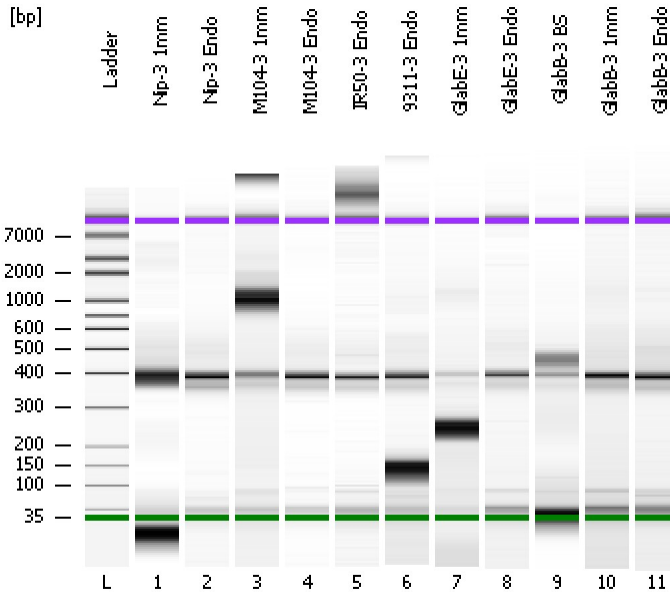


Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-23\2013-05-23_003.xad

Created: 5/23/2013 1:34:42 PM
 Modified: 5/23/2013 2:22:33 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

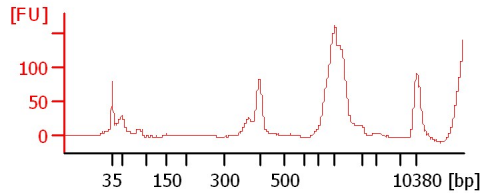
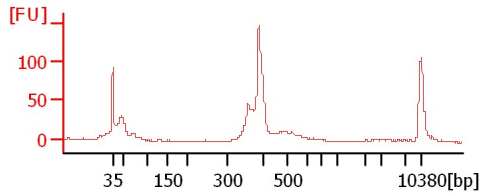
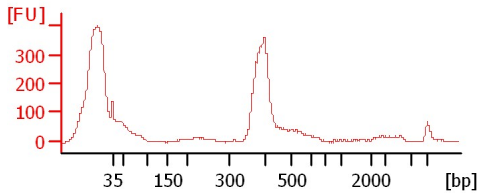
Chip Information:

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

Nip-3 1mm

Nip-3 Endo

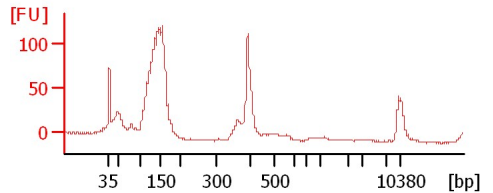
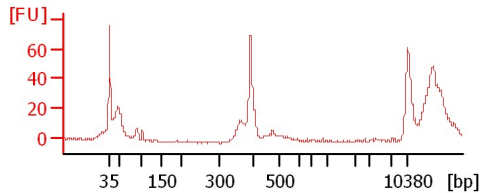
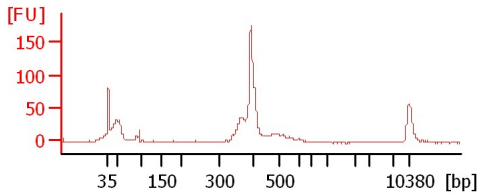
M104-3 1mm



M104-3 Endo

IR50-3 Endo

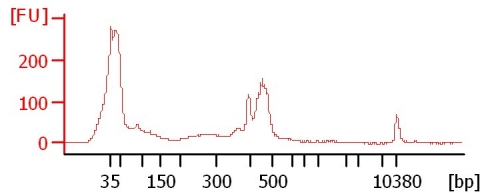
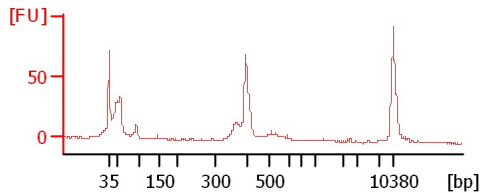
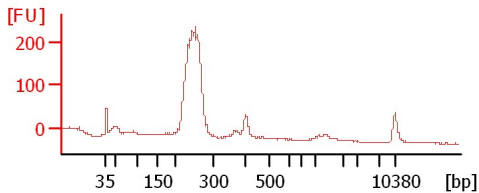
9311-3 Endo



GlabE-3 1mm

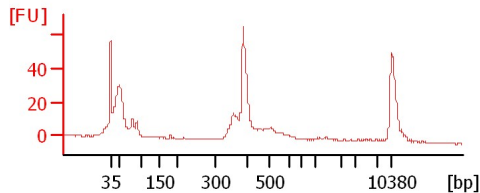
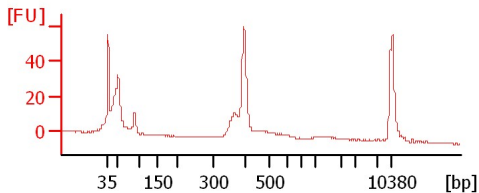
GlabE-3 Endo

GlabB-3 BS



GlabB-3 1mm

GlabB-3 Endo



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-23\2013-05-23_003.xad

Created: 5/23/2013 1:34:42 PM
 Modified: 5/23/2013 2:22:33 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
Nip-3 1mm		<input type="checkbox"/>	✓			
Nip-3 Endo		<input type="checkbox"/>	✓			
M104-3 1mm		<input type="checkbox"/>	✓			
M104-3 Endo		<input type="checkbox"/>	✓			
IR50-3 Endo		<input type="checkbox"/>	✓			
9311-3 Endo		<input type="checkbox"/>	✓			
GlabE-3 1mm		<input type="checkbox"/>	✓			
GlabE-3 Endo		<input type="checkbox"/>	✓			
GlabB-3 BS		<input type="checkbox"/>	✓			
GlabB-3 1mm		<input type="checkbox"/>	✓			
GlabB-3 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\2013-05-23\2013-05-23_003.xad

Created: 5/23/2013 1:34:42 PM
Modified: 5/23/2013 2:22:33 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

