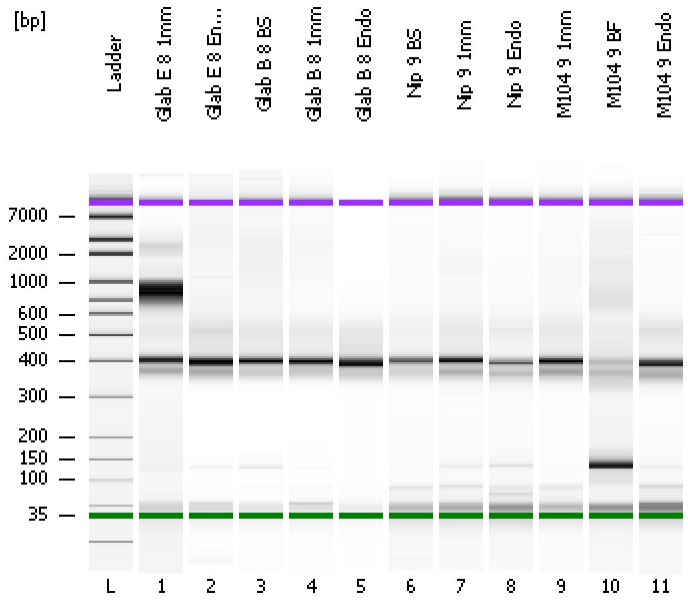
Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-11\2013-07-11_004.xad

Created: 7/11/2013 2:20:36 PM
Modified: 7/11/2013 3:02:46 PM

Electrophoresis File Run Summary



Instrument Information:

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

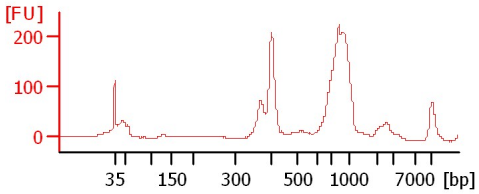
Assay Information:

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

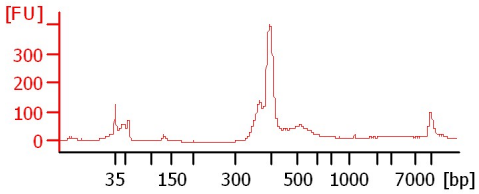
Chip Information:

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

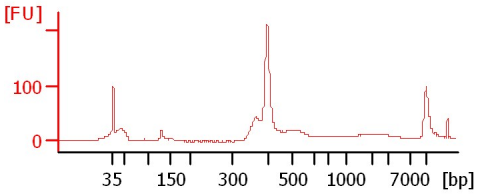
Glab E 8 1mm



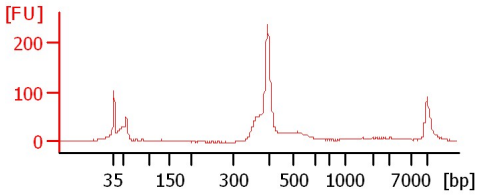
Glab E 8 Endo- 1mm



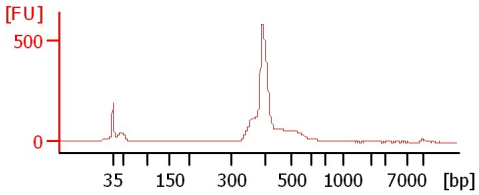
Glab B 8 BS



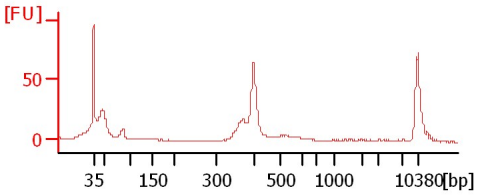
Glab B 8 1mm



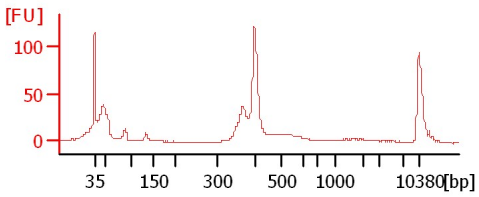
Glab B 8 Endo



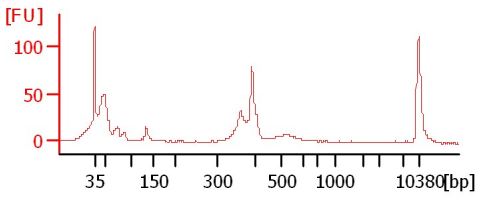
Nip 9 BS



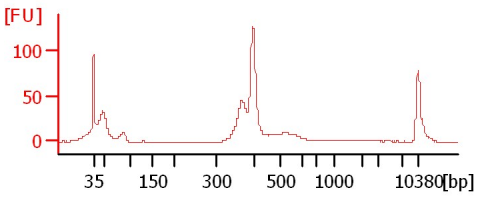
Nip 9 1mm



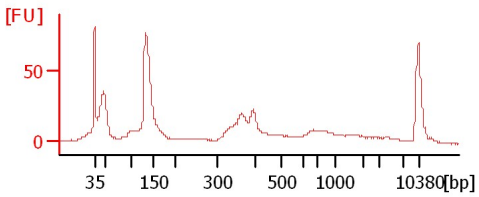
Nip 9 Endo



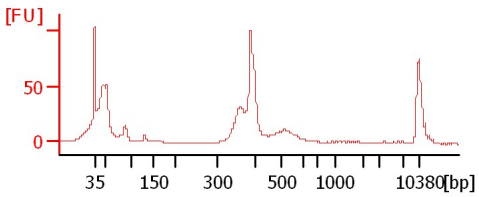
M104 9 1mm



M104 9 BF



M104 9 Endo



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-11\2013-07-11_004.xad

Created: 7/11/2013 2:20:36 PM
Modified: 7/11/2013 3:02:46 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
Glab E 8 1mm		☐	✔			
Glab E 8 Endo- 1mm		☐	✔			
Glab B 8 BS		☐	✔			
Glab B 8 1mm		☐	✔			
Glab B 8 Endo		☐	✔			
Nip 9 BS		☐	✔			
Nip 9 1mm		☐	✔			
Nip 9 Endo		☐	✔			
M104 9 1mm		☐	✔			
M104 9 BF		☐	✔			
M104 9 Endo		☐	✔			
Ladder		☐	✔			

Chip Lot # **Reagent Kit Lot #**

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-11\2013-07-11_004.xad

Created: 7/11/2013 2:20:36 PM
Modified: 7/11/2013 3:02:46 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

