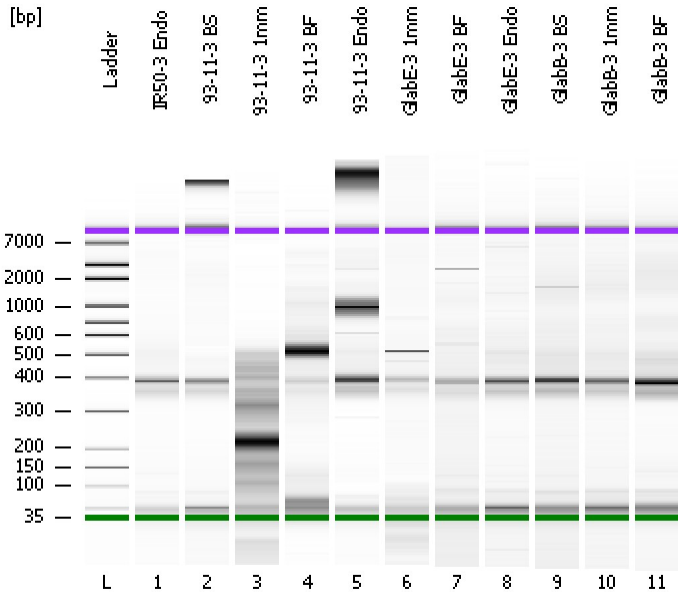


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-20\2013-05-20_005.xad

Created: 5/20/2013 3:15:22 PM
Modified: 5/20/2013 4:00:30 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

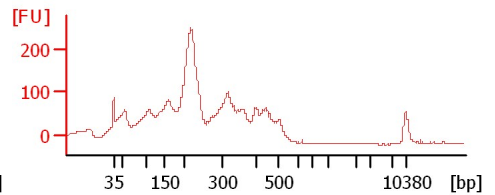
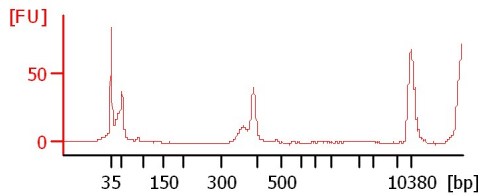
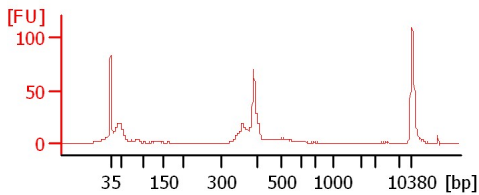
Chip Information:

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

IR50-3 Endo

93-11-3 BS

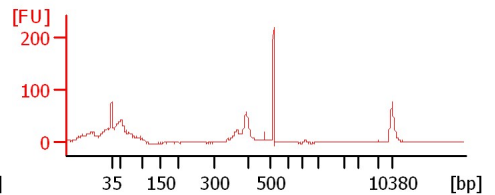
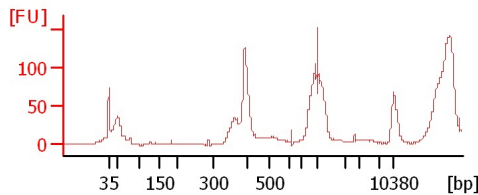
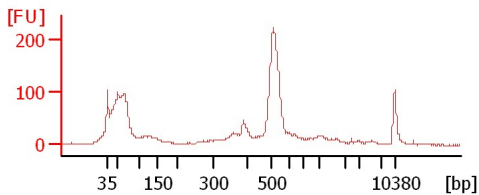
93-11-3 1mm



93-11-3 BF

93-11-3 Endo

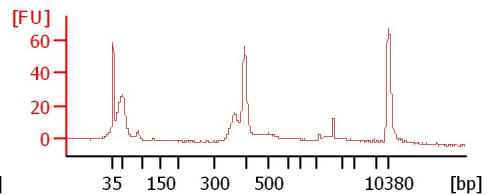
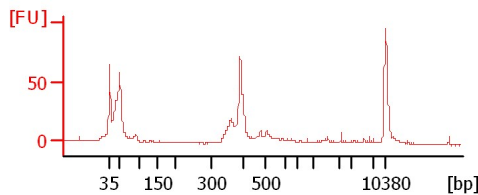
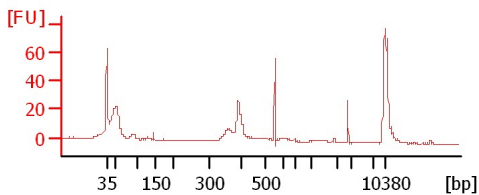
GlabE-3 1mm



GlabE-3 BF

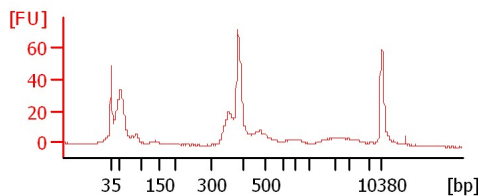
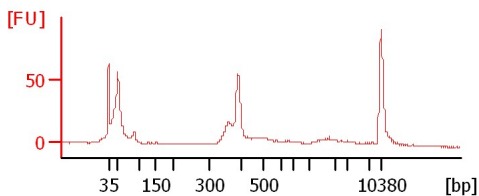
GlabE-3 Endo

GlabB-3 BS



GlabB-3 1mm

GlabB-3 BF



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-20\2013-05-20_005.xad

Created: 5/20/2013 3:15:22 PM
 Modified: 5/20/2013 4:00:30 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
IR50-3 Endo		<input type="checkbox"/>	✓			
93-11-3 BS		<input type="checkbox"/>	✓			
93-11-3 1mm		<input type="checkbox"/>	✓			
93-11-3 BF		<input type="checkbox"/>	✓			
93-11-3 Endo		<input type="checkbox"/>	✓			
GlabE-3 1mm		<input type="checkbox"/>	✓			
GlabE-3 BF		<input type="checkbox"/>	✓			
GlabE-3 Endo		<input type="checkbox"/>	✓			
GlabB-3 BS		<input type="checkbox"/>	✓			
GlabB-3 1mm		<input type="checkbox"/>	✓			
GlabB-3 BF		<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\2013-05-20\2013-05-20_005.xad

Created: 5/20/2013 3:15:22 PM
Modified: 5/20/2013 4:00:30 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

