283.68	332.2	66	4.7	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-11\2013-06-11_006.xad

Created: 6/11/2013 1:15:15 PM
Modified: 6/11/2013 1:56:21 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 3 : Glab B 7 Endo

Height Threshold [FU] : 30

Overall Results for sample 3 : Glab B 7 Endo

Number of peaks found:	1	Corr. Area 1:	509.9
Noise:	0.1		

Peak table for sample 3 : Glab B 7 Endo

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	396	409.28	1,565.1	
3	10,380	75.00	10.9	Upper Marker

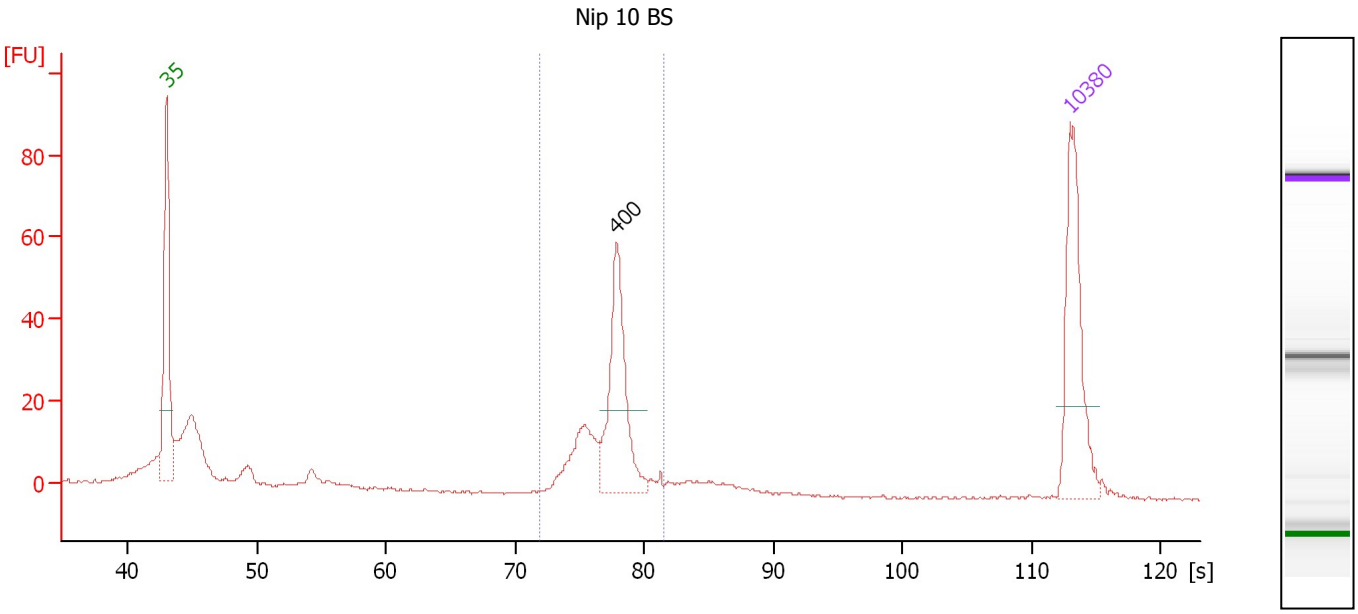
Region table for sample 3 : Glab B 7 Endo

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
72.05	80.23	397	1,751.5	457.80	509.9	59	4.4	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-11\2013-06-11_006.xad

Created: 6/11/2013 1:15:15 PM
Modified: 6/11/2013 1:56:21 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 4 : Nip 10 BS

Height Threshold [FU] : 20

Overall Results for sample 4 : Nip 10 BS

Number of peaks found:	1	Corr. Area 1:	164.9
Noise:	0.2		

Peak table for sample 4 : Nip 10 BS

Peak		Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	◀	35	125.00	5,411.3	Lower Marker
2		400	108.15	409.8	
3	▶	10,380	75.00	10.9	Upper Marker