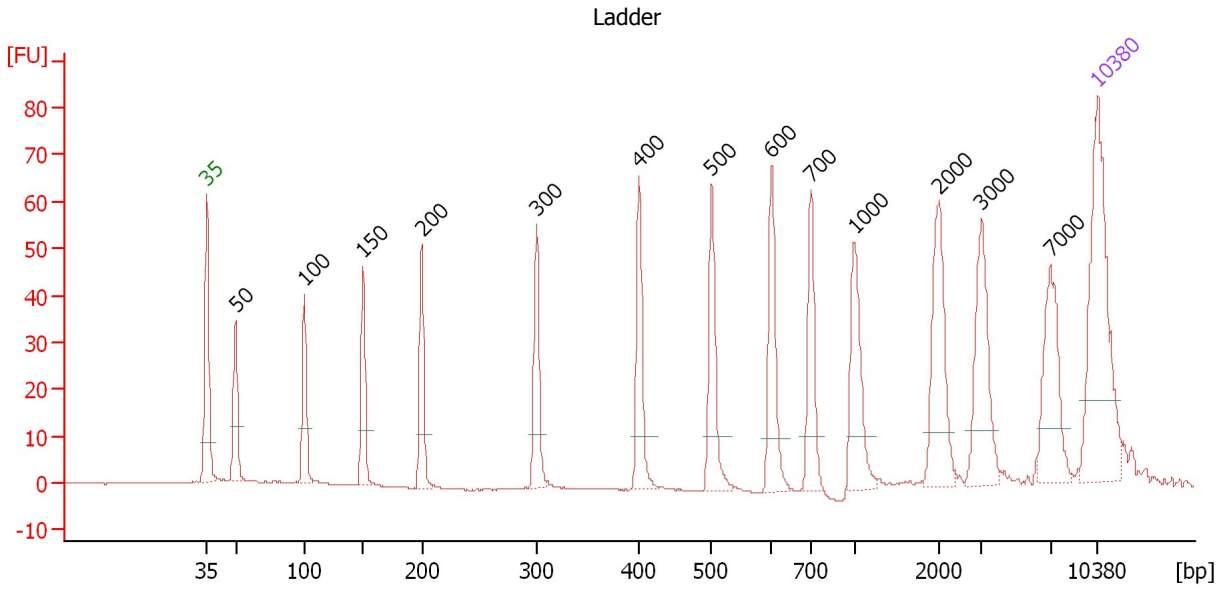
Ladder

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\2013-05-23\2013-05-23_003.xad

Created: 5/23/2013 1:34:42 PM
 Modified: 5/23/2013 2:22:33 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

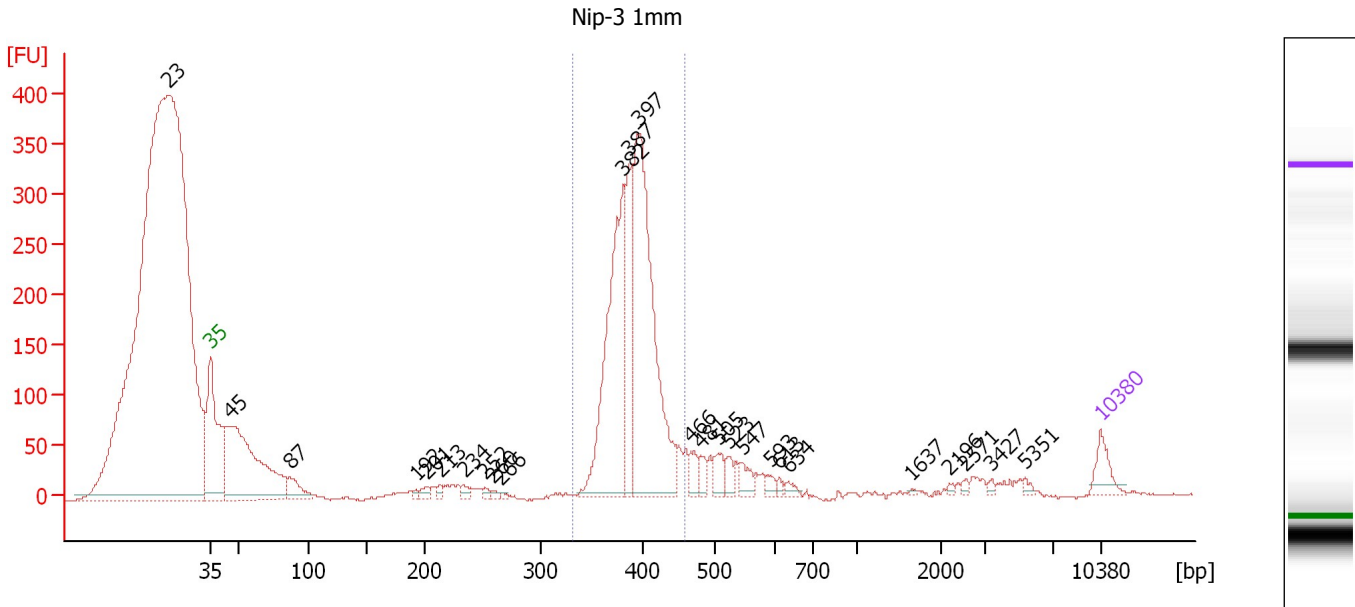
Peak table for Ladder

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\2013-05-23\2013-05-23_003.xad

Created: 5/23/2013 1:34:42 PM
 Modified: 5/23/2013 2:22:33 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : Nip-3 1mm

Number of peaks found: 26 Corr. Area 1: 1,935.7
 Noise: 1.1


Peak table for sample 1 : Nip-3 1mm

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	23	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	45	1,279.16	43,058.0	
4	87	138.64	2,417.5	
5	192	16.68	131.6	
6	201	30.82	232.1	
7	213	23.49	167.3	
8	234	25.35	164.4	
9	252	18.82	113.1	
10	260	15.08	88.0	
11	266	9.54	54.3	
12	382	1,098.37	4,359.6	
13	387	389.47	1,525.0	
14	397	1,464.79	5,585.0	
15	466	66.53	216.2	
16	481	56.55	178.2	
17	505	74.00	221.8	
18	523	50.88	147.3	
19	547	61.27	169.8	
20	593	28.20	72.0	
21	613	15.71	38.9	
22	634	23.21	55.4	
23	1,637	4.75	4.4	
24	2,196	8.62	5.9	
25	2,571	11.85	7.0	
26	3,427	10.96	4.8	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-23\2013-05-23_003.xad

Created: 5/23/2013 1:34:42 PM
Modified: 5/23/2013 2:22:33 PM

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

Peak	Size [bp]	Conc. [pg/ μ l]	Molarity [pmol/l]	Observations
27	5,351	12.55	3.6	
28	 10,380	75.00	10.9	Upper Marker