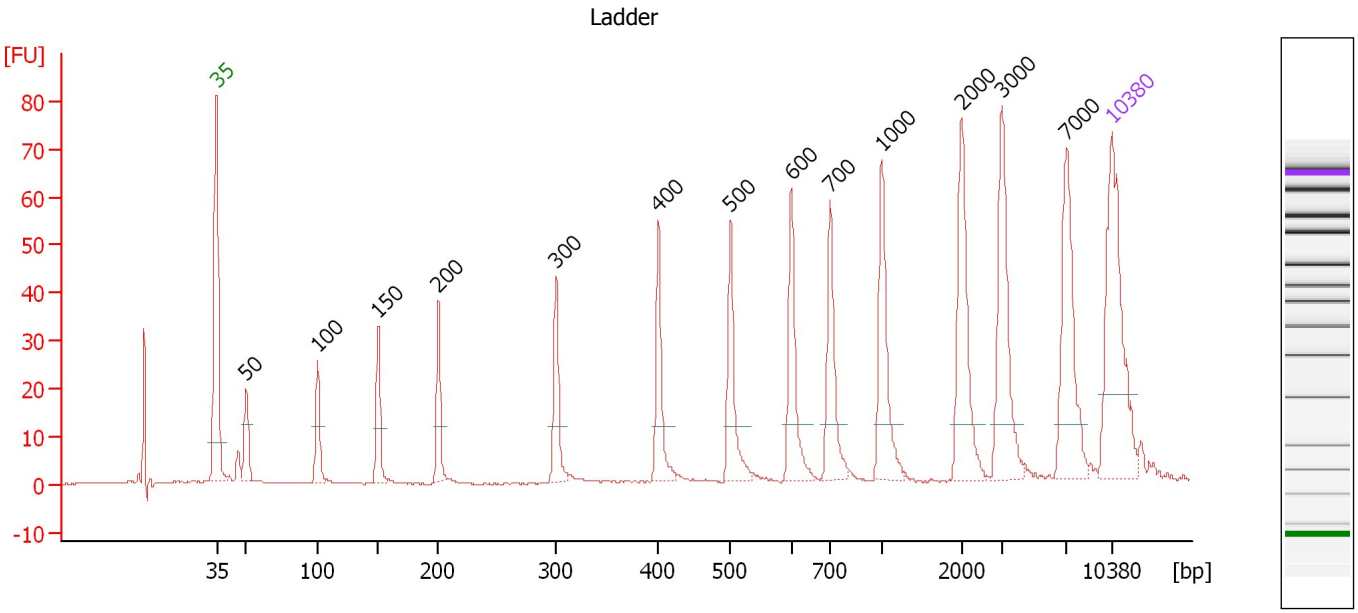
Ladder

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\2013-07-11\2013-07-11_004.xad

Created: 7/11/2013 2:20:36 PM
Modified: 7/11/2013 3:02:46 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

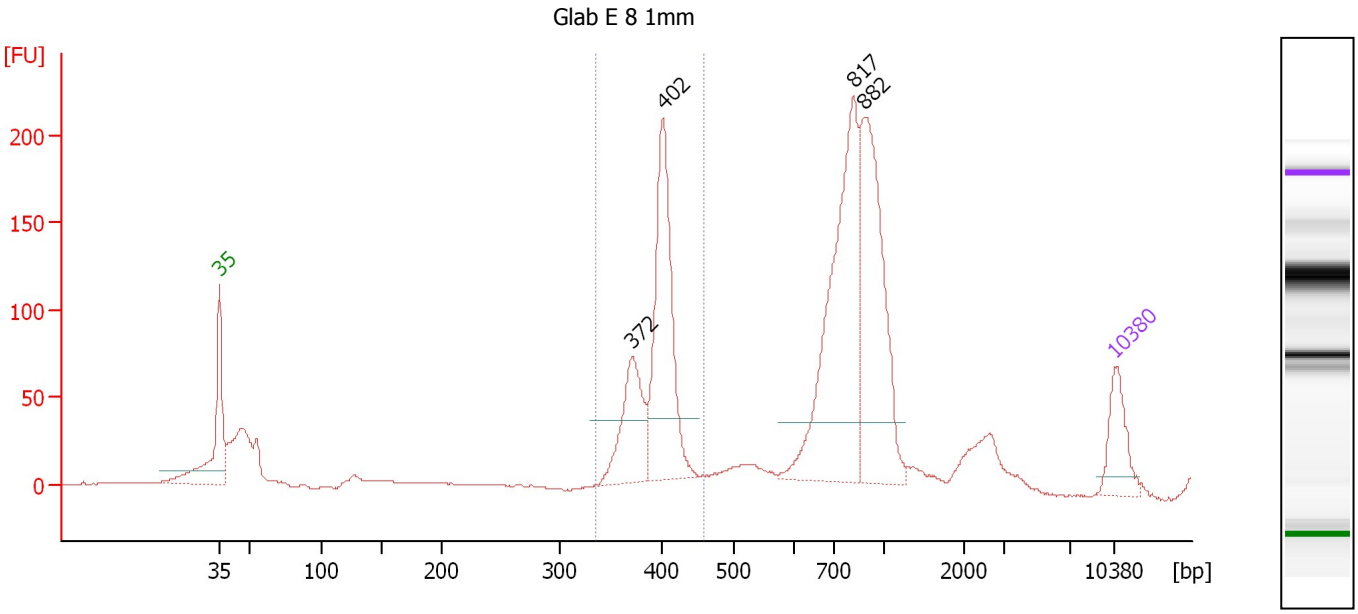
Peak table for Ladder

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\2013-07-11\2013-07-11_004.xad

Created: 7/11/2013 2:20:36 PM
Modified: 7/11/2013 3:02:46 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 1 : Glab E 8 1mm

Height Threshold [FU] : 35

Overall Results for sample 1 : Glab E 8 1mm

Number of peaks found:	4	Corr. Area 1:	659.0
Noise:	0.2		

Peak table for sample 1 : Glab E 8 1mm

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	372	204.26	832.8	
3	402	421.34	1,588.6	
4	817	547.98	1,016.8	
5	882	440.68	756.9	
6	10,380	75.00	10.9	Upper Marker

