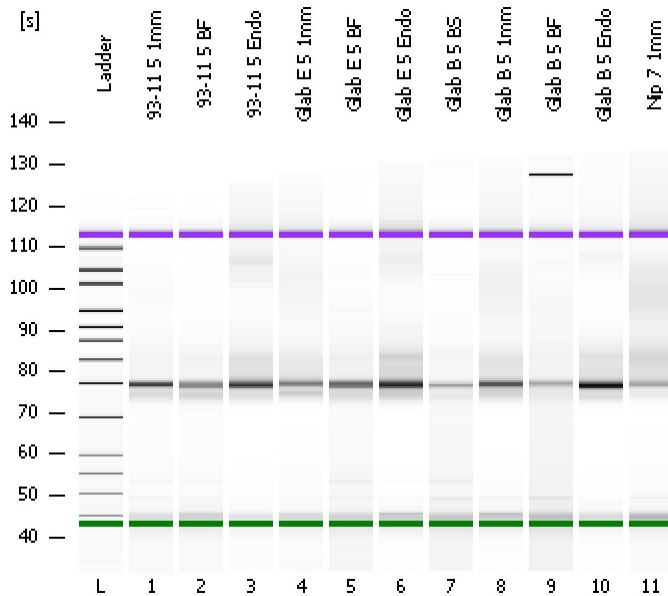


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-10\2013-06-10\_006.xad

Created: 6/10/2013 2:15:34 PM  
Modified: 6/10/2013 2:57:28 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

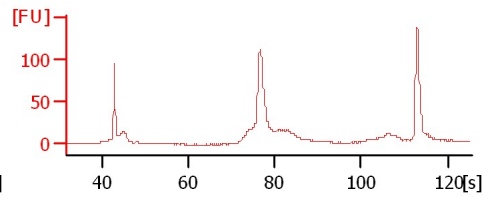
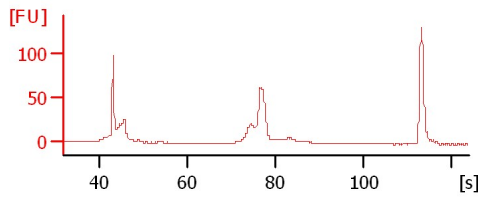
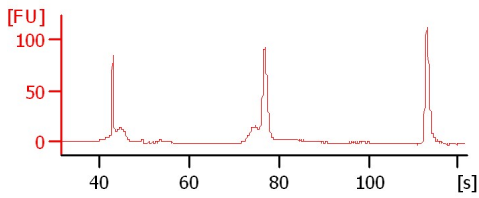
Chip Information:

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

**93-11 5 1mm**

**93-11 5 BF**

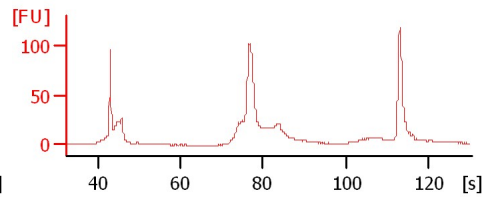
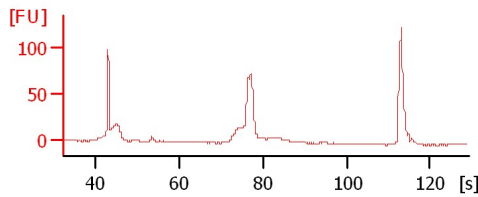
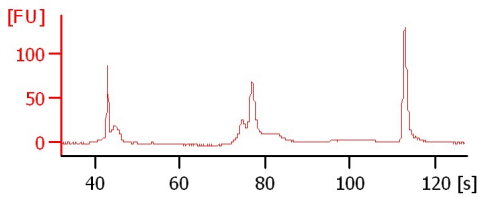
**93-11 5 Endo**