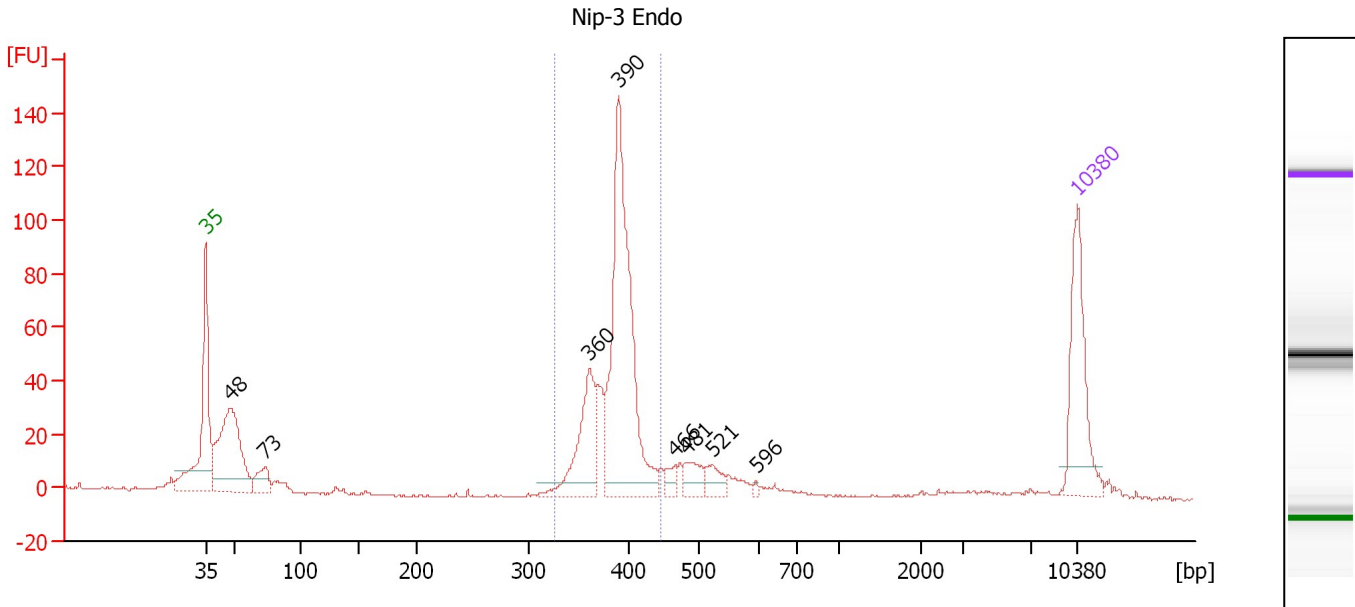
Region table for sample 1 : Nip-3 1mm

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/ μ l]	Corr. Area	% of Total	Size distribution in CV [%]	Color
331	459	393	11,763.7	3,039.38	1,935.7	23	5.6	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-23\2013-05-23_003.xad

Created: 5/23/2013 1:34:42 PM
 Modified: 5/23/2013 2:22:33 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : Nip-3 Endo

Number of peaks found: 8 Corr. Area 1: 470.4
 Noise: 0.4

Peak table for sample 2 : Nip-3 Endo

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	48	190.94	6,019.8	
3	73	28.83	594.8	
4	360	94.41	397.0	
5	390	284.69	1,105.6	
6	466	11.40	37.1	
7	481	22.58	71.2	
8	521	17.09	49.7	
9	596	2.32	5.9	
10	10,380	75.00	10.9	Upper Marker

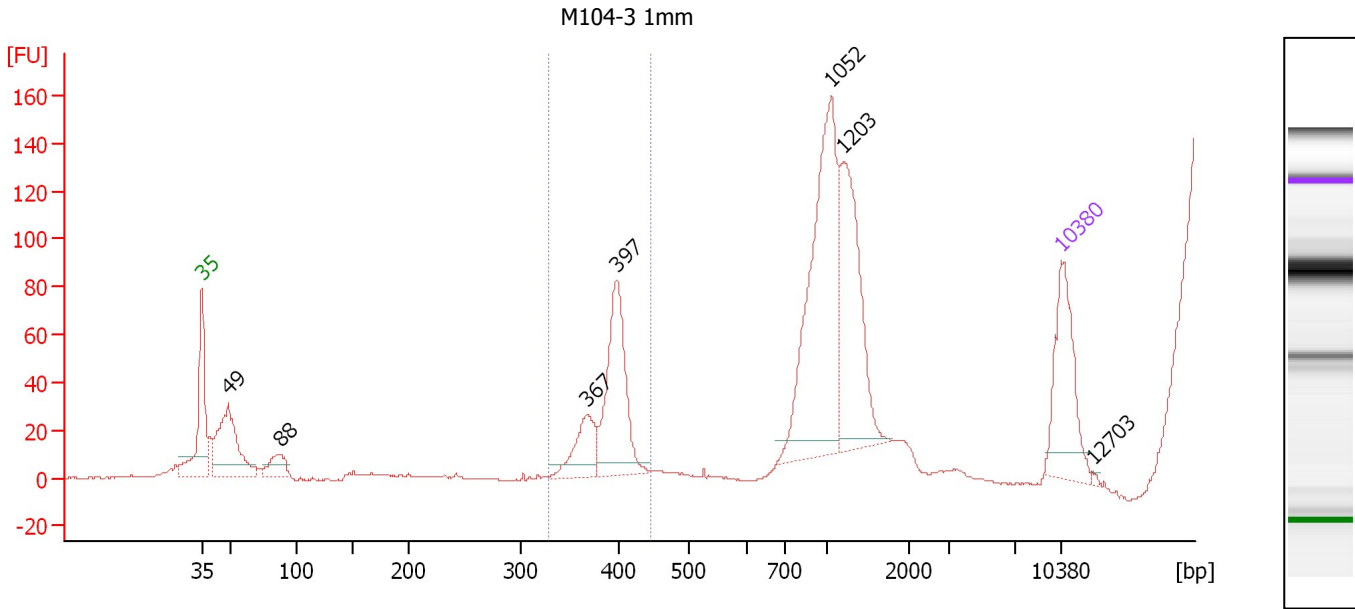
Region table for sample 2 : Nip-3 Endo

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
326	446	386	1,550.8	394.48	470.4	60	5.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-23\2013-05-23_003.xad

Created: 5/23/2013 1:34:42 PM
 Modified: 5/23/2013 2:22:33 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : M104-3 1mm

Number of peaks found: 7 Corr. Area 1: 36.1
 Noise: 0.3

Peak table for sample 3 : M104-3 1mm

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	49	131.76	4,065.0	
3	88	30.32	521.2	
4	367	51.72	213.6	
5	397	136.35	520.2	
6	1,052	236.71	341.0	
7	1,203	144.08	181.5	
8	10,380	75.00	10.9	Upper Marker
9	12,703	0.00	0.0	