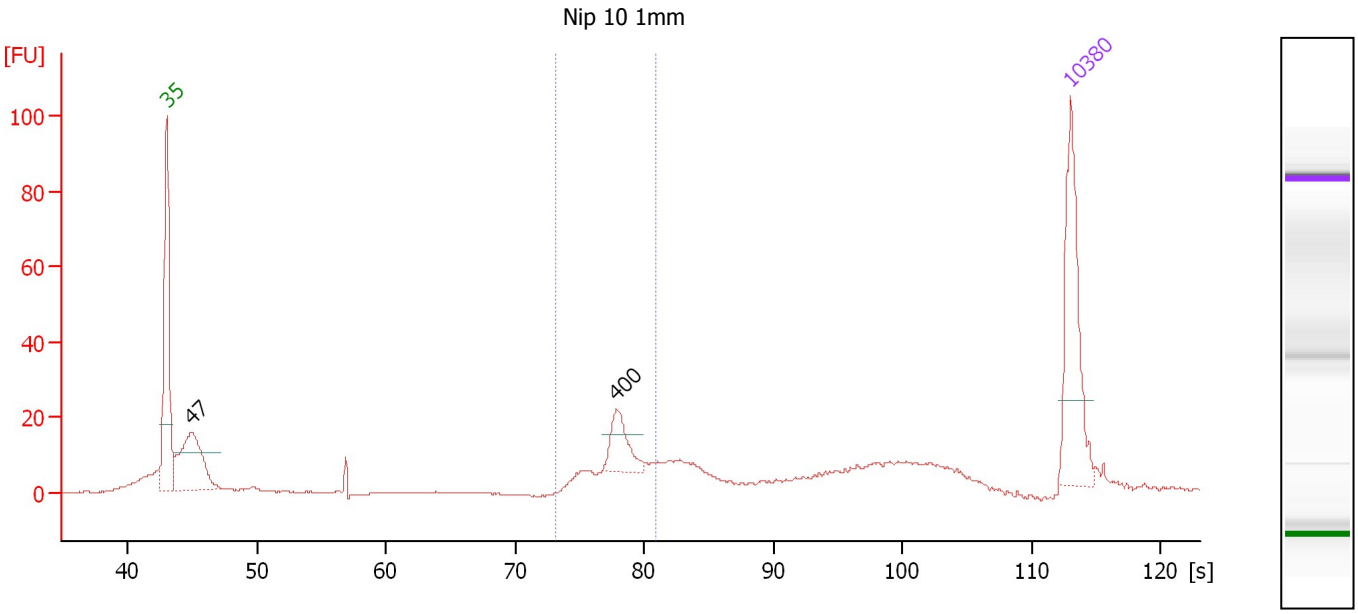
Region table for sample 4 : Nip 10 BS

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
71.83	81.52	394	614.9	159.39	164.9	49	5.7	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-11\2013-06-11_006.xad

Created: 6/11/2013 1:15:15 PM
Modified: 6/11/2013 1:56:21 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 5 : Nip 10 1mm

Height Threshold [FU] : 10

Overall Results for sample 5 : Nip 10 1mm

Number of peaks found:	2	Corr. Area 1:	84.4
Noise:	0.2		

Peak table for sample 5 : Nip 10 1mm

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	47	107.63	3,441.0	
3	400	33.76	127.8	
4	10,380	75.00	10.9	Upper Marker