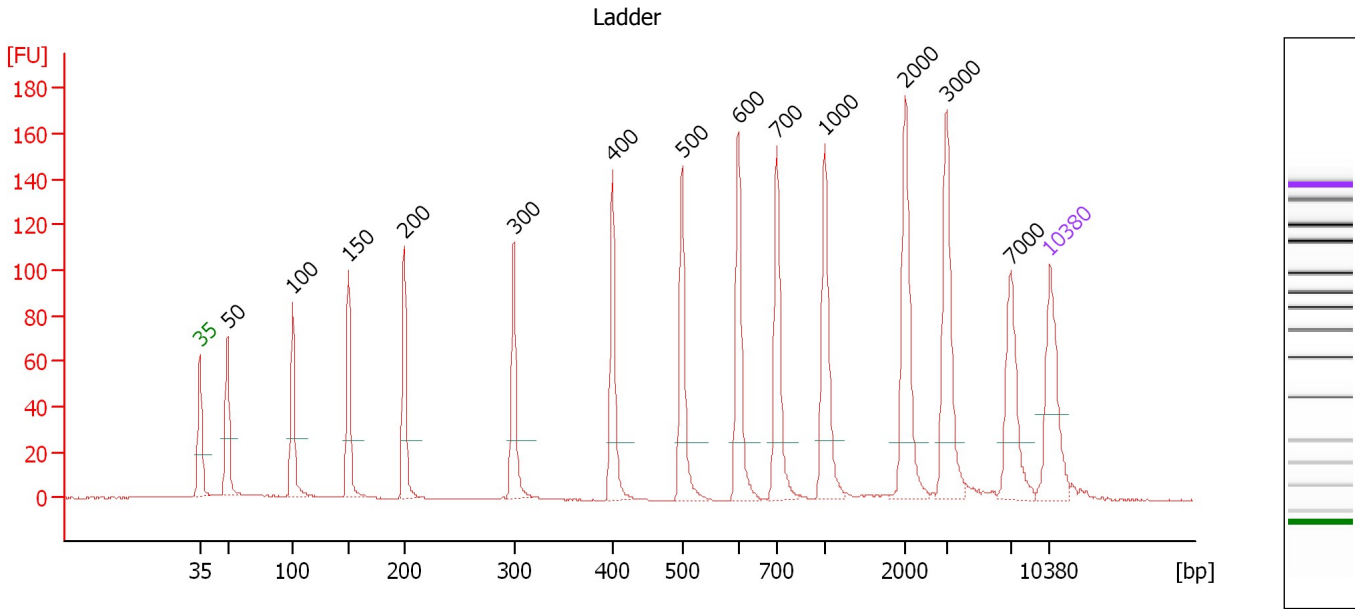
Ladder

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\2013-05-20\2013-05-20_005.xad

Created: 5/20/2013 3:15:22 PM
 Modified: 5/20/2013 4:00:30 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

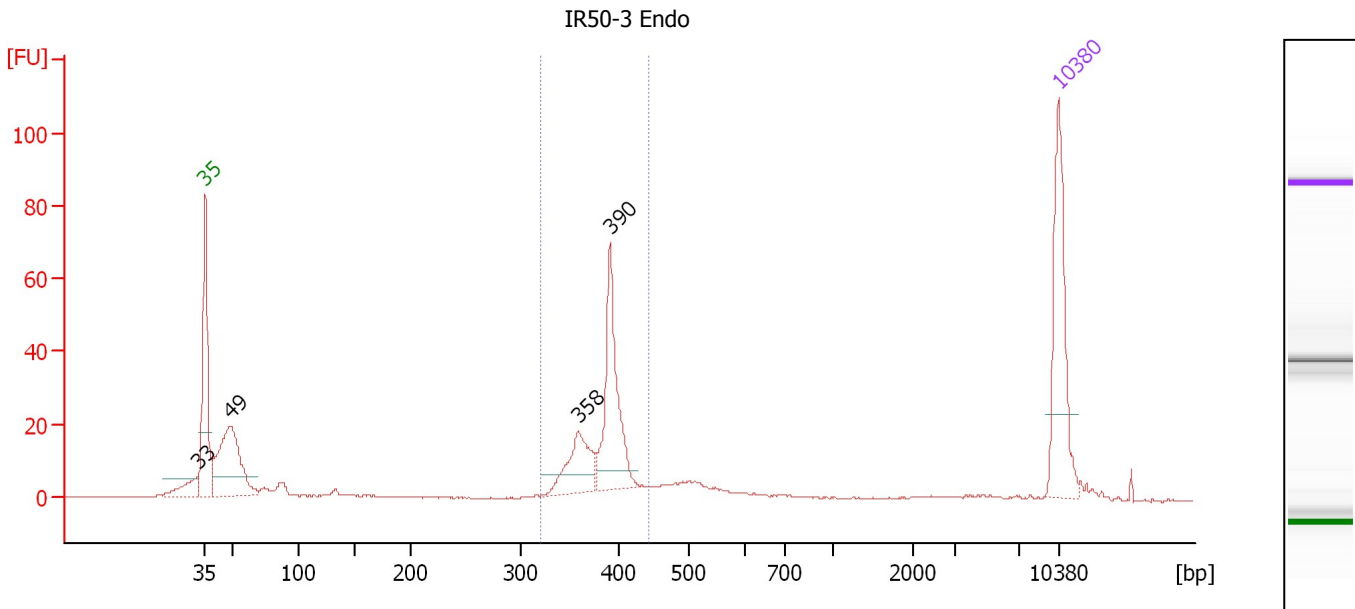
Peak table for Ladder

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\2013-05-20\2013-05-20_005.xad

Created: 5/20/2013 3:15:22 PM
 Modified: 5/20/2013 4:00:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : IR50-3 Endo

Number of peaks found: 4 Corr. Area 1: 180.7
 Noise: 0.2

Peak table for sample 1 : IR50-3 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	49	146.19	4,566.2	
4	358	54.37	230.1	
5	390	101.98	395.8	
6	10,380	75.00	10.9	Upper Marker