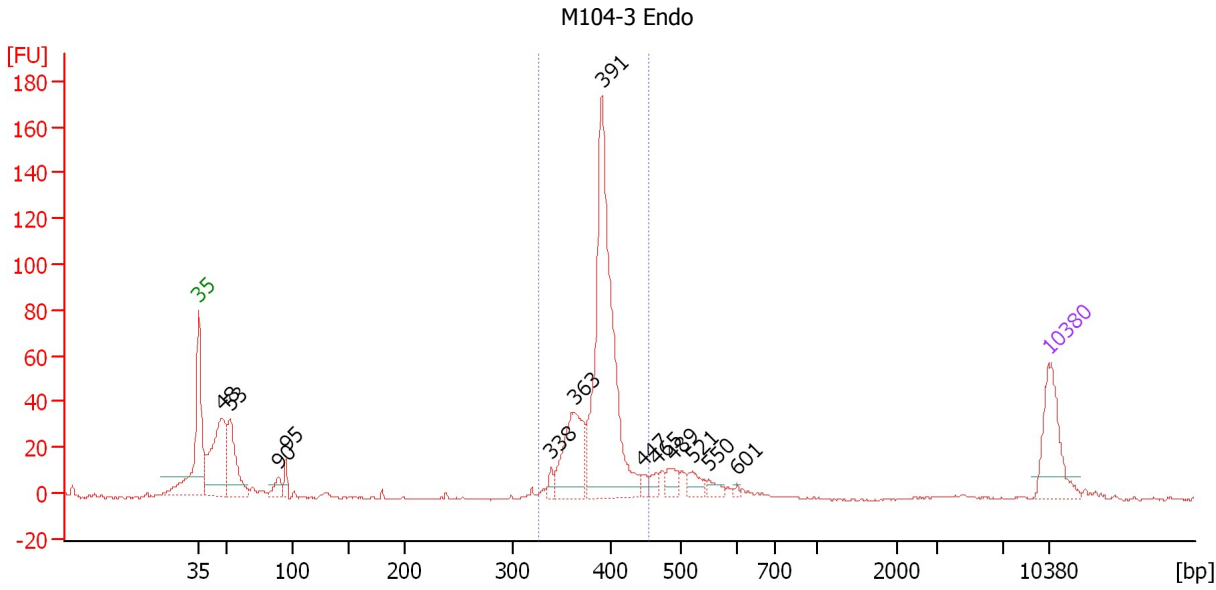
Region table for sample 3 : M104-3 1mm

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
328	446	398	96.2	25.23	36.1	11	1.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-23\2013-05-23_003.xad

Created: 5/23/2013 1:34:42 PM
 Modified: 5/23/2013 2:22:33 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : M104-3 Endo

Number of peaks found: 13 Corr. Area 1: 479.3
 Noise: 0.4

Peak table for sample 4 : M104-3 Endo

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	48	209.73	6,685.7	
3	53	122.04	3,484.9	
4	90	25.06	421.7	
5	95	20.26	322.0	
6	338	11.35	50.9	
7	363	134.26	560.8	
8	391	462.24	1,792.9	
9	447	11.23	38.1	
10	465	12.17	39.6	
11	489	22.66	70.3	
12	521	22.05	64.2	
13	550	13.31	36.7	
14	601	3.96	10.0	
15	10,380	75.00	10.9	Upper Marker

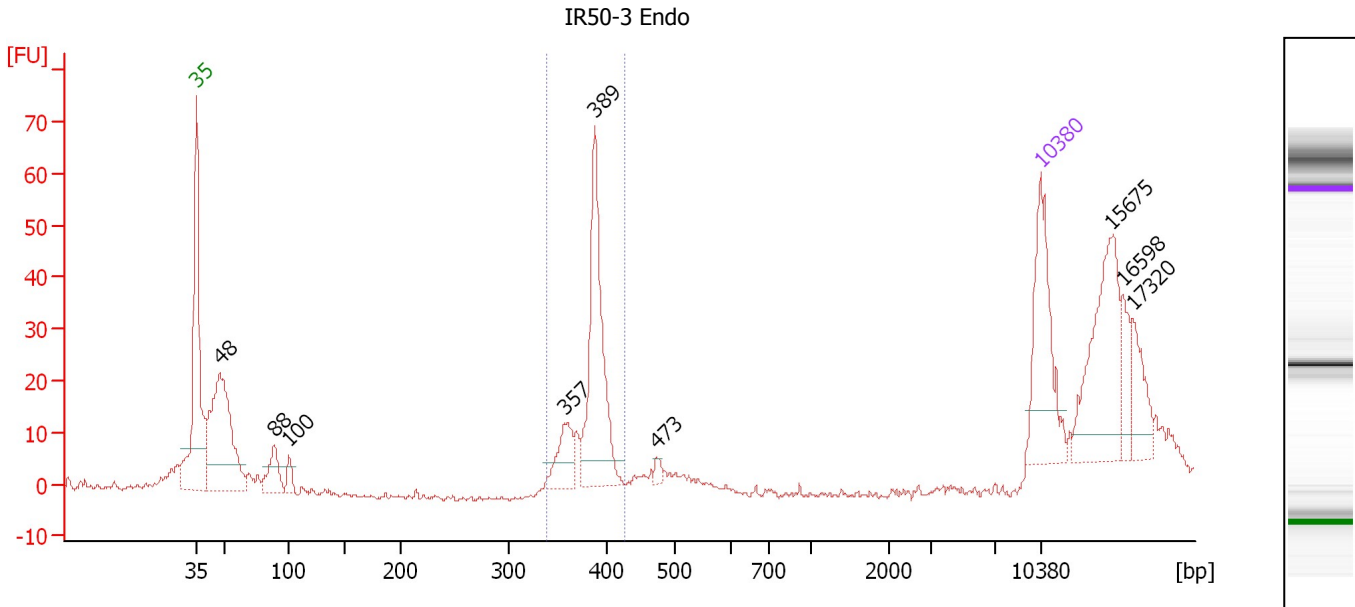
Region table for sample 4 : M104-3 Endo

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
325	455	388	2,360.2	603.68	479.3	62	5.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-23\2013-05-23_003.xad

Created: 5/23/2013 1:34:42 PM
 Modified: 5/23/2013 2:22:33 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : IR50-3 Endo