**Glab E 5 1mm**

**Glab E 5 BF**

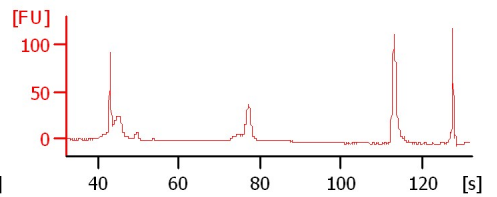
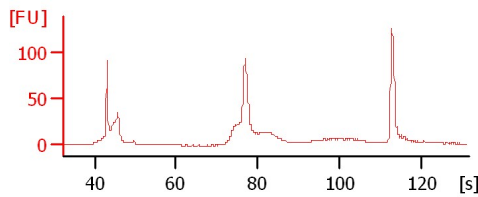
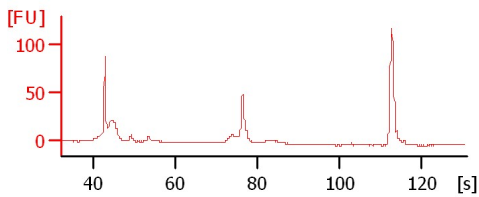
**Glab E 5 Endo**



**Glab B 5 BS**

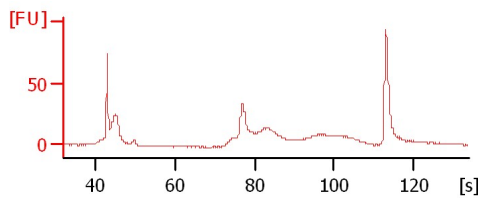
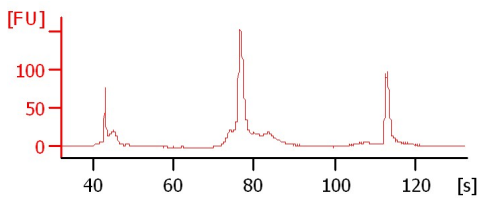
**Glab B 5 1mm**

**Glab B 5 BF**



**Glab B 5 Endo**

**Nip 7 1mm**



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-10\2013-06-10\_006.xad

Created: 6/10/2013 2:15:34 PM  
Modified: 6/10/2013 2:57:28 PM

**Electrophoresis File Run Summary (Chip Summary)**

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
93-11 5 1mm		<input type="checkbox"/>	✓			
93-11 5 BF		<input type="checkbox"/>	✓			
93-11 5 Endo		<input type="checkbox"/>	✓			
Glub E 5 1mm		<input type="checkbox"/>	✓			
Glub E 5 BF		<input type="checkbox"/>	✓			
Glub E 5 Endo		<input type="checkbox"/>	✓			
Glub B 5 BS		<input type="checkbox"/>	✓			
Glub B 5 1mm		<input type="checkbox"/>	✓			
Glub B 5 BF		<input type="checkbox"/>	✓			
Glub B 5 Endo		<input type="checkbox"/>	✓			
Nip 7 1mm		<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\2013-06-10\2013-06-10\_006.xad

Created: 6/10/2013 2:15:34 PM  
Modified: 6/10/2013 2:57:28 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