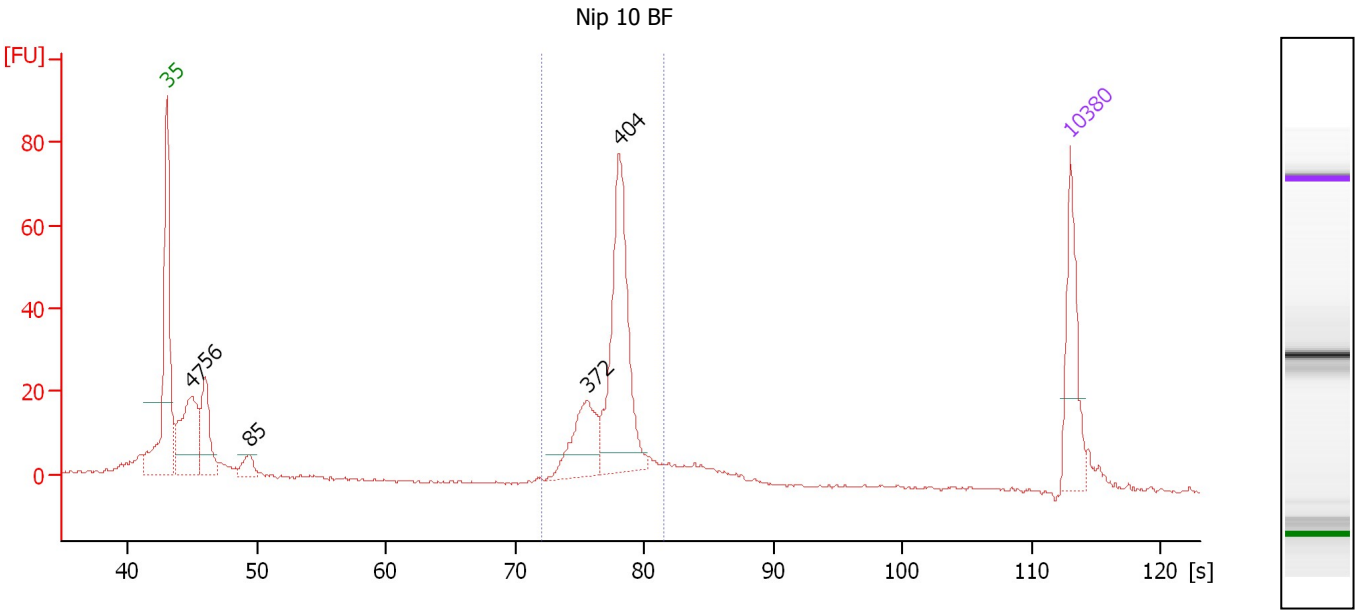
Region table for sample 5 : Nip 10 1mm

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
73.14	80.84	403	320.5	84.97	84.4	22	6.0	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-11\2013-06-11_006.xad

Created: 6/11/2013 1:15:15 PM
Modified: 6/11/2013 1:56:21 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : Nip 10 BF

Number of peaks found:	5	Corr. Area 1:	230.4
Noise:	0.3		

Peak table for sample 6 : Nip 10 BF

Peak		Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	◀	35	125.00	5,411.3	Lower Marker
2		47	166.43	5,338.3	
3		56	93.93	2,545.8	
4		85	25.17	446.2	
5		372	89.09	362.6	
6		404	238.70	896.2	
7	▶	10,380	75.00	10.9	Upper Marker