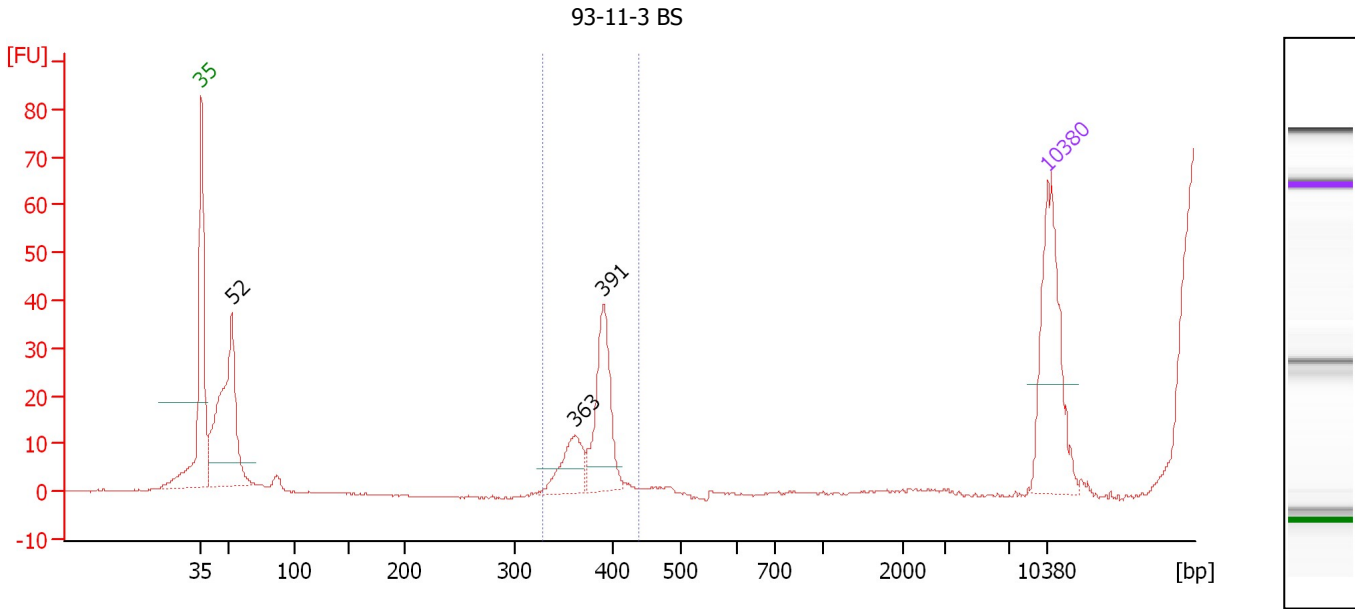
Region table for sample 1 : IR50-3 Endo

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
321	443	383	748.0	188.55	180.7	43	5.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-20\2013-05-20_005.xad

Created: 5/20/2013 3:15:22 PM
 Modified: 5/20/2013 4:00:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : 93-11-3 BS

Number of peaks found: 3 Corr. Area 1: 9.2
 Noise: 0.2

Peak table for sample 2 : 93-11-3 BS

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	52	176.74	5,134.9	
3	363	36.28	151.5	
4	391	74.34	288.1	
5	10,380	75.00	10.9	Upper Marker

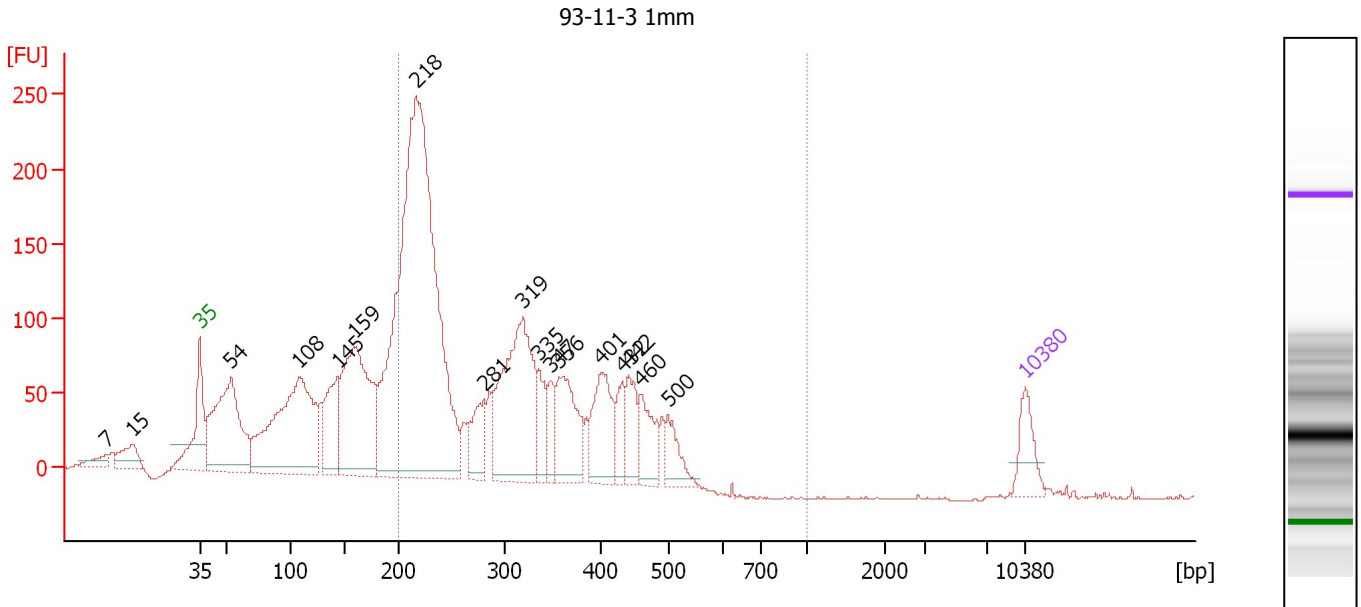
Region table for sample 2 : 93-11-3 BS

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
328	439	391	35.2	9.09	9.2	10	0.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-20\2013-05-20_005.xad

Created: 5/20/2013 3:15:22 PM
 Modified: 5/20/2013 4:00:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : 93-11-3 1mm

Number of peaks found: 17 Corr. Area 1: 2,932.9
 Noise: 0.7

Peak table for sample 3 : 93-11-3 1mm

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	7	0.00	0.0	
2	15	0.00	0.0	
3	35	125.00	5,411.3	Lower Marker
4	54	624.04	17,644.4	
5	108	847.28	11,848.6	
6	145	249.75	2,616.4	
7	159	673.51	6,420.6	
8	218	2,292.54	15,968.7	
9	281	129.65	700.3	
10	319	596.62	2,834.5	
11	335	100.47	454.3	
12	347	83.04	362.3	
13	356	244.39	1,039.5	
14	401	212.50	802.8	
15	432	82.38	289.0	
16	442	112.56	385.6	
17	460	125.12	411.7	
18	500	88.71	268.8	
19	10,380	75.00	10.9	Upper Marker