Number of peaks found: 9 Corr. Area 1: 131.0
 Noise: 0.5

Peak table for sample 5 : IR50-3 Endo

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	48	214.89	6,837.8	
3	88	36.45	624.5	
4	100	13.38	203.0	
5	357	38.91	165.0	
6	389	151.23	589.7	
7	473	5.94	19.0	
8	10,380	75.00	10.9	Upper Marker
9	15,675	0.00	0.0	
10	16,598	0.00	0.0	
11	17,320	0.00	0.0	

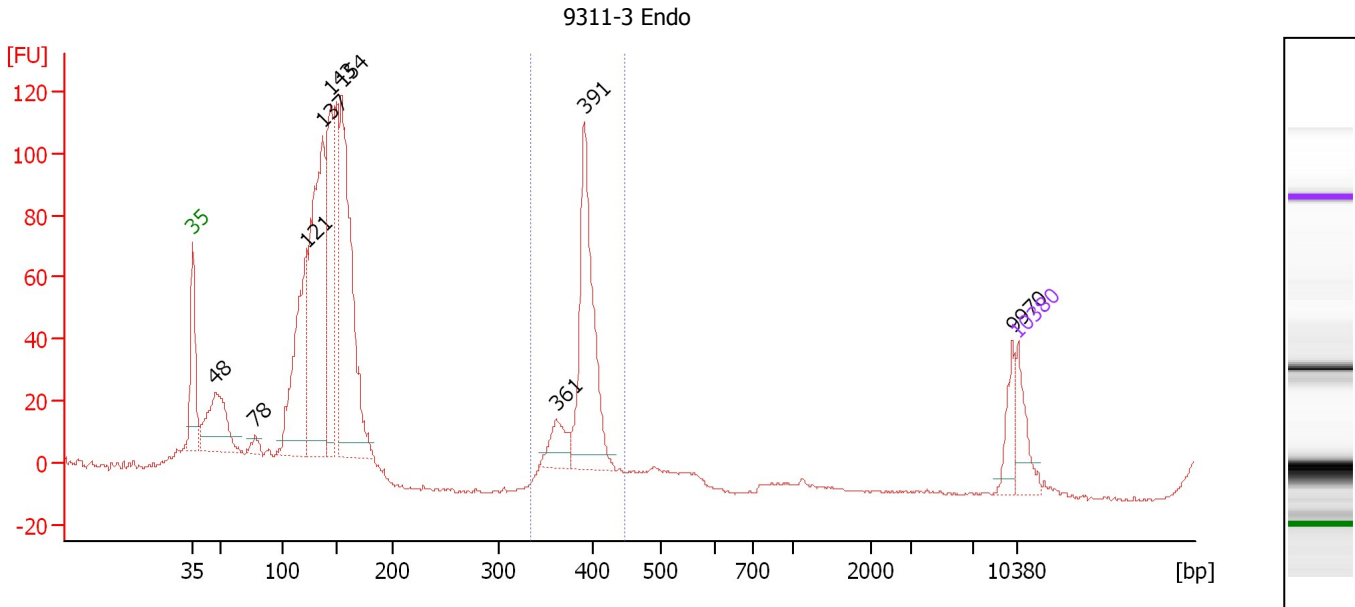
Region table for sample 5 : IR50-3 Endo

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
340	429	384	704.2	178.58	131.0	29	3.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-23\2013-05-23_003.xad

Created: 5/23/2013 1:34:42 PM
 Modified: 5/23/2013 2:22:33 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : 9311-3 Endo

Number of peaks found: 9 Corr. Area 1: 237.0
 Noise: 0.4

Peak table for sample 6 : 9311-3 Endo

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	48	308.43	9,817.2	
3	78	30.80	601.1	
4	121	517.77	6,488.5	
5	137	876.09	9,716.3	
6	143	494.80	5,224.7	
7	154	867.93	8,550.3	
8	361	89.86	377.5	
9	391	472.78	1,834.2	
10	9,970	59.32	9.0	
11	10,380	75.00	10.9	Upper Marker

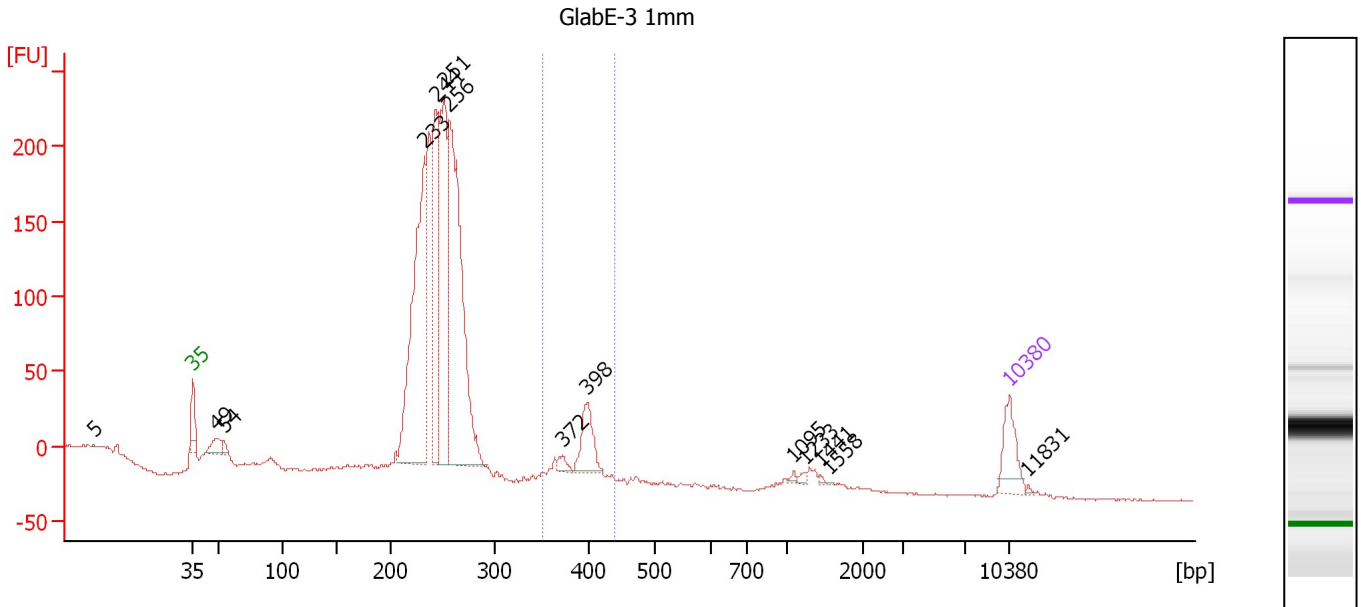
Region table for sample 6 : 9311-3 Endo

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
333	448	390	2,181.6	560.59	237.0	16	3.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-23\2013-05-23_003.xad