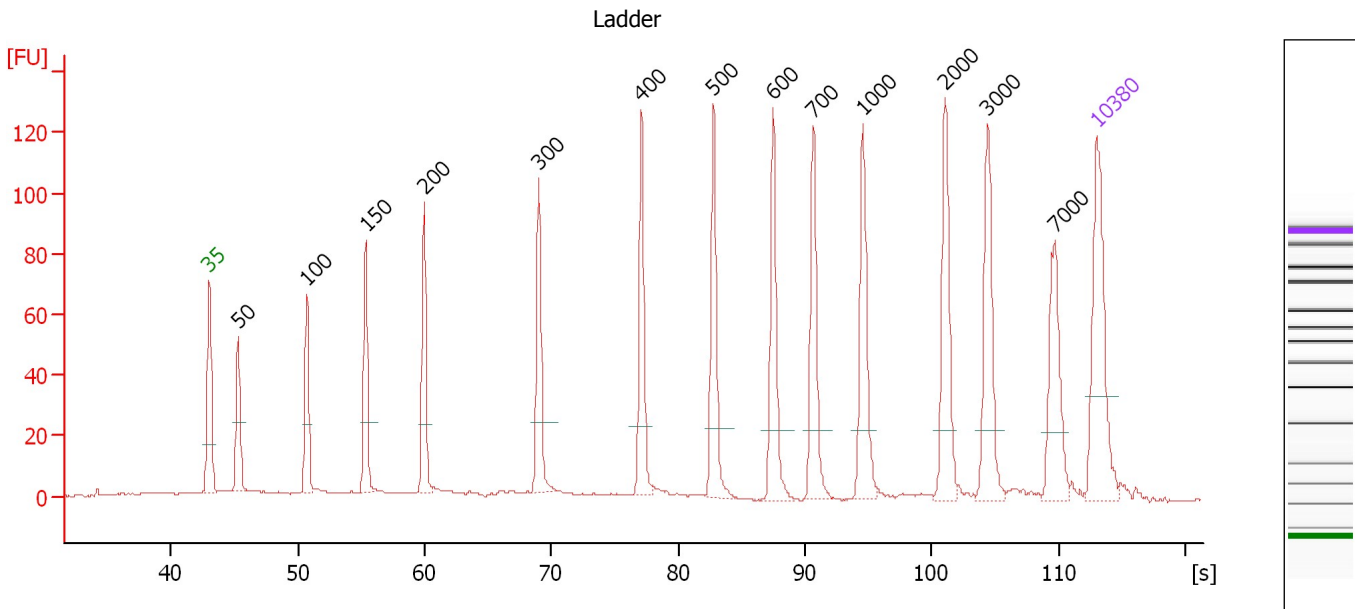
**Ladder**

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\2013-06-10\2013-06-10\_006.xad

Created: 6/10/2013 2:15:34 PM  
 Modified: 6/10/2013 2:57:28 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.2

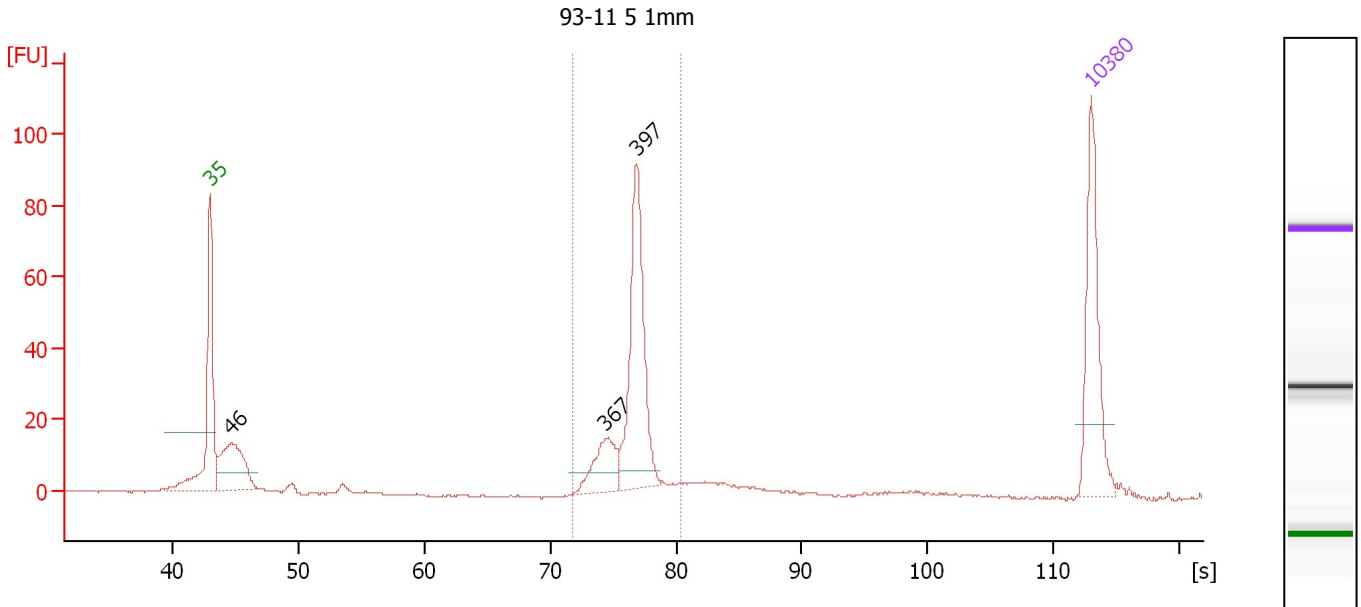
**Peak table for Ladder**

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\2013-06-10\2013-06-10\_006.xad