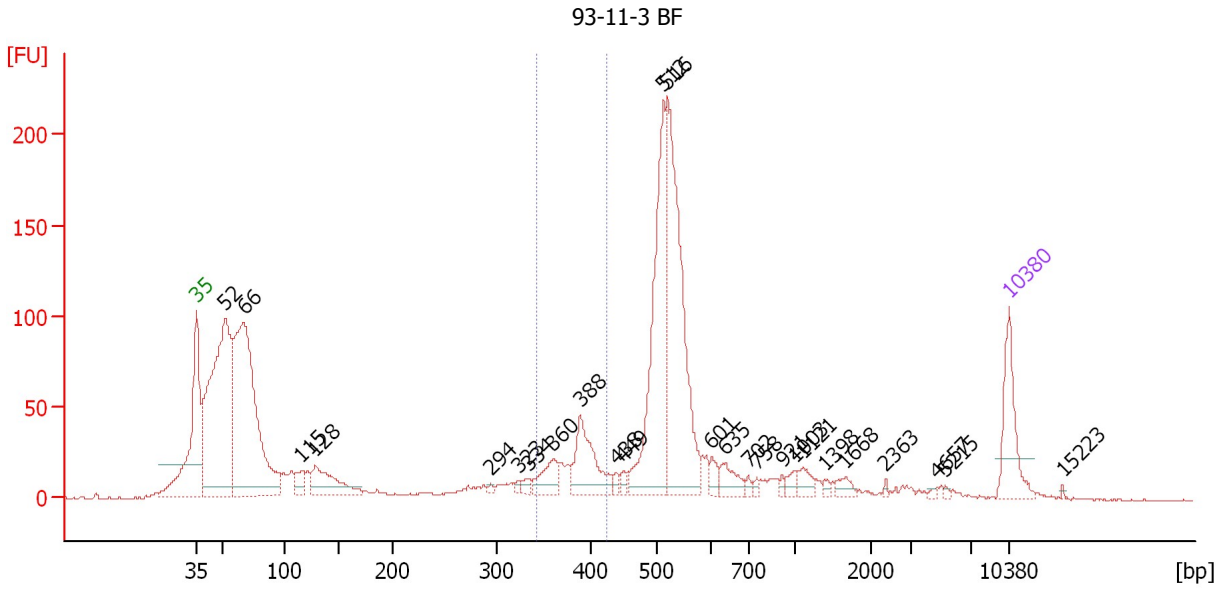
Region table for sample 3 : 93-11-3 1mm

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	308	21,024.7	3,825.13	2,932.9	61	29.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-20\2013-05-20_005.xad

Created: 5/20/2013 3:15:22 PM
 Modified: 5/20/2013 4:00:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : 93-11-3 BF

Number of peaks found: 26 Corr. Area 1: 186.1
 Noise: 0.5

Peak table for sample 4 : 93-11-3 BF

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	52	703.22	20,554.9	
3	66	707.01	16,130.4	
4	115	33.33	440.0	
5	128	108.07	1,277.2	
6	294	4.96	25.5	
7	323	6.29	29.5	
8	334	10.66	48.4	
9	360	46.97	197.8	
10	388	112.68	439.9	
11	438	9.31	32.2	
12	449	10.67	36.0	
13	512	335.20	992.8	
14	516	419.94	1,232.0	
15	601	16.75	42.3	
16	635	32.33	77.1	
17	702	6.18	13.4	
18	758	5.58	11.2	
19	921	5.94	9.8	
20	1,003	11.31	17.1	
21	1,121	18.68	25.2	
22	1,398	5.50	6.0	
23	1,668	13.17	12.0	
24	2,363	2.66	1.7	
25	4,657	3.05	1.0	
26	5,215	2.72	0.8	


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-20\2013-05-20_005.xad

Created: 5/20/2013 3:15:22 PM
Modified: 5/20/2013 4:00:30 PM

Electropherogram Summary Continued ...**... Peak table for sample 4 : 93-11-3 BF**

Peak	Size [bp]	Conc. [pg/ μ l]	Molarity [pmol/l]	Observations
27	10,380	75.00	10.9	Upper Marker
28	15,223	0.00	0.0	

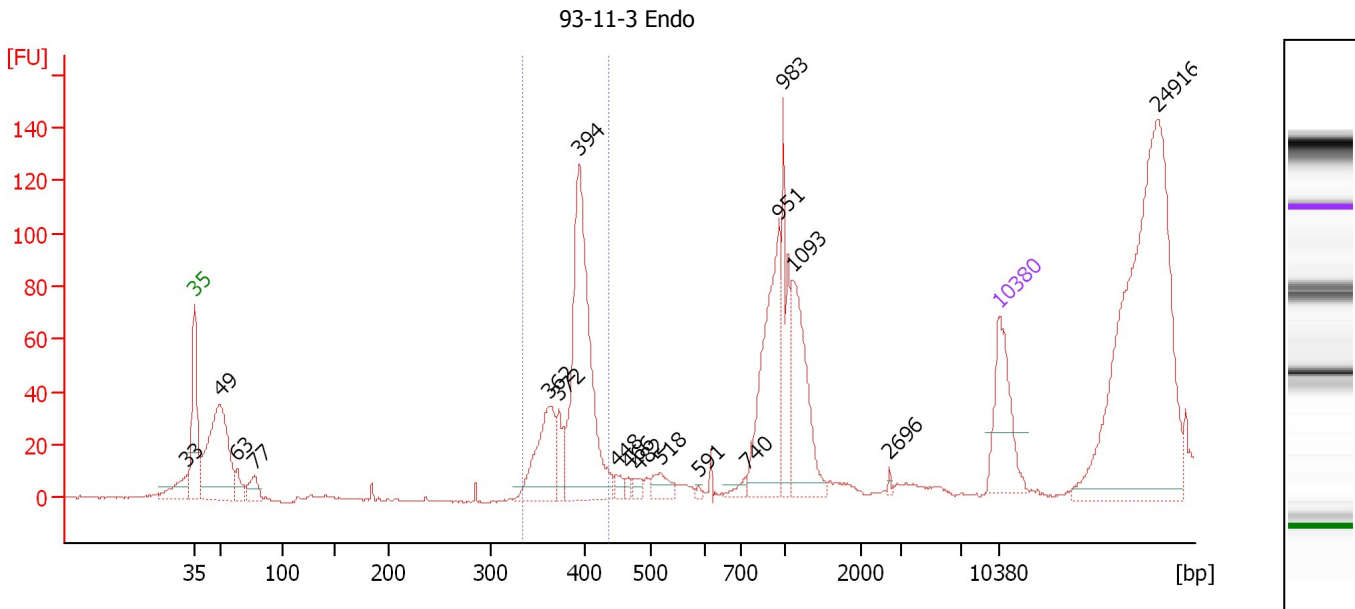
Region table for sample 4 : 93-11-3 BF

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/ μ l]	Corr. Area	% of Total	Size distribution in CV [%]	Color
341	423	382	780.2	196.22	186.1	7	5.3	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-20\2013-05-20_005.xad