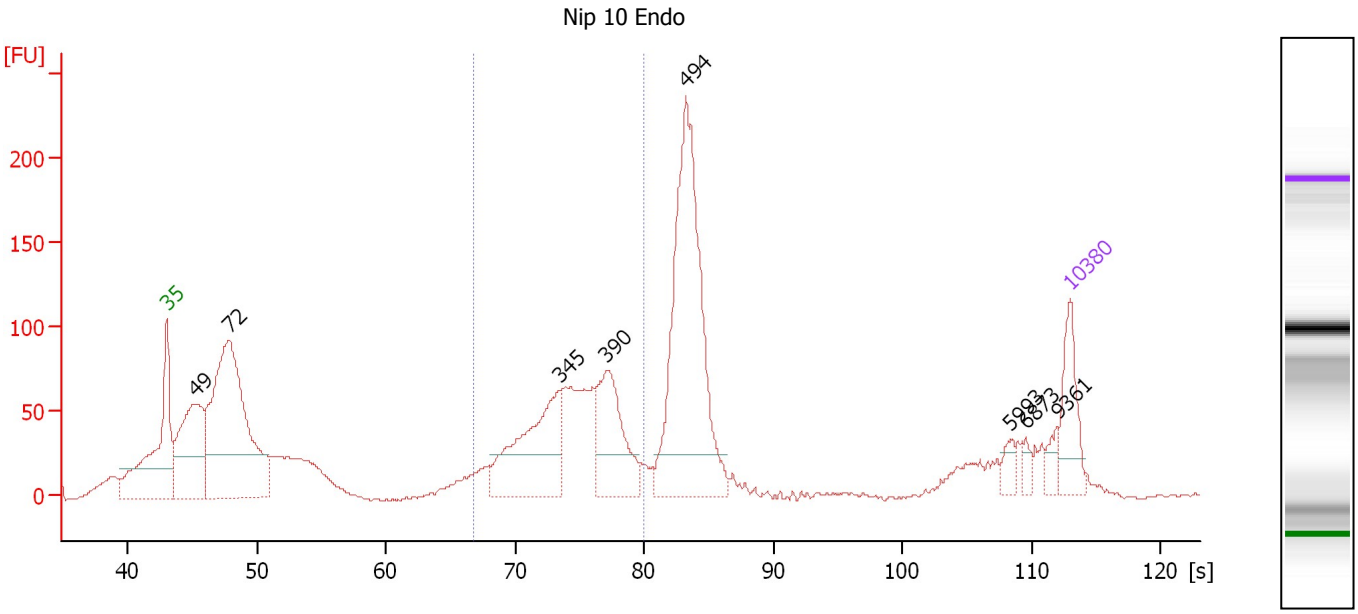
Region table for sample 6 : Nip 10 BF

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
71.98	81.55	398	1,411.1	369.19	230.4	54	5.8	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-11\2013-06-11_006.xad

Created: 6/11/2013 1:15:15 PM
Modified: 6/11/2013 1:56:21 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 7 : Nip 10 Endo

Height Threshold [FU] : 25

Overall Results for sample 7 : Nip 10 Endo

Number of peaks found:	8	Corr. Area 1:	802.5
Noise:	0.8		

Peak table for sample 7 : Nip 10 Endo

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	49	322.63	9,998.5	
3	72	757.68	15,966.0	
4	345	265.84	1,166.5	
5	390	189.22	734.7	
6	494	584.74	1,791.8	
7	5,993	19.62	5.0	
8	6,873	13.83	3.0	
9	9,361	18.69	3.0	
10	10,380	75.00	10.9	Upper Marker