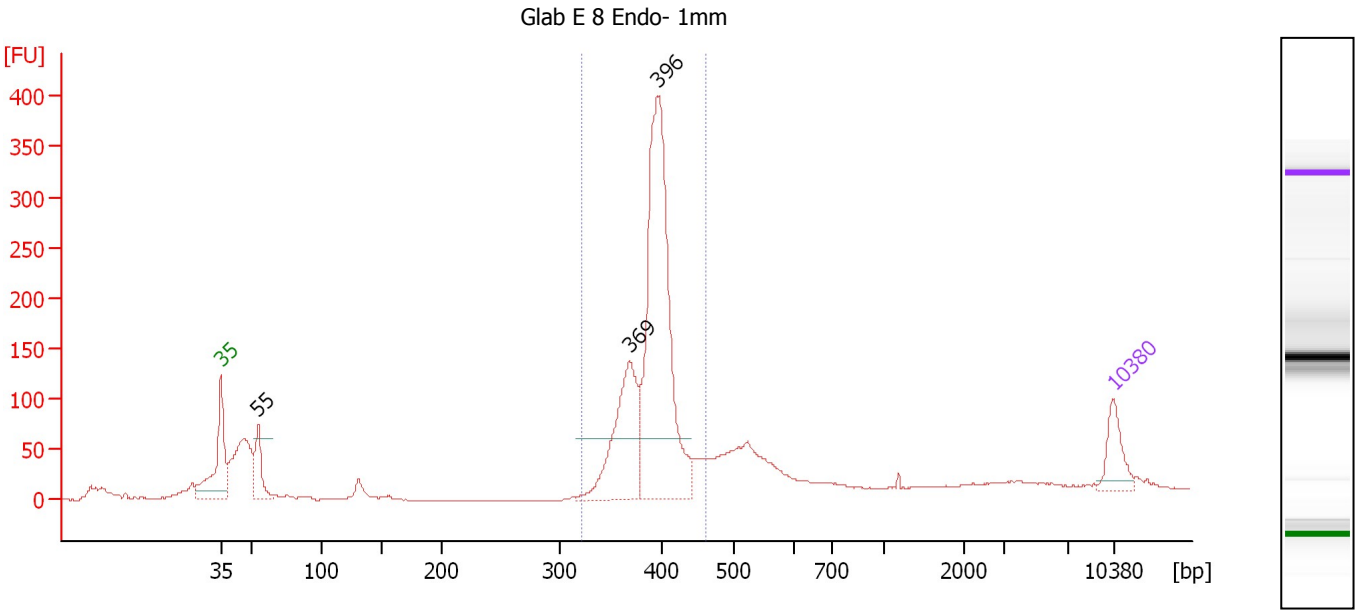
Region table for sample 1 : Glab E 8 1mm

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
335	459	395	2,582.0	671.01	659.0	29	5.2	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-11\2013-07-11_004.xad

Created: 7/11/2013 2:20:36 PM
Modified: 7/11/2013 3:02:46 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 2 : Glab E 8 Endo- 1mm

Height Threshold [FU] : 60

Overall Results for sample 2 : Glab E 8 Endo- 1mm

Number of peaks found:	3	Corr. Area 1:	1,473.9
Noise:	0.4		

Peak table for sample 2 : Glab E 8 Endo- 1mm

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	55	142.40	3,901.5	
3	369	392.77	1,613.2	
4	396	1,037.47	3,968.8	
5	10,380	75.00	10.9	Upper Marker

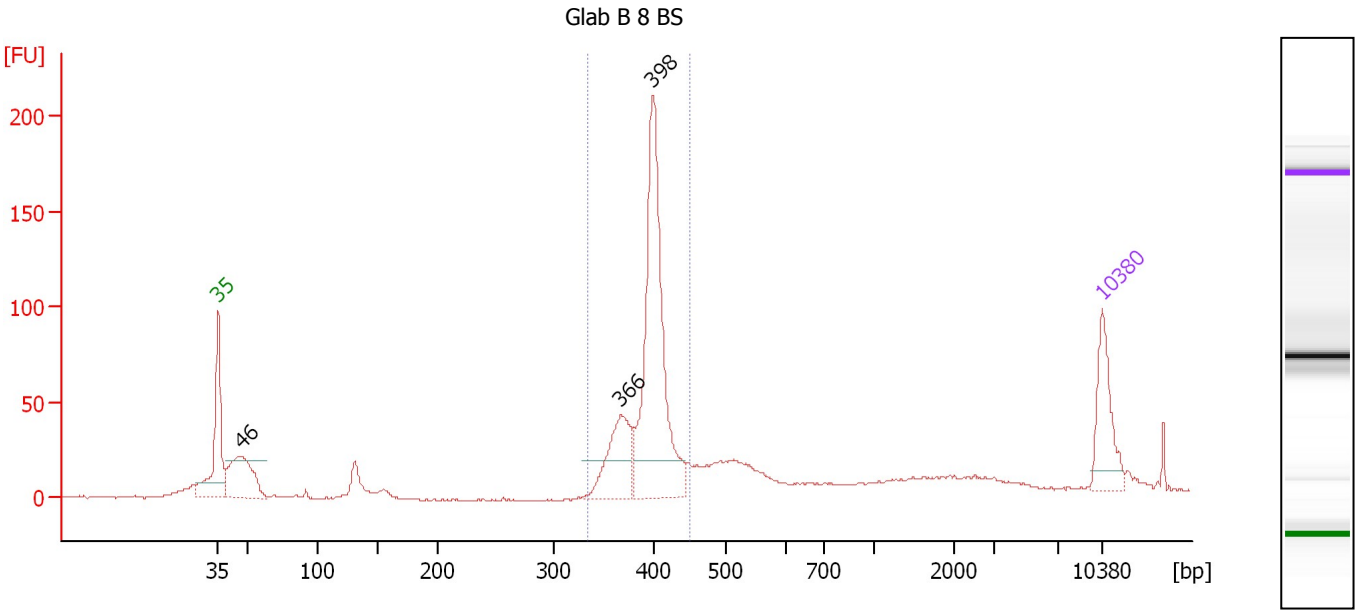
Region table for sample 2 : Glab E 8 Endo- 1mm

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
321	462	392	5,506.4	1,421.73	1,473.9	60	5.8	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-11\2013-07-11_004.xad

Created: 7/11/2013 2:20:36 PM
Modified: 7/11/2013 3:02:46 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 3 : Glab B 8 BS