Created: 5/20/2013 3:15:22 PM
 Modified: 5/20/2013 4:00:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : 93-11-3 Endo

Number of peaks found: 18 Corr. Area 1: 314.0
 Noise: 0.2

Peak table for sample 5 : 93-11-3 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	49	278.20	8,544.7	
4	63	26.28	628.5	
5	77	33.67	660.7	
6	362	110.44	462.8	
7	372	39.28	160.1	
8	394	324.81	1,250.4	
9	448	9.51	32.2	
10	466	6.57	21.3	
11	482	8.81	27.7	
12	518	22.97	67.2	
13	591	2.52	6.5	
14	740	9.84	20.1	
15	951	164.40	261.8	
16	983	93.43	144.0	
17	1,093	123.56	171.3	
18	2,696	2.37	1.3	
19	10,380	75.00	10.9	Upper Marker
20	24,916	0.00	0.0	

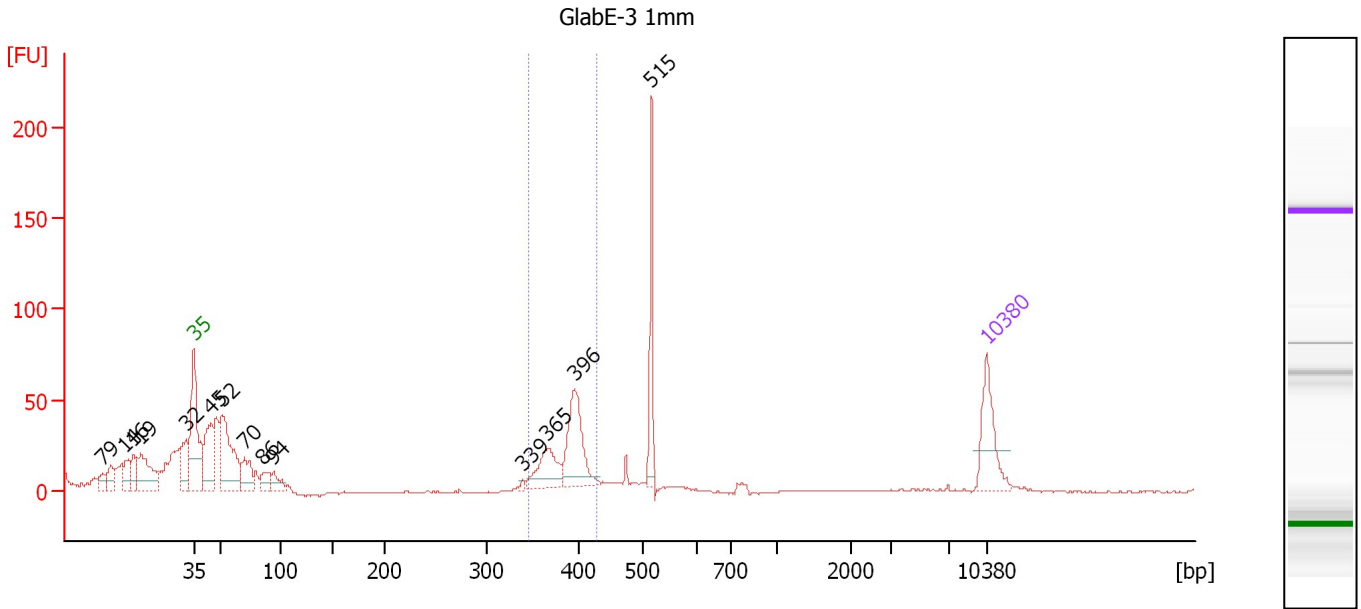
Region table for sample 5 : 93-11-3 Endo

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
334	436	389	1,378.1	353.35	314.0	26	4.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-20\2013-05-20_005.xad

Created: 5/20/2013 3:15:22 PM
 Modified: 5/20/2013 4:00:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : GlabE-3 1mm

Number of peaks found: 15 Corr. Area 1: 164.3
 Noise: 0.4

Peak table for sample 6 : GlabE-3 1mm

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	7	0.00	0.0	
2	9	0.00	0.0	
3	14	0.00	0.0	
4	16	0.00	0.0	
5	19	0.00	0.0	
6	32	0.00	0.0	
7	35	125.00	5,411.3	Lower Marker
8	45	148.62	5,015.1	
9	52	226.01	6,642.9	
10	70	68.71	1,487.0	
11	86	38.11	672.6	
12	94	34.46	554.4	
13	339	5.25	23.5	
14	365	82.66	343.2	
15	396	138.63	530.9	
16	515	98.91	290.8	
17	10,380	75.00	10.9	Upper Marker