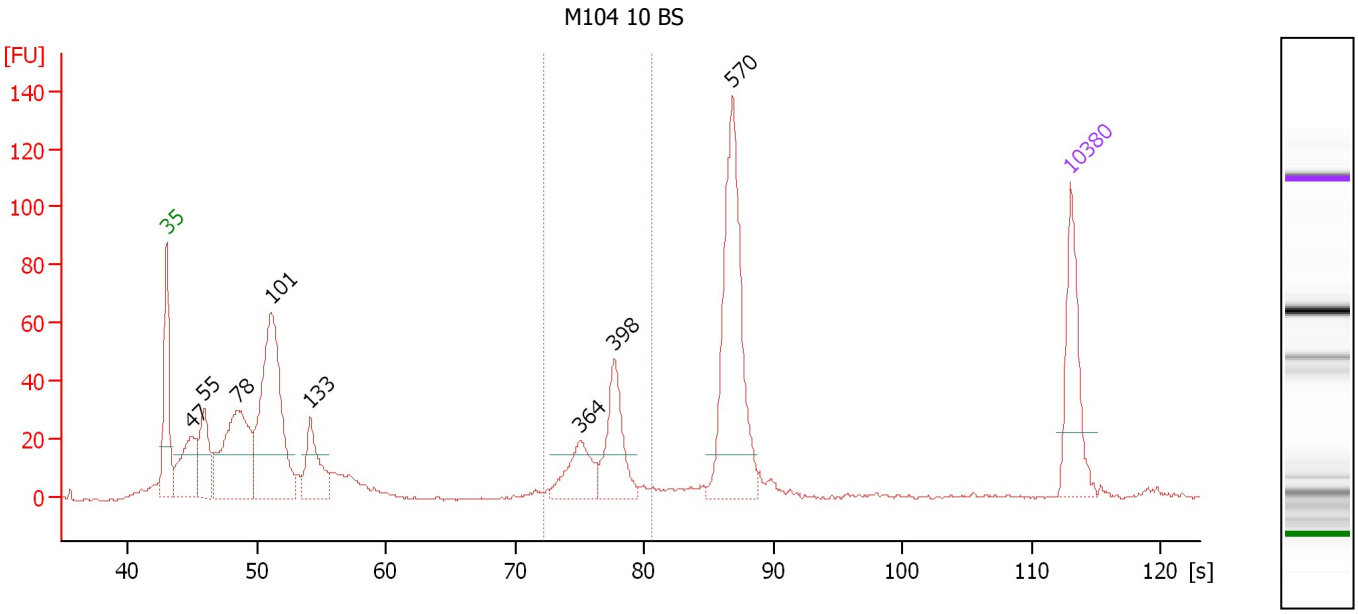
Region table for sample 7 : Nip 10 Endo

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
66.75	79.97	354	3,069.4	707.58	802.5	27	11.1	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-11\2013-06-11_006.xad

Created: 6/11/2013 1:15:15 PM
Modified: 6/11/2013 1:56:21 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 8 : M104 10 BS

Height Threshold [FU] : 15

Overall Results for sample 8 : M104 10 BS

Number of peaks found:	8	Corr. Area 1:	150.4
Noise:	0.4		

Peak table for sample 8 : M104 10 BS

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	47	107.91	3,446.9	
3	55	83.88	2,309.3	
4	78	224.38	4,371.2	
5	101	340.12	5,097.0	
6	133	84.65	965.5	
7	364	64.35	267.7	
8	398	88.51	336.9	
9	570	240.60	639.5	
10	10,380	75.00	10.9	Upper Marker

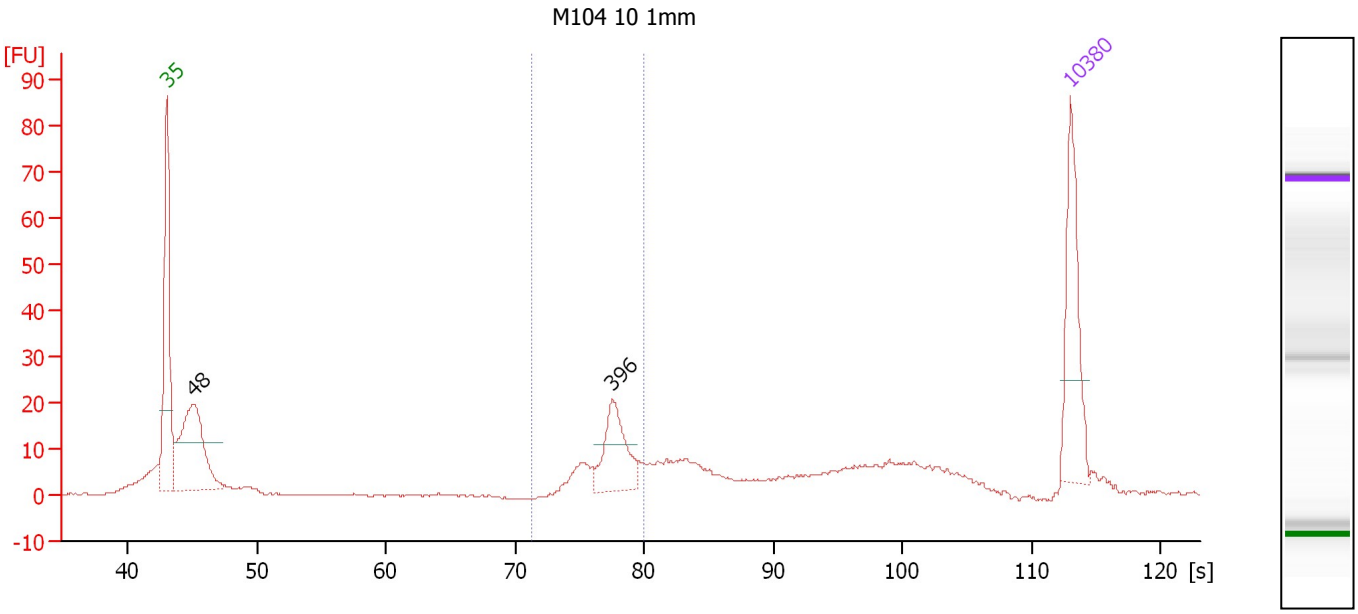
Region table for sample 8 : M104 10 BS

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
72.13	80.59	386	610.0	155.10	150.4	14	5.9	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-11\2013-06-11_006.xad