Created: 5/23/2013 1:34:42 PM
 Modified: 5/23/2013 2:22:33 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 7 : GlabE-3 1mm

Height Threshold [FU] : 1

Overall Results for sample 7 : GlabE-3 1mm

Number of peaks found: 14 Corr. Area 1: 85.0
 Noise: 0.3

Peak table for sample 7 : GlabE-3 1mm

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	5	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	49	48.62	1,504.9	
4	54	18.71	528.8	
5	233	730.47	4,755.7	
6	244	416.86	2,590.2	
7	251	505.37	3,045.5	
8	256	848.08	5,010.1	
9	372	17.50	71.4	
10	398	105.40	401.0	
11	1,095	5.37	7.4	
12	1,233	5.75	7.1	
13	1,441	3.63	3.8	
14	1,558	1.03	1.0	
15	10,380	75.00	10.9	Upper Marker
16	11,831	0.00	0.0	

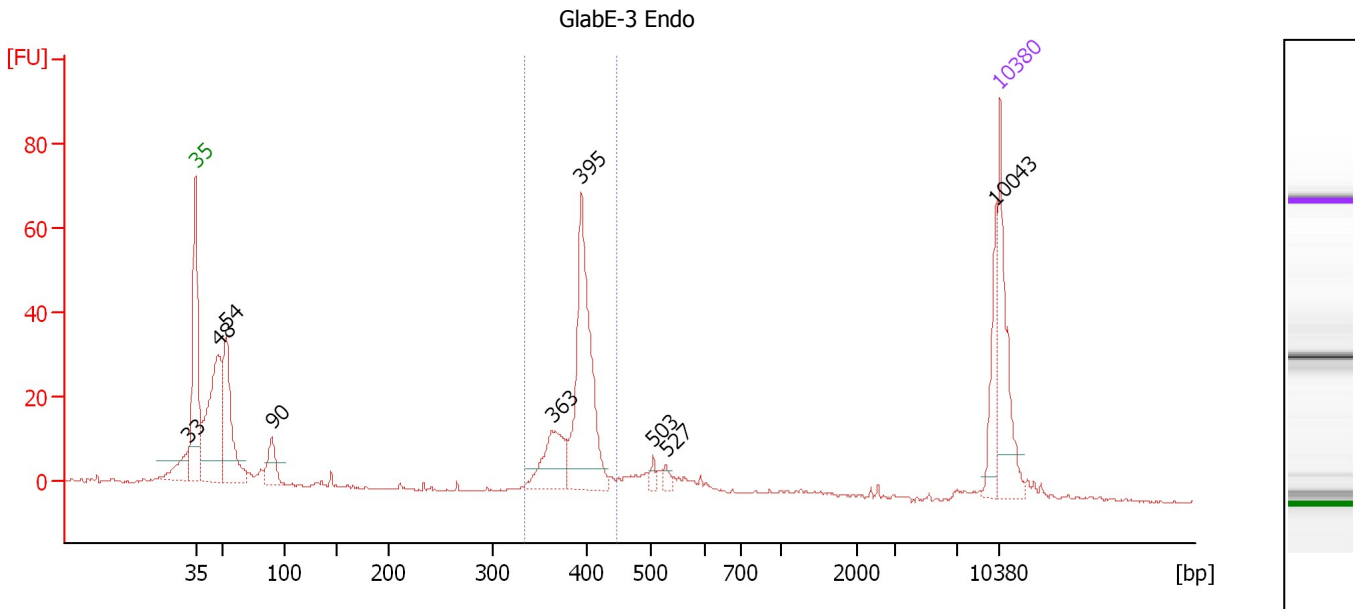
Region table for sample 7 : GlabE-3 1mm

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
350	440	394	475.9	123.74	85.0	5	3.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-23\2013-05-23_003.xad

Created: 5/23/2013 1:34:42 PM
 Modified: 5/23/2013 2:22:33 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : GlabE-3 Endo

Number of peaks found: 9 Corr. Area 1: 179.4
 Noise: 0.3

Peak table for sample 8 : GlabE-3 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	196.52	6,212.8	
4	54	141.56	3,973.3	
5	90	38.00	636.4	
6	363	62.75	261.8	
7	395	187.42	718.1	
8	503	7.11	21.4	
9	527	7.21	20.7	
10	10,043	32.43	4.9	
11	10,380	75.00	10.9	Upper Marker

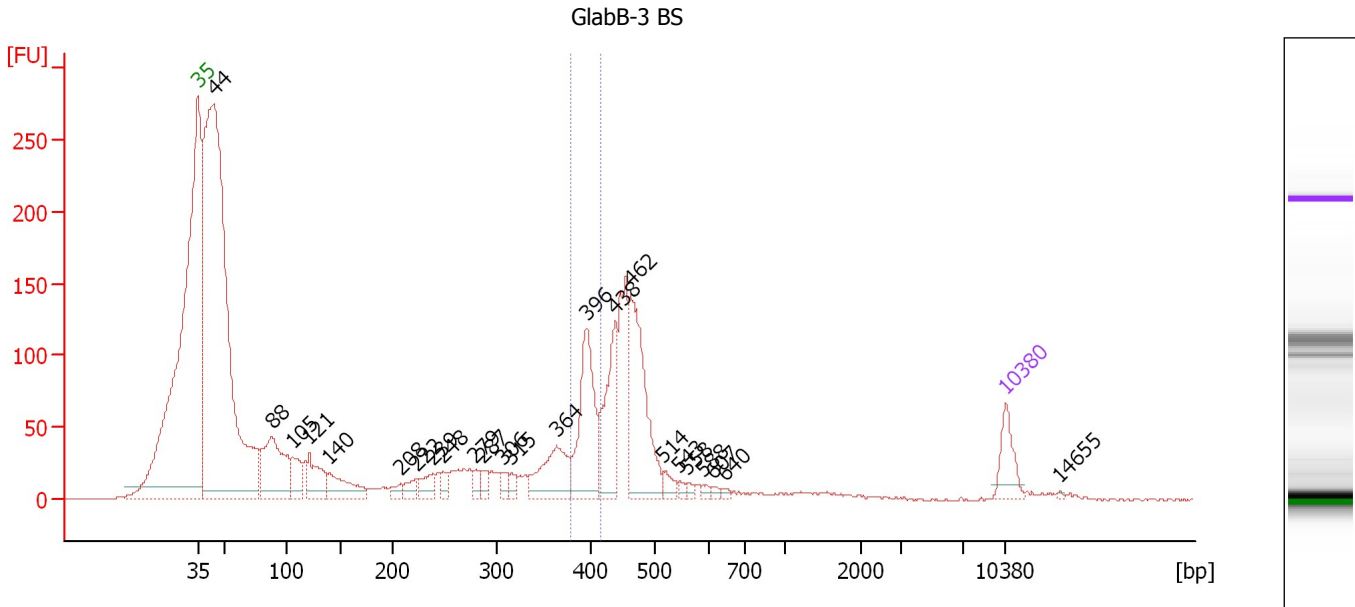
Region table for sample 8 : GlabE-3 Endo