Height Threshold [FU] : 20

Overall Results for sample 3 : Glab B 8 BS

Number of peaks found:	3	Corr. Area 1:	557.5
Noise:	0.5		

Peak table for sample 3 : Glab B 8 BS

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	46	172.11	5,621.1	
3	366	130.72	540.5	
4	398	440.09	1,675.0	
5	10,380	75.00	10.9	Upper Marker

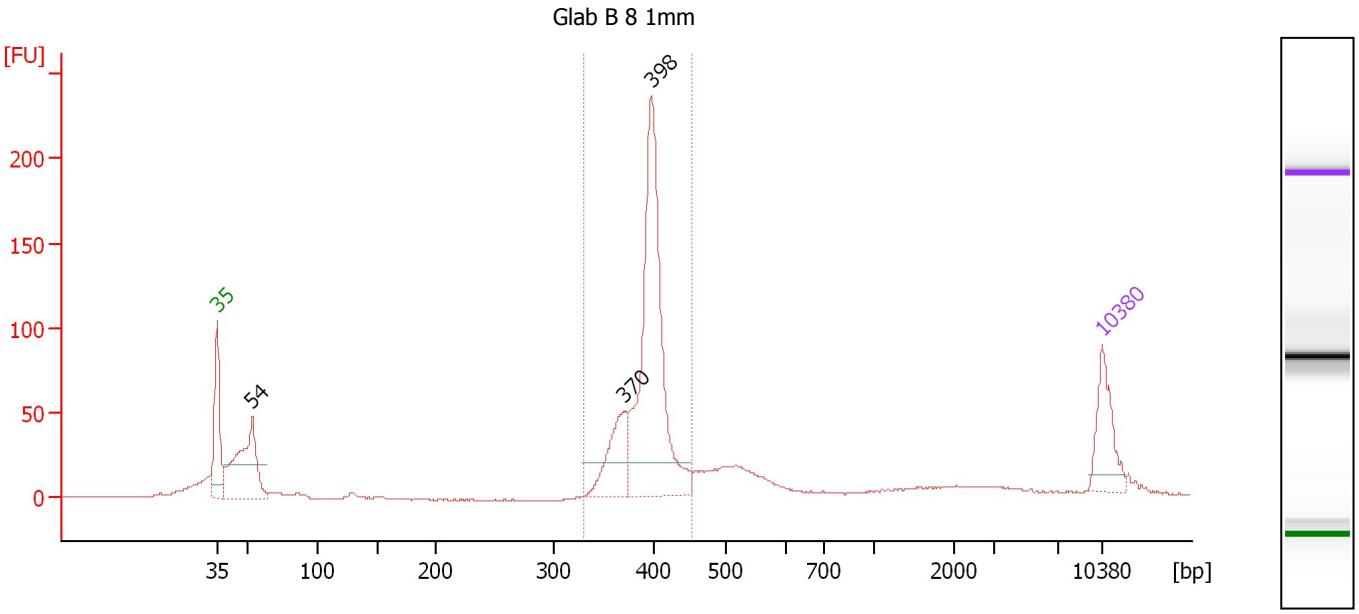
Region table for sample 3 : Glab B 8 BS

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
333	450	395	2,149.7	558.79	557.5	56	5.1	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-11\2013-07-11_004.xad

Created: 7/11/2013 2:20:36 PM
Modified: 7/11/2013 3:02:46 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 4 : Glab B 8 1mm

Height Threshold [FU] : 20

Overall Results for sample 4 : Glab B 8 1mm

Number of peaks found:	3	Corr. Area 1:	669.4
Noise:	0.4		

Peak table for sample 4 : Glab B 8 1mm

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	54	275.17	7,719.1	
3	370	124.41	509.2	
4	398	548.21	2,089.3	
5	10,380	75.00	10.9	Upper Marker

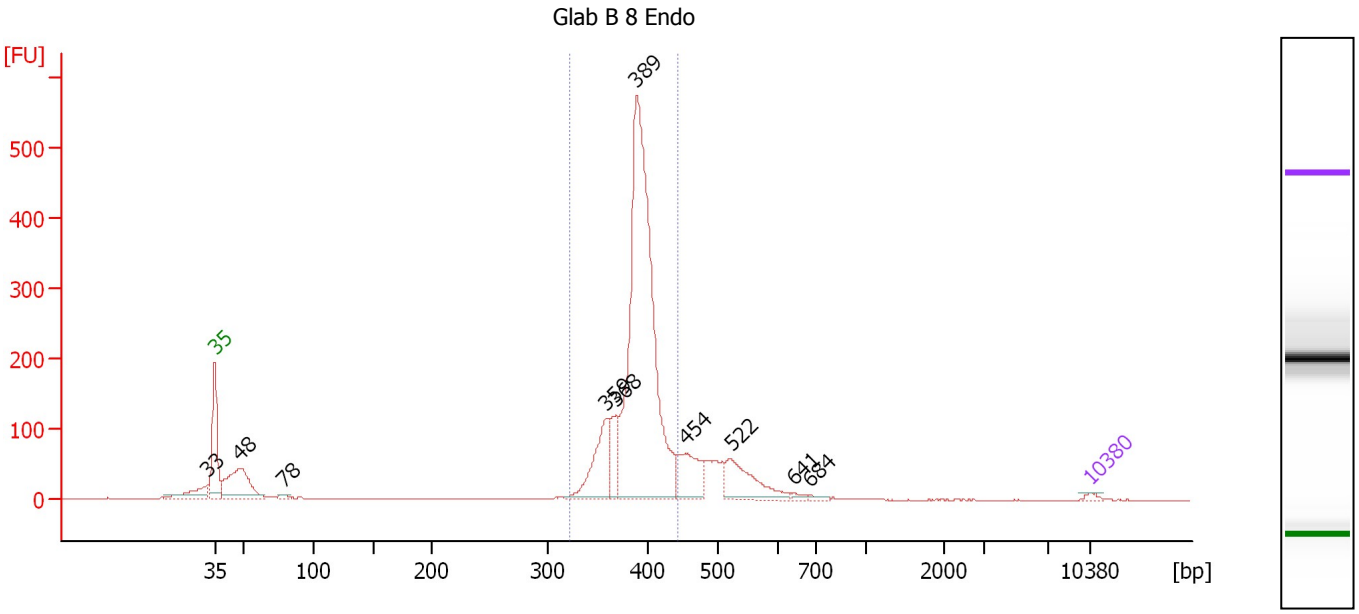
Region table for sample 4 : Glab B 8 1mm