Created: 6/10/2013 2:15:34 PM  
 Modified: 6/10/2013 2:57:28 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : 93-11 5 1mm**

Number of peaks found: 3                      Corr. Area 1: 221.0  
 Noise: 0.2

**Peak table for sample 1 : 93-11 5 1mm**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	46	100.01	3,300.2	
3	367	44.63	184.4	
4	397	153.67	586.8	
5	10,380	75.00	10.9	Upper Marker

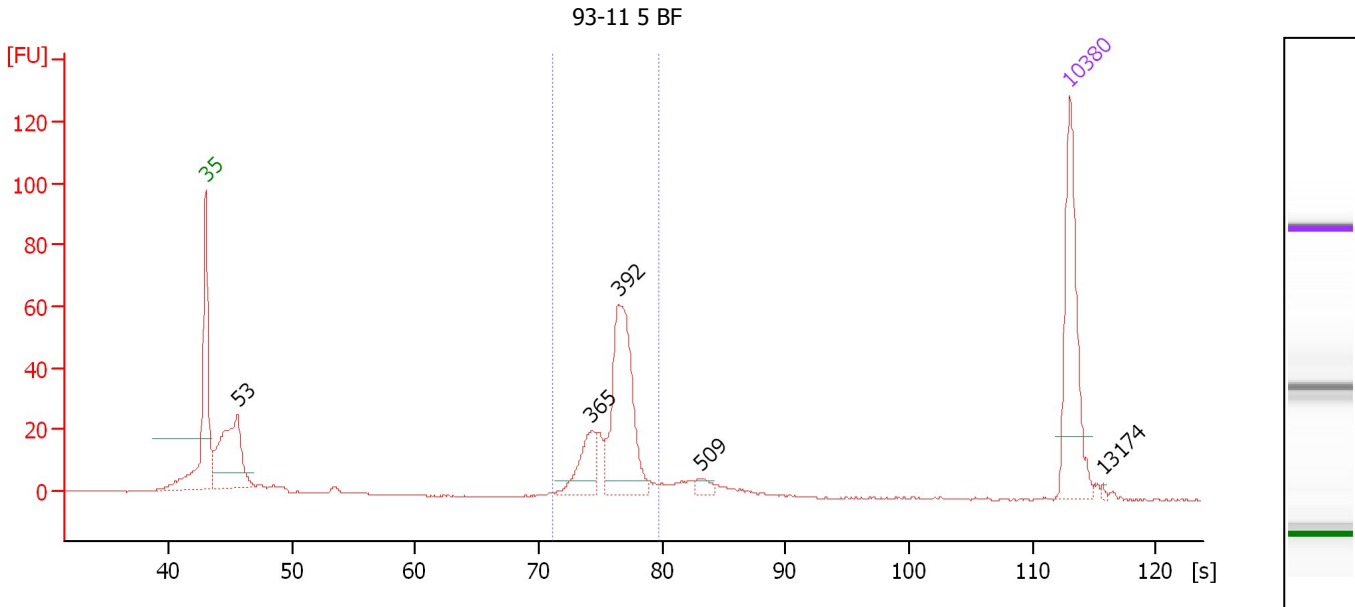
**Region table for sample 1 : 93-11 5 1mm**

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area % of Total	Size distribution in CV [%]	Color
71.72	80.45	393	837.9	216.91	221.0 64	4.8	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-10\2013-06-10\_006.xad

Created: 6/10/2013 2:15:34 PM  
 Modified: 6/10/2013 2:57:28 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : 93-11 5 BF**