Created: 6/11/2013 1:15:15 PM
Modified: 6/11/2013 1:56:21 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 9 : M104 10 1mm

Height Threshold [FU] : 10

Overall Results for sample 9 : M104 10 1mm

Number of peaks found:	2	Corr. Area 1:	73.4
Noise:	0.2		

Peak table for sample 9 : M104 10 1mm

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	48	174.51	5,494.8	
3	396	67.37	257.9	
4	10,380	75.00	10.9	Upper Marker

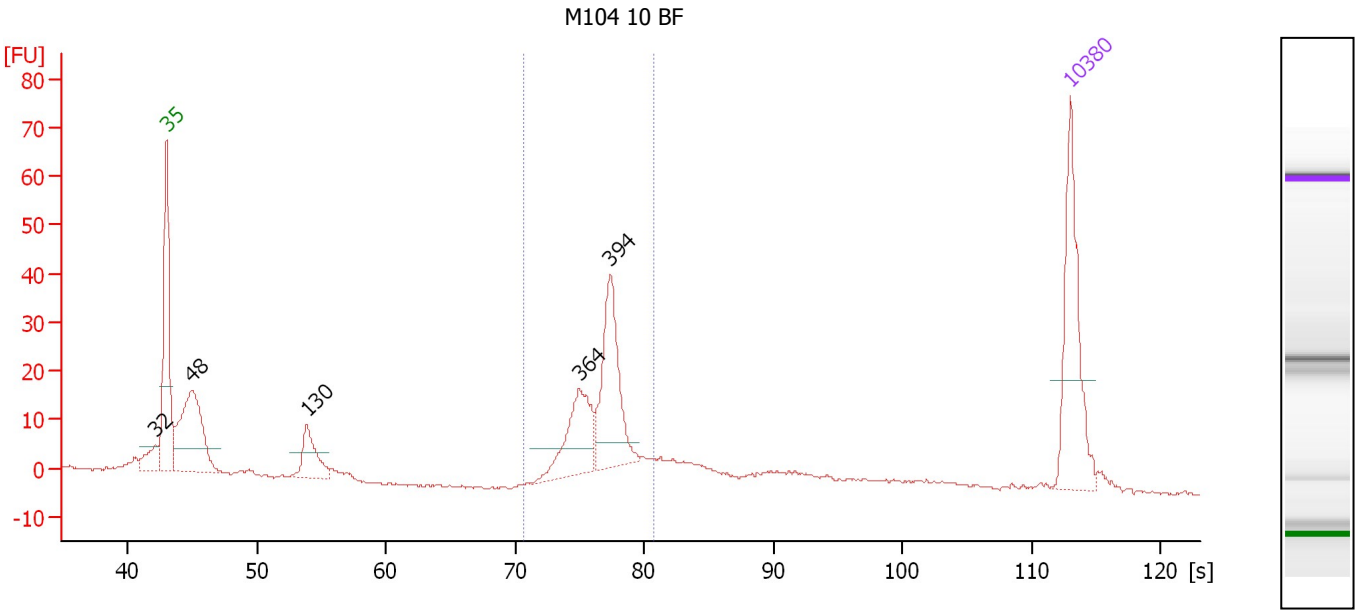
Region table for sample 9 : M104 10 1mm

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
71.32	80.00	395	387.0	100.52	73.4	21	5.3	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-11\2013-06-11_006.xad

Created: 6/11/2013 1:15:15 PM
Modified: 6/11/2013 1:56:21 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : M104 10 BF

Number of peaks found:	5	Corr. Area 1:	155.1
Noise:	0.3		

Peak table for sample 10 : M104 10 BF

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	48	137.69	4,386.0	
4	130	43.37	505.5	
5	364	67.69	281.7	
6	394	94.08	361.8	
7	10,380	75.00	10.9	Upper Marker