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
333	446	392	996.5	257.11	179.4	36	5.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-23\2013-05-23_003.xad

Created: 5/23/2013 1:34:42 PM
 Modified: 5/23/2013 2:22:33 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : GlabB-3 BS

Number of peaks found: 24 Corr. Area 1: 236.7
 Noise: 0.3

Peak table for sample 9 : GlabB-3 BS

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	44	3,307.29	114,170.2	
3	88	404.05	6,948.5	
4	105	121.74	1,754.9	
5	121	165.15	2,065.2	
6	140	152.74	1,650.3	
7	208	30.25	220.8	
8	222	41.58	283.9	
9	239	63.09	400.3	
10	248	34.75	211.9	
11	279	30.22	164.1	
12	287	33.56	177.3	
13	306	31.20	154.6	
14	315	27.08	130.2	
15	364	198.67	825.9	
16	396	335.35	1,282.8	
17	438	249.61	862.9	
18	462	413.25	1,355.8	
19	514	33.65	99.2	
20	543	12.48	34.8	
21	558	11.10	30.1	
22	588	10.50	27.1	
23	607	10.58	26.4	
24	640	8.29	19.6	
25	10,380	75.00	10.9	Upper Marker
26	14,655	0.00	0.0	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-23\2013-05-23_003.xad

Created: 5/23/2013 1:34:42 PM
Modified: 5/23/2013 2:22:33 PM

Electropherogram Summary Continued ...

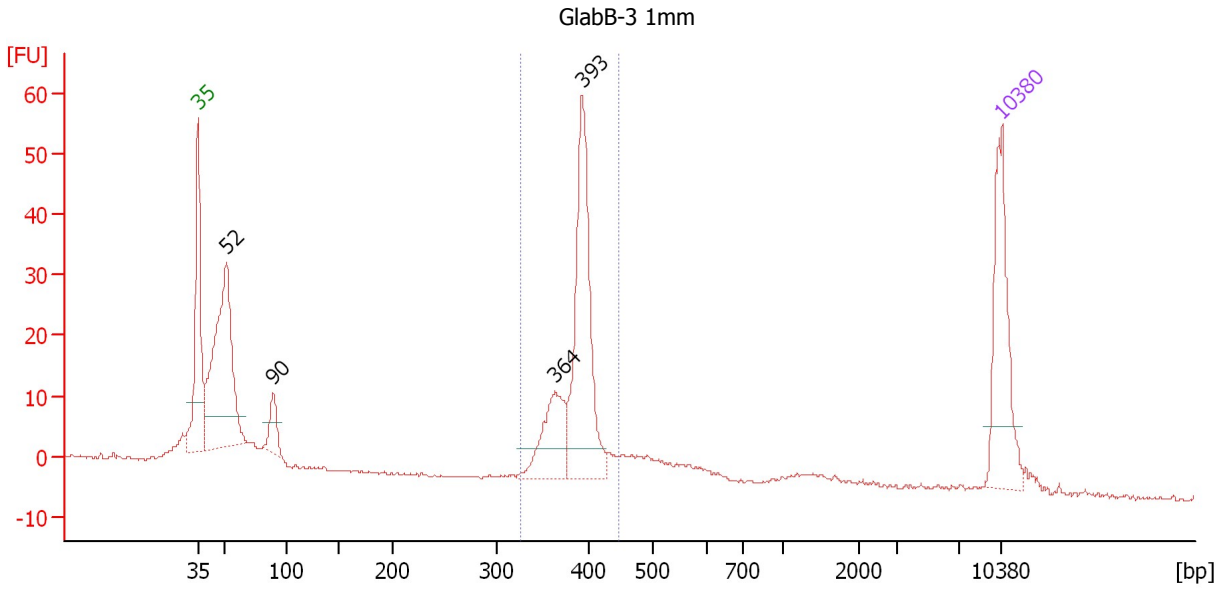
... Region table for sample 9 : GlabB-3 BS

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/ μ l]	Corr. Area	% of Total	Size distribution in CV [%]	Color
380	415	397	1,292.1	338.57	236.7	7	2.0	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-23\2013-05-23_003.xad

Created: 5/23/2013 1:34:42 PM
 Modified: 5/23/2013 2:22:33 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : GlabB-3 1mm

Number of peaks found: 4 Corr. Area 1: 169.4
 Noise: 0.2

Peak table for sample 10 : GlabB-3 1mm

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	52	251.24	7,342.0	
3	90	30.30	512.1	
4	364	66.92	278.6	
5	393	175.35	675.3	
6	10,380	75.00	10.9	Upper Marker

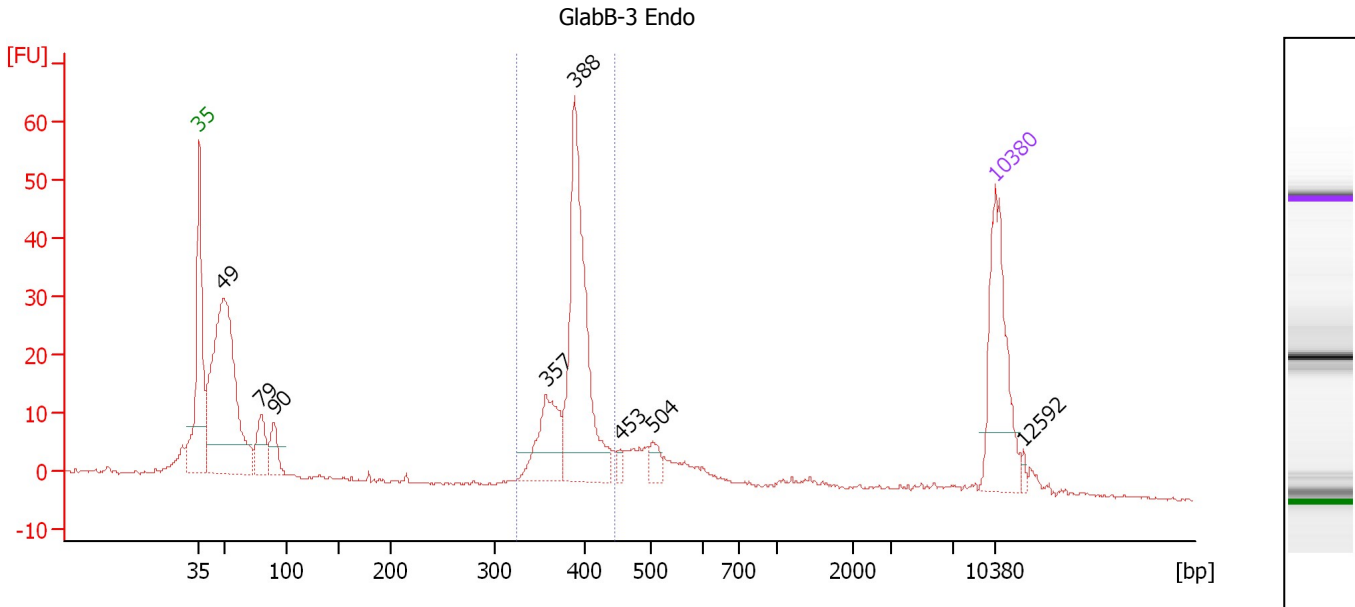
Region table for sample 10 : GlabB-3 1mm