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
330	453	394	2,606.6	675.86	669.4	59	5.1	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-11\2013-07-11_004.xad

Created: 7/11/2013 2:20:36 PM
Modified: 7/11/2013 3:02:46 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : Glab B 8 Endo

Number of peaks found:	10	Corr. Area 1:	1,987.0
Noise:	0.4		

Peak table for sample 5 : Glab B 8 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	48	2,959.05	93,667.5	
4	78	178.28	3,467.0	
5	359	2,109.19	8,904.3	
6	368	1,157.94	4,761.4	
7	389	14,584.53	56,772.2	
8	454	1,494.22	4,991.4	
9	522	1,696.67	4,923.7	
10	641	105.60	249.7	
11	684	81.89	181.4	
12	10,380	75.00	10.9	Upper Marker

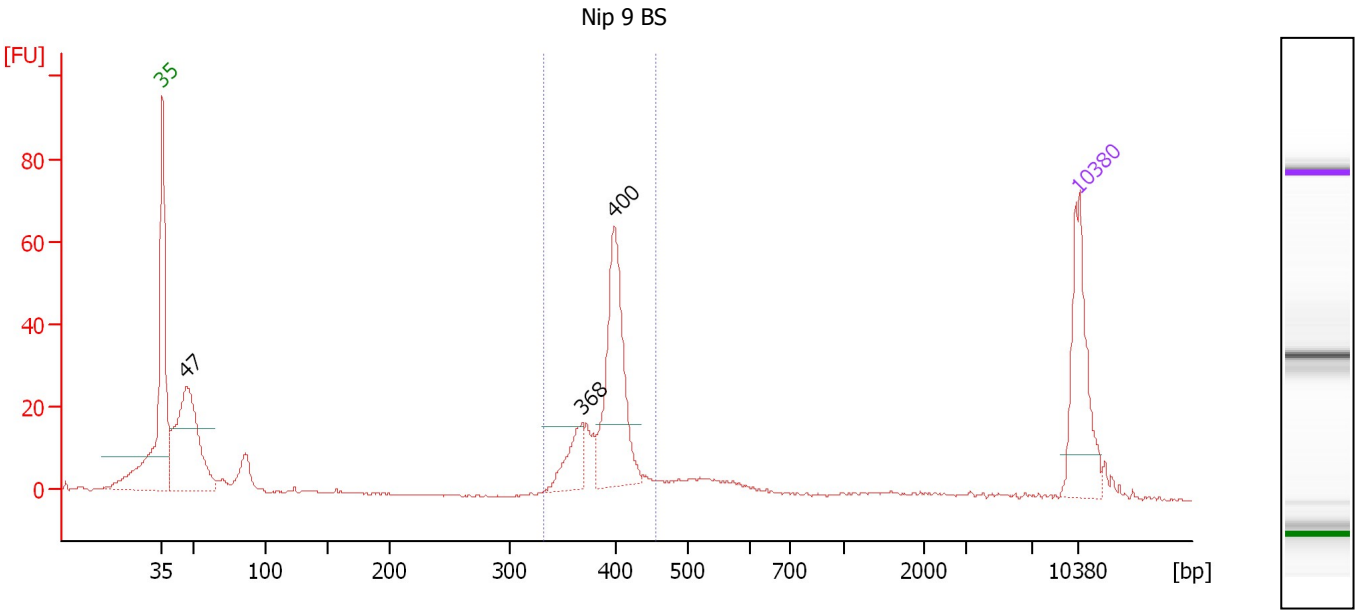
Region table for sample 5 : Glab B 8 Endo

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
322	444	390	69,749.5	17,909.81	1,987.0	68	5.3	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-11\2013-07-11_004.xad

Created: 7/11/2013 2:20:36 PM
Modified: 7/11/2013 3:02:46 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 6 : Nip 9 BS

Height Threshold [FU] : 15

Overall Results for sample 6 : Nip 9 BS

Number of peaks found:	3	Corr. Area 1:	199.4
Noise:	0.2		

Peak table for sample 6 : Nip 9 BS

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	47	215.04	6,991.4	
3	368	40.93	168.3	
4	400	151.75	575.4	
5	10,380	75.00	10.9	Upper Marker

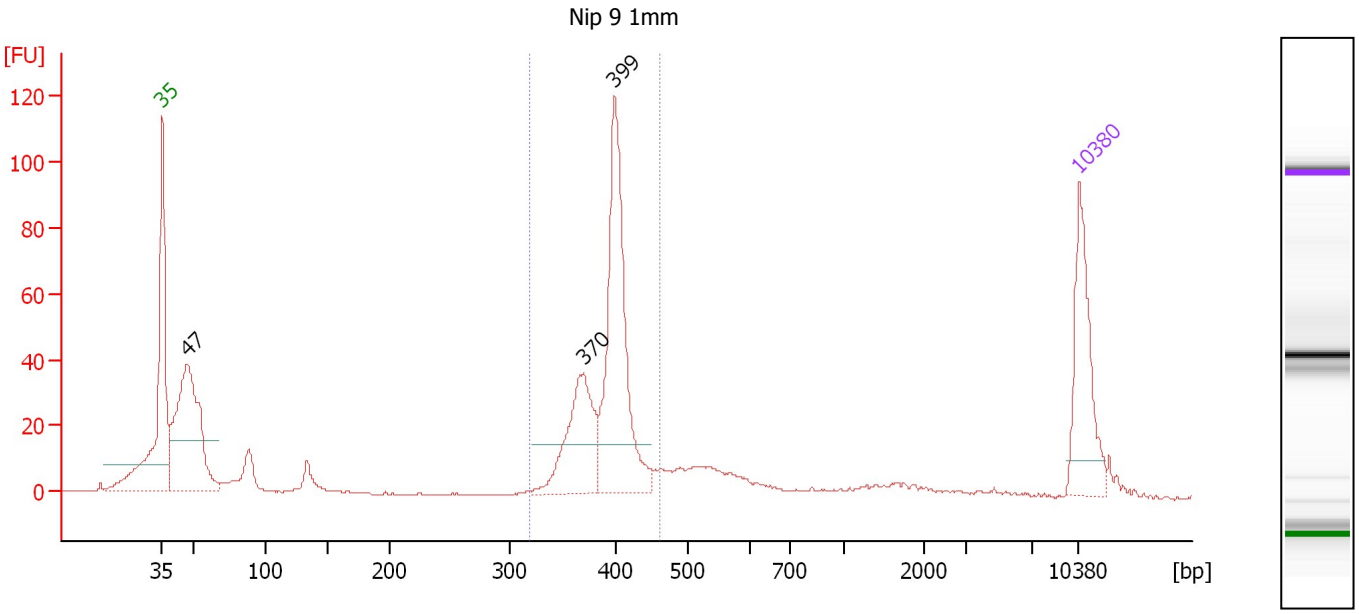
Region table for sample 6 : Nip 9 BS

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
332	456	393	935.1	242.16	199.4	48	5.6	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-11\2013-07-11_004.xad