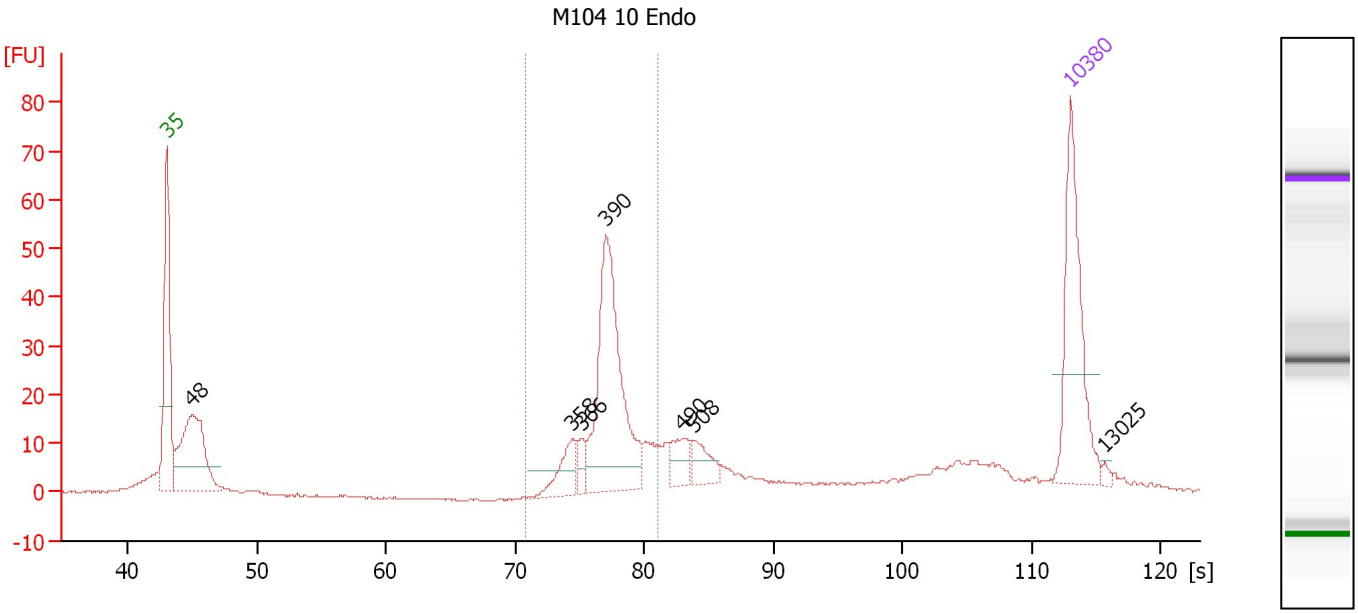
Region table for sample 10 : M104 10 BF

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
70.60	80.79	386	771.8	196.28	155.1	43	6.1	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-11\2013-06-11_006.xad

Created: 6/11/2013 1:15:15 PM
Modified: 6/11/2013 1:56:21 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : M104 10 Endo

Number of peaks found:	7	Corr. Area 1:	191.8
Noise:	0.2		

Peak table for sample 11 : M104 10 Endo

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	48	122.95	3,904.9	
3	358	26.97	114.3	
4	366	11.03	45.6	
5	390	156.79	609.8	
6	490	20.93	64.8	
7	508	18.36	54.8	
8	10,380	75.00	10.9	Upper Marker
9	13,025	0.00	0.0	