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
326	448	388	953.1	243.95	169.4	40	5.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-23\2013-05-23_003.xad

Created: 5/23/2013 1:34:42 PM
 Modified: 5/23/2013 2:22:33 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : GlabB-3 Endo

Number of peaks found: 8 Corr. Area 1: 190.5
 Noise: 0.2

Peak table for sample 11 : GlabB-3 Endo

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	49	321.34	9,936.4	
3	79	39.13	746.5	
4	90	28.32	477.6	
5	357	61.71	262.1	
6	388	190.10	741.9	
7	453	5.56	18.6	
8	504	10.98	33.0	
9	10,380	75.00	10.9	Upper Marker
10	12,592	0.00	0.0	

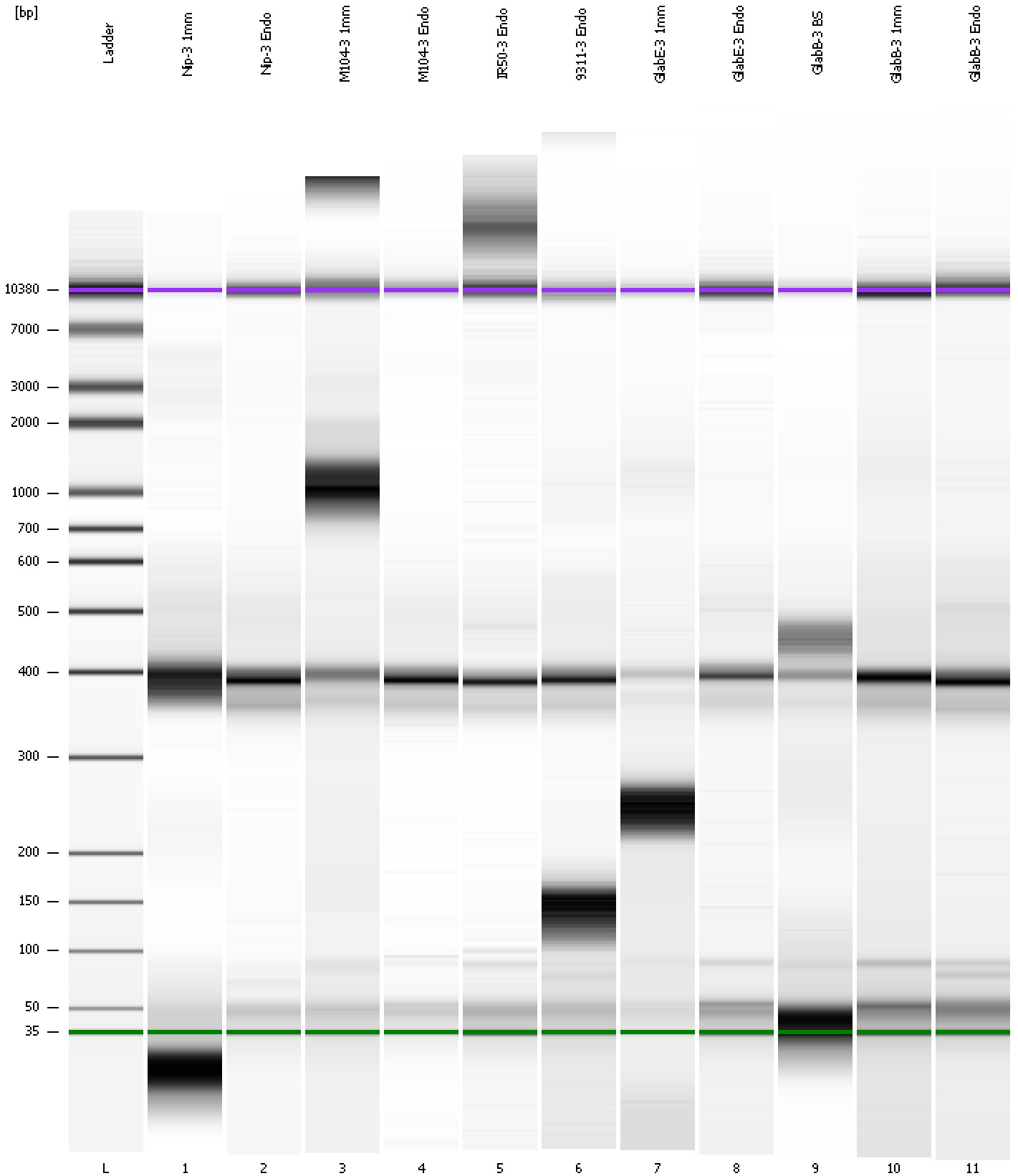
Region table for sample 11 : GlabB-3 Endo

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
324	445	387	1,010.3	257.60	190.5	38	5.5	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-23\2013-05-23_003.xad

Created: 5/23/2013 1:34:42 PM
Modified: 5/23/2013 2:22:33 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-23\2013-05-23_003.xad

Created: 5/23/2013 1:34:42 PM
 Modified: 5/23/2013 2:22:33 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		5/23/2013 2:16:02 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-05-23\2013-05-23_003.xad)		Instrument	Run		5/23/2013 1:34:47 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		5/23/2013 1:34:47 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		5/23/2013 1:34:47 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		5/23/2013 1:34:47 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		5/23/2013 1:34:47 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		5/23/2013 1:34:47 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		5/23/2013 1:34:47 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1