Created: 7/11/2013 2:20:36 PM
Modified: 7/11/2013 3:02:46 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 7 : Nip 9 1mm

Height Threshold [FU] : 15

Overall Results for sample 7 : Nip 9 1mm

Number of peaks found:	3	Corr. Area 1:	372.2
Noise:	0.3		

Peak table for sample 7 : Nip 9 1mm

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	47	262.76	8,460.5	
3	370	114.54	469.0	
4	399	224.77	852.5	
5	10,380	75.00	10.9	Upper Marker

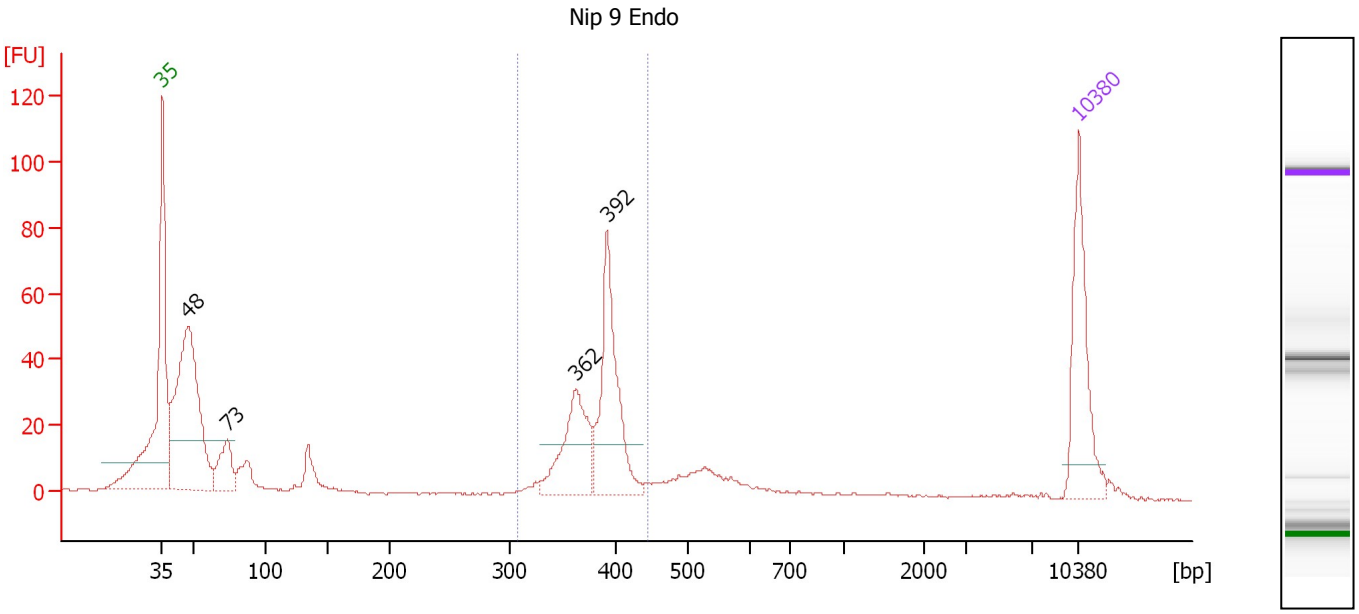
Region table for sample 7 : Nip 9 1mm

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
318	462	393	1,357.2	350.93	372.2	49	6.2	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-11\2013-07-11_004.xad

Created: 7/11/2013 2:20:36 PM
Modified: 7/11/2013 3:02:46 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 8 : Nip 9 Endo

Height Threshold [FU] : 15

Overall Results for sample 8 : Nip 9 Endo

Number of peaks found:	4	Corr. Area 1:	254.4
Noise:	0.2		

Peak table for sample 8 : Nip 9 Endo

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	48	315.84	10,040.0	
3	73	49.09	1,013.3	
4	362	89.70	375.2	
5	392	132.02	509.8	
6	10,380	75.00	10.9	Upper Marker

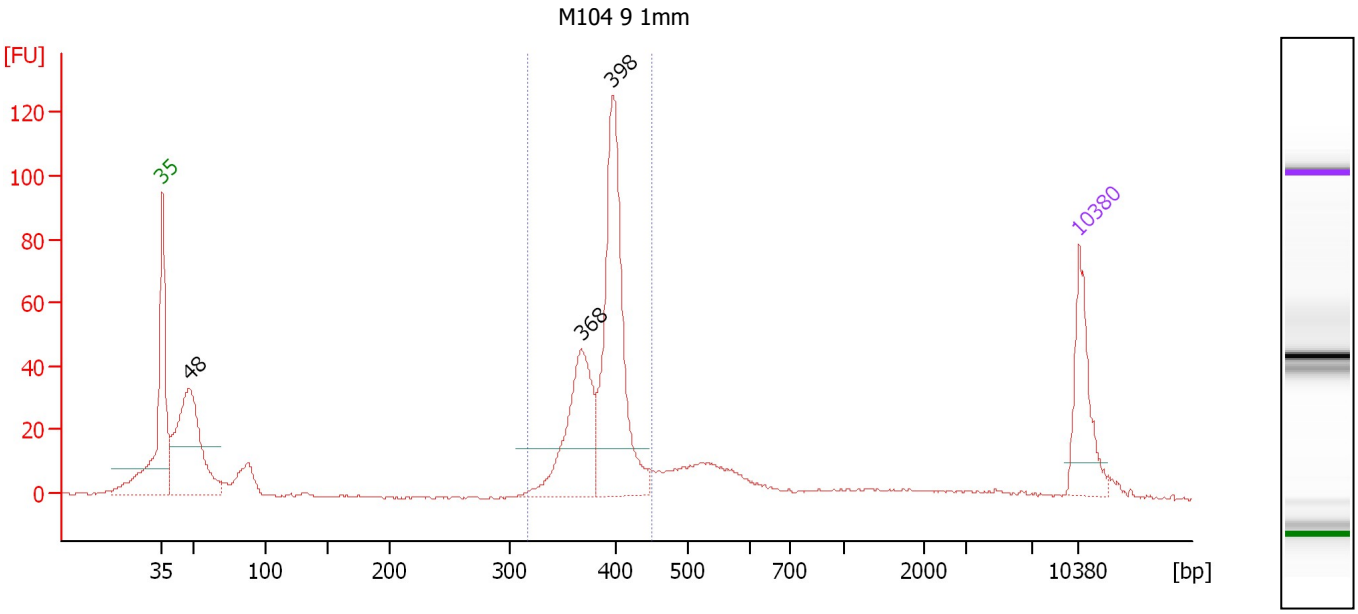
Region table for sample 8 : Nip 9 Endo

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
308	445	382	934.3	234.90	254.4	37	6.2	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-11\2013-07-11_004.xad