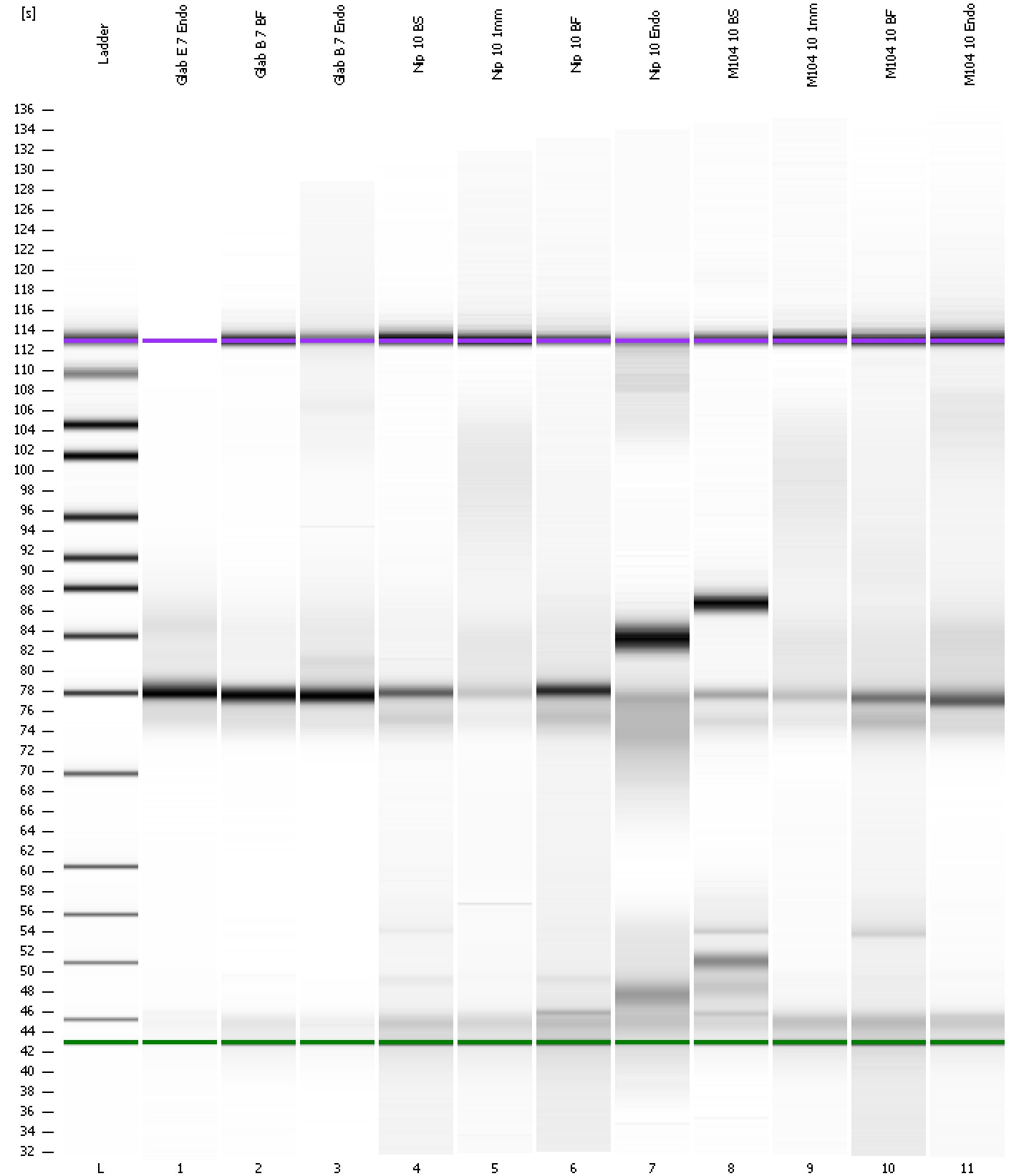
Region table for sample 11 : M104 10 Endo

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
70.87	80.98	393	837.8	216.79	191.8	39	6.4	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-11\2013-06-11_006.xad

Created: 6/11/2013 1:15:15 PM
Modified: 6/11/2013 1:56:21 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-11\2013-06-11_006.xad

Created: 6/11/2013 1:15:15 PM
Modified: 6/11/2013 1:56:21 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		6/11/2013 1:55:44 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-06-11\2013-06-11_006.xad)		Instrument	Run		6/11/2013 1:15:21 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		6/11/2013 1:15:21 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		6/11/2013 1:15:21 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		6/11/2013 1:15:21 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		6/11/2013 1:15:21 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		6/11/2013 1:15:21 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		6/11/2013 1:15:21 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1