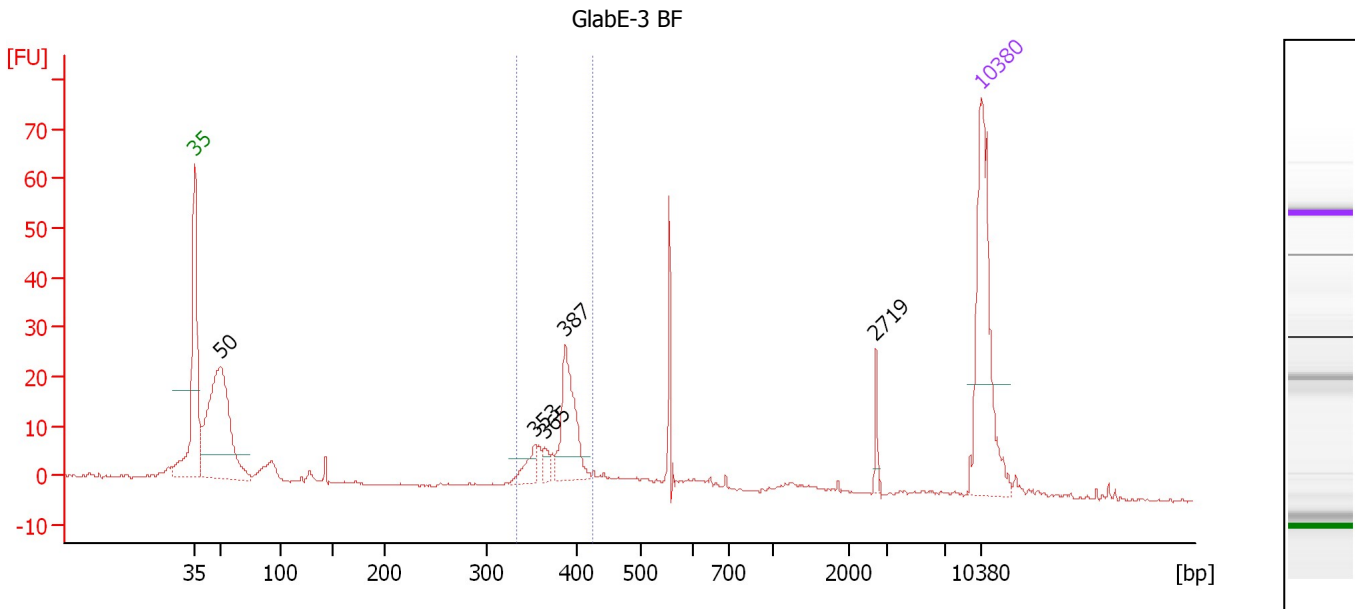
Region table for sample 6 : GlabE-3 1mm

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
345	427	387	865.3	220.62	164.3	20	4.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-20\2013-05-20_005.xad

Created: 5/20/2013 3:15:22 PM
 Modified: 5/20/2013 4:00:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : GlabE-3 BF

Number of peaks found: 5 Corr. Area 1: 84.8
 Noise: 0.2

Peak table for sample 7 : GlabE-3 BF

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	50	178.45	5,412.7	
3	353	14.11	60.5	
4	365	6.41	26.6	
5	387	54.47	213.4	
6	2,719	5.13	2.9	
7	10,380	75.00	10.9	Upper Marker

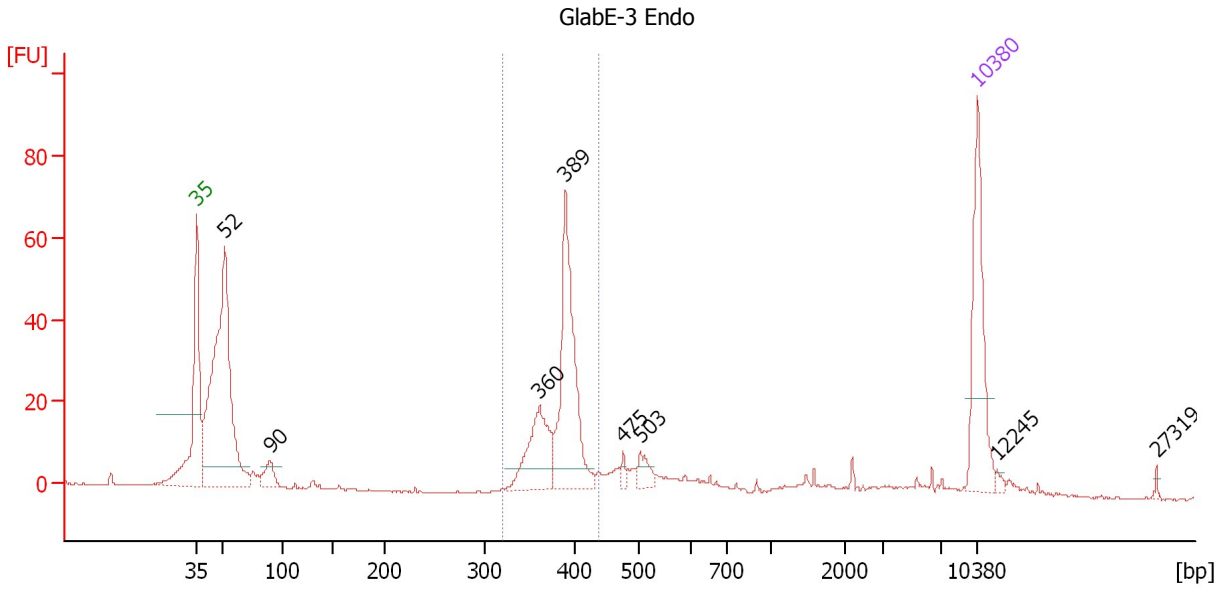
Region table for sample 7 : GlabE-3 BF

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
334	424	381	368.8	92.60	84.8	29	5.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-20\2013-05-20_005.xad

Created: 5/20/2013 3:15:22 PM
 Modified: 5/20/2013 4:00:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : GlabE-3 Endo

Number of peaks found: 8 Corr. Area 1: 196.3
 Noise: 0.2

Peak table for sample 8 : GlabE-3 Endo

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	52	383.39	11,098.8	
3	90	23.13	388.2	
4	360	74.27	312.6	
5	389	155.36	605.3	
6	475	5.99	19.1	
7	503	14.09	42.5	
8	10,380	75.00	10.9	Upper Marker
9	12,245	0.00	0.0	
10	27,319	0.00	0.0	

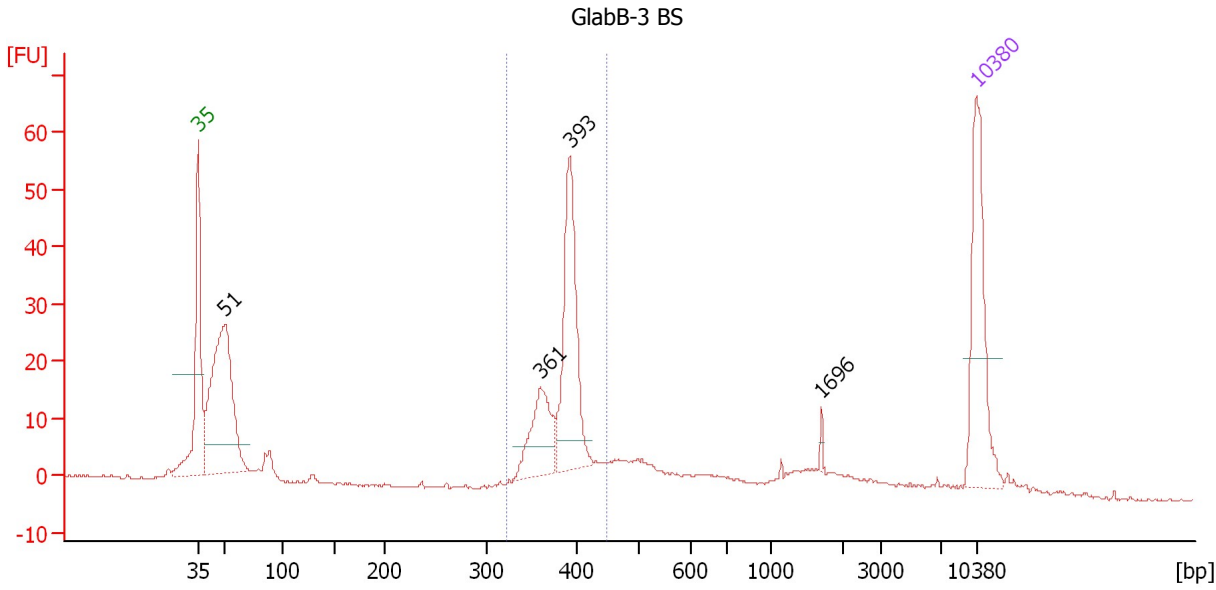
Region table for sample 8 : GlabE-3 Endo