Created: 7/11/2013 2:20:36 PM
Modified: 7/11/2013 3:02:46 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 9 : M104 9 1mm

Height Threshold [FU] : 15

Overall Results for sample 9 : M104 9 1mm

Number of peaks found:	3	Corr. Area 1:	421.5
Noise:	0.2		

Peak table for sample 9 : M104 9 1mm

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	48	300.41	9,483.7	
3	368	185.60	763.9	
4	398	318.52	1,213.3	
5	10,380	75.00	10.9	Upper Marker

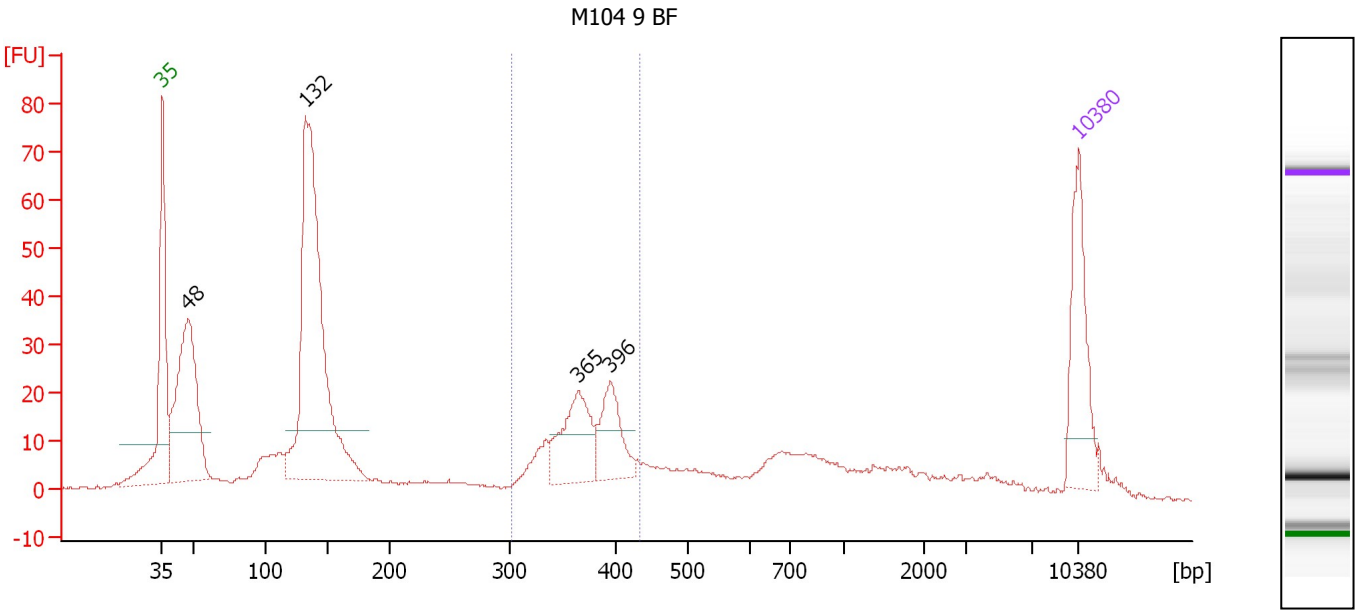
Region table for sample 9 : M104 9 1mm

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
316	449	389	2,004.5	512.74	421.5	53	5.9	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-11\2013-07-11_004.xad

Created: 7/11/2013 2:20:36 PM
Modified: 7/11/2013 3:02:46 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 10 : M104 9 BF

Height Threshold [FU] : 10

Overall Results for sample 10 : M104 9 BF

Number of peaks found:	4	Corr. Area 1:	168.4
Noise:	0.2		

Peak table for sample 10 : M104 9 BF

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	48	266.82	8,466.0	
3	132	495.35	5,684.7	
4	365	88.59	367.8	
5	396	64.26	246.0	
6	10,380	75.00	10.9	Upper Marker

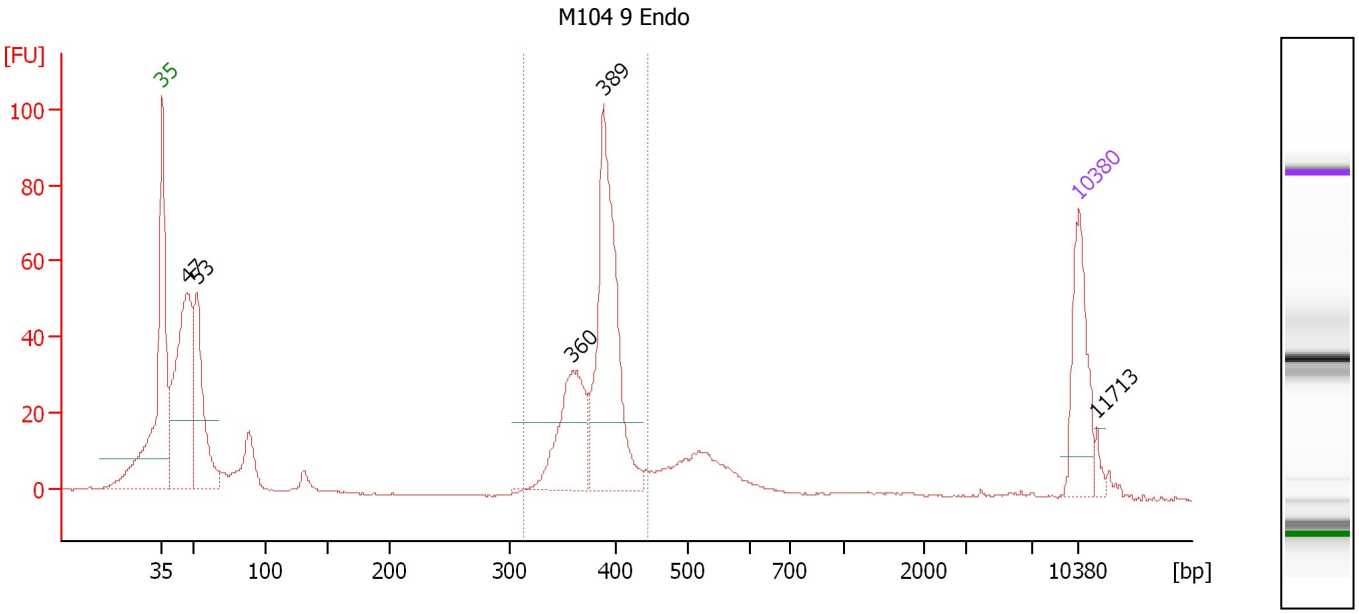
Region table for sample 10 : M104 9 BF

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
302	435	371	936.0	228.58	168.4	19	7.9	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-11\2013-07-11_004.xad

Created: 7/11/2013 2:20:36 PM
Modified: 7/11/2013 3:02:46 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 11 : M104 9 Endo

Height Threshold [FU] : 18

Overall Results for sample 11 : M104 9 Endo

Number of peaks found:	5	Corr. Area 1:	342.4
Noise:	0.1		

Peak table for sample 11 : M104 9 Endo

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	47	322.51	10,391.8	
3	53	179.27	5,160.7	
4	360	131.28	553.2	
5	389	274.46	1,068.9	
6	10,380	75.00	10.9	Upper Marker
7	11,713	0.00	0.0	

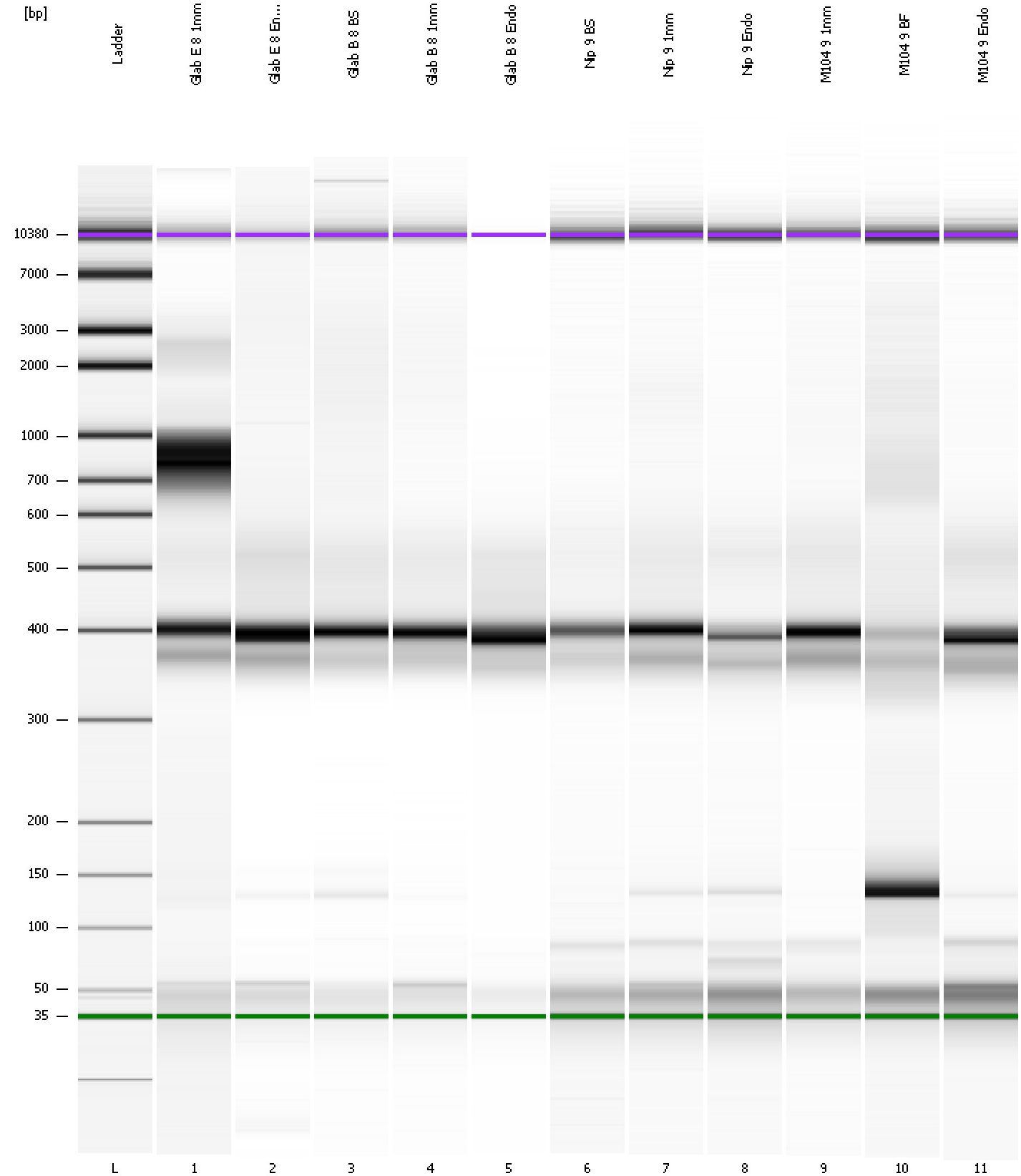
Region table for sample 11 : M104 9 Endo

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
312	444	383	1,702.7	429.51	342.4	42	5.8	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-11\2013-07-11_004.xad

Created: 7/11/2013 2:20:36 PM
Modified: 7/11/2013 3:02:46 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-11\2013-07-11_004.xad

Created: 7/11/2013 2:20:36 PM
Modified: 7/11/2013 3:02:46 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		7/11/2013 3:01:05 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-07-11\2013-07-11_004.xad)		Instrument	Run		7/11/2013 2:20:42 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		7/11/2013 2:20:42 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		7/11/2013 2:20:42 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		7/11/2013 2:20:42 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		7/11/2013 2:20:42 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		7/11/2013 2:20:42 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		7/11/2013 2:20:42 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1