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
319	437	383	948.6	239.20	196.3	34	5.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-20\2013-05-20_005.xad

Created: 5/20/2013 3:15:22 PM
 Modified: 5/20/2013 4:00:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : GlabB-3 BS

Number of peaks found: 4 Corr. Area 1: 171.9
 Noise: 0.2

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	51	241.87	7,174.8	
3	361	61.76	259.4	
4	393	127.29	490.4	
5	1,696	2.60	2.3	
6	10,380	75.00	10.9	Upper Marker

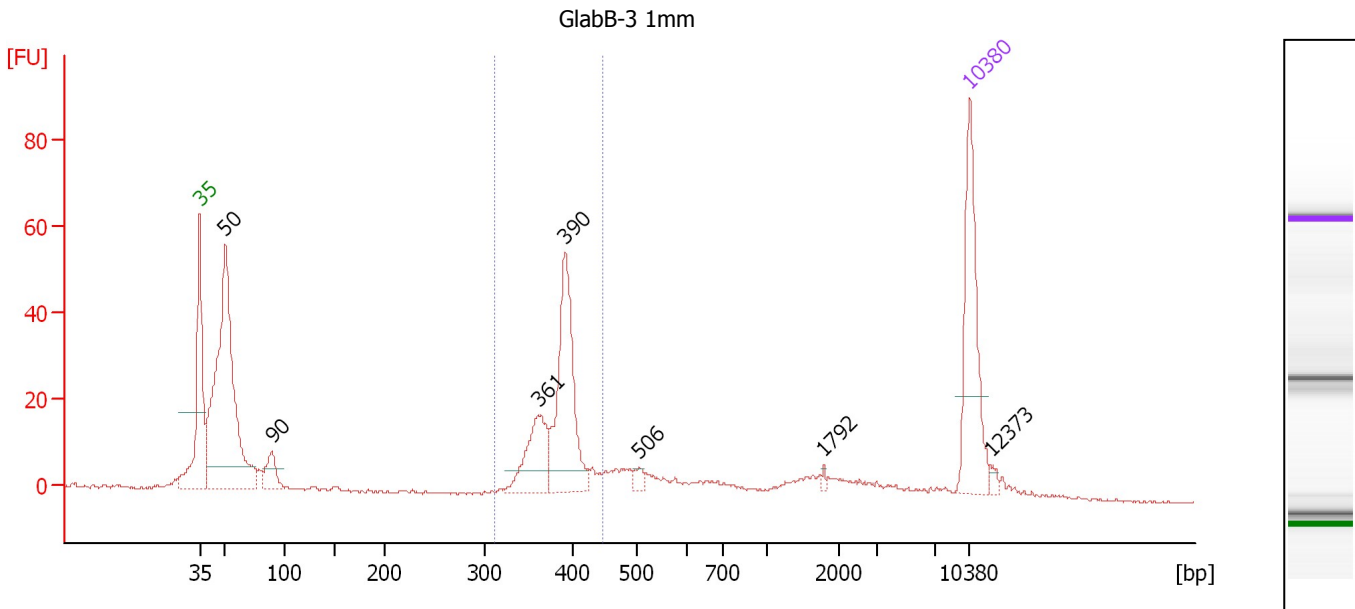
Region table for sample 9 : GlabB-3 BS

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
323	448	386	909.2	231.06	171.9	39	5.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-20\2013-05-20_005.xad

Created: 5/20/2013 3:15:22 PM
 Modified: 5/20/2013 4:00:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : GlabB-3 1mm

Number of peaks found: 7 Corr. Area 1: 178.1
 Noise: 0.3

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	50	345.27	10,378.7	
3	90	28.13	474.8	
4	361	58.60	246.3	
5	390	126.75	492.0	
6	506	6.72	20.1	
7	1,792	2.08	1.8	
8	10,380	75.00	10.9	Upper Marker
9	12,373	0.00	0.0	

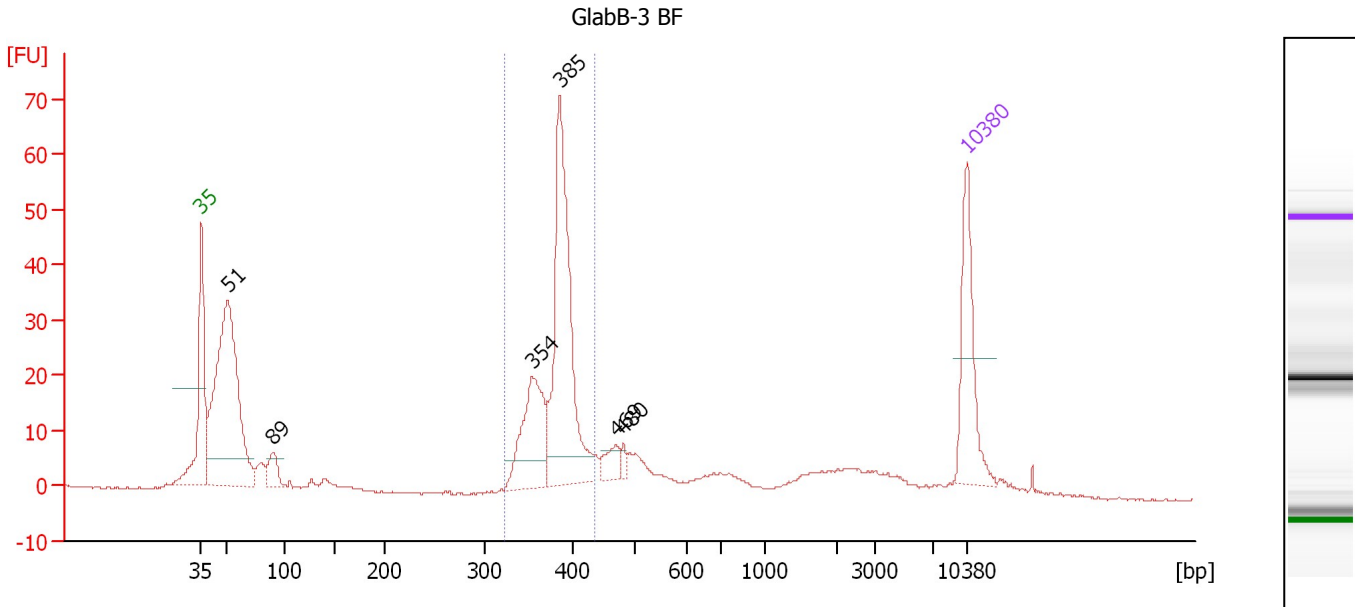
Region table for sample 10 : GlabB-3 1mm

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
311	446	384	767.4	193.88	178.1	33	5.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-20\2013-05-20_005.xad

Created: 5/20/2013 3:15:22 PM
 Modified: 5/20/2013 4:00:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : GlabB-3 BF

Number of peaks found: 6 Corr. Area 1: 226.5
 Noise: 0.2

Peak table for sample 11 : GlabB-3 BF

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	51	421.90	12,538.9	
3	89	31.05	527.4	
4	354	110.13	471.9	
5	385	258.90	1,019.3	
6	469	19.18	62.0	
7	480	6.92	21.8	
8	10,380	75.00	10.9	Upper Marker

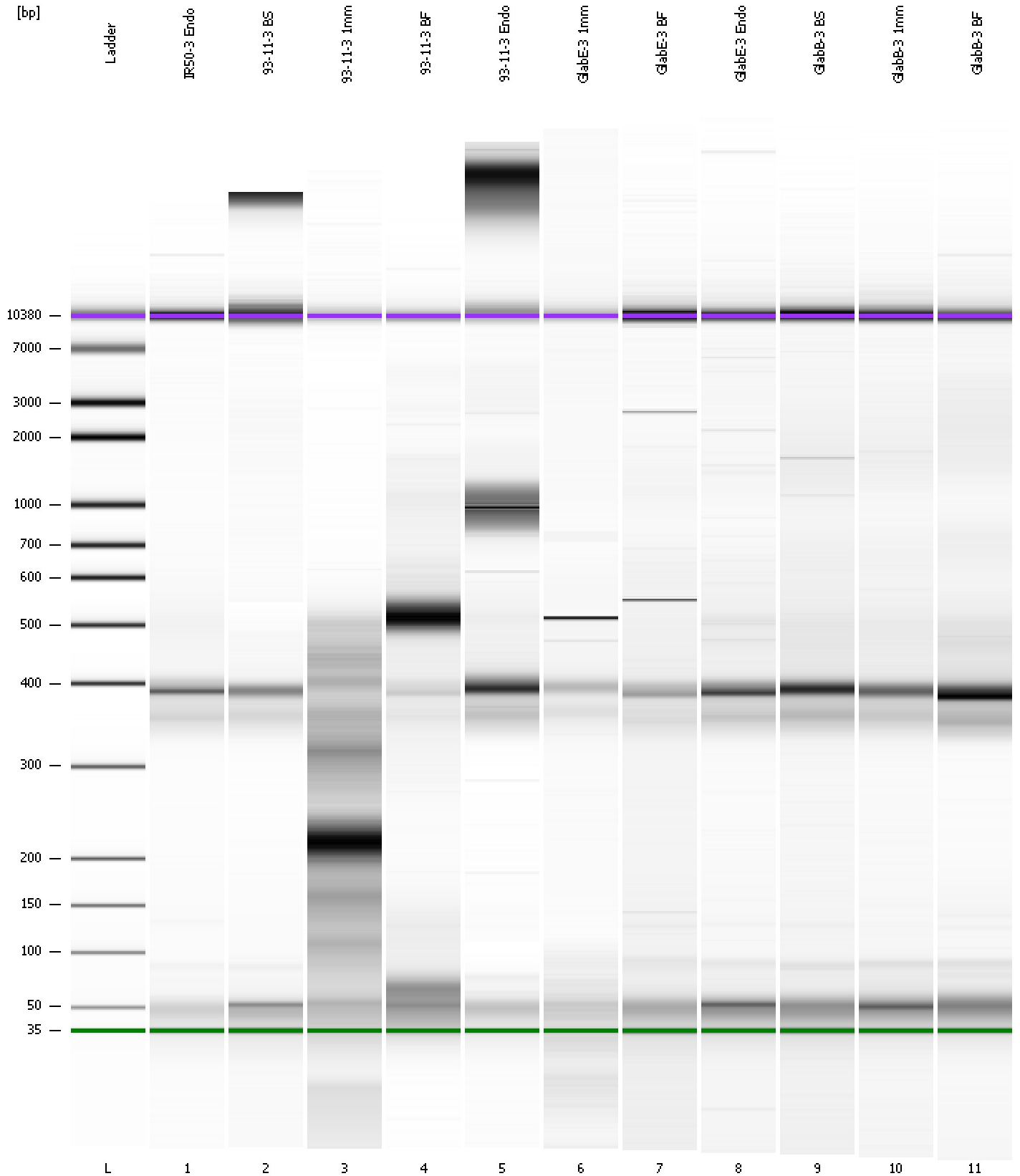
Region table for sample 11 : GlabB-3 BF

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
323	436	380	1,564.0	391.91	226.5	39	5.6	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-20\2013-05-20_005.xad

Created: 5/20/2013 3:15:22 PM
Modified: 5/20/2013 4:00:30 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-20\2013-05-20_005.xad

Created: 5/20/2013 3:15:22 PM
 Modified: 5/20/2013 4:00:30 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		5/20/2013 3:56:41 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-05-20\2013-05-20_005.xad)		Instrument	Run		5/20/2013 3:15:28 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		5/20/2013 3:15:28 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		5/20/2013 3:15:28 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		5/20/2013 3:15:28 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		5/20/2013 3:15:28 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		5/20/2013 3:15:28 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		5/20/2013 3:15:28 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1