Number of peaks found: 5                      Corr. Area 1: 231.9  
 Noise: 0.2

**Peak table for sample 2 : 93-11 5 BF**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	53	125.03	3,576.2	
3	365	39.08	162.2	
4	392	131.08	506.1	
5	509	7.55	22.5	
6	10,380	75.00	10.9	Upper Marker
7	13,174	0.00	0.0	

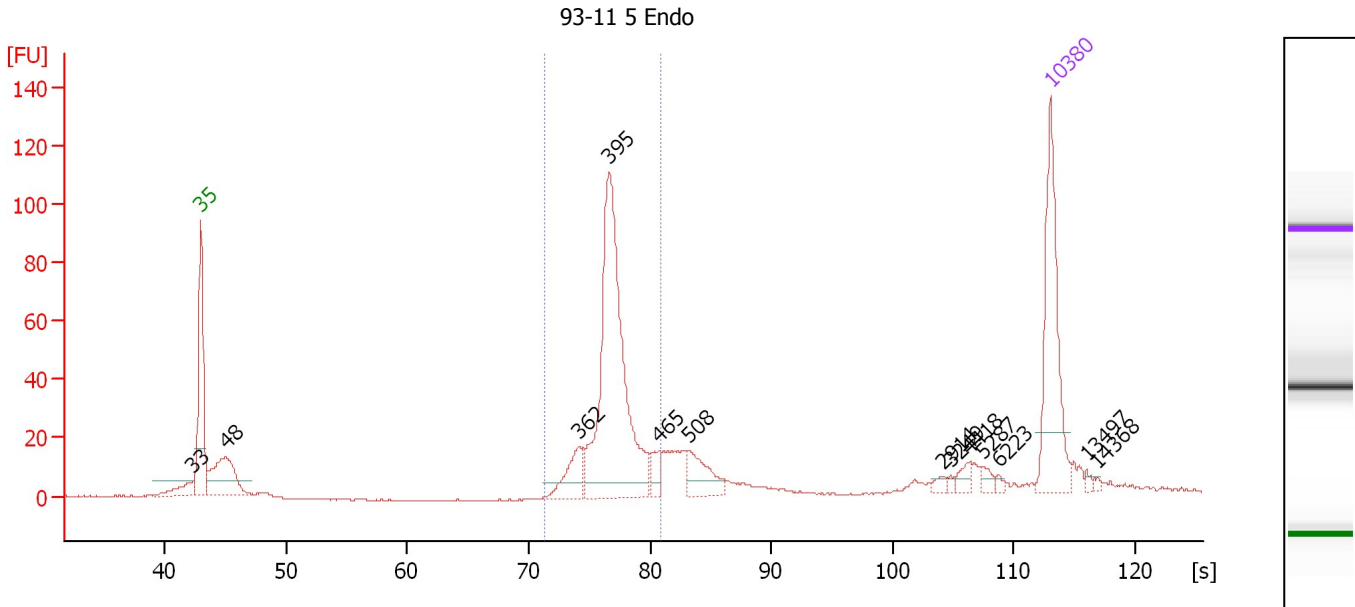
**Region table for sample 2 : 93-11 5 BF**

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area % of Total	Size distribution in CV [%]	Color
71.18	79.75	389	732.8	187.58	231.9 56	5.1	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-10\2013-06-10\_006.xad

Created: 6/10/2013 2:15:34 PM  
 Modified: 6/10/2013 2:57:28 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 13      Corr. Area 1: 357.8  
 Noise: 0.2

**Peak table for sample 3 : 93-11 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	48	72.31	2,266.2	
4	362	31.31	130.9	
5	395	244.45	938.6	
6	465	11.17	36.4	
7	508	28.80	85.8	
8	2,914	3.69	1.9	
9	3,249	1.80	0.8	
10	4,418	6.77	2.3	
11	5,287	4.63	1.3	
12	6,223	2.03	0.5	
13	10,380	75.00	10.9	Upper Marker
14	13,497	0.00	0.0	
15	14,368	0.00	0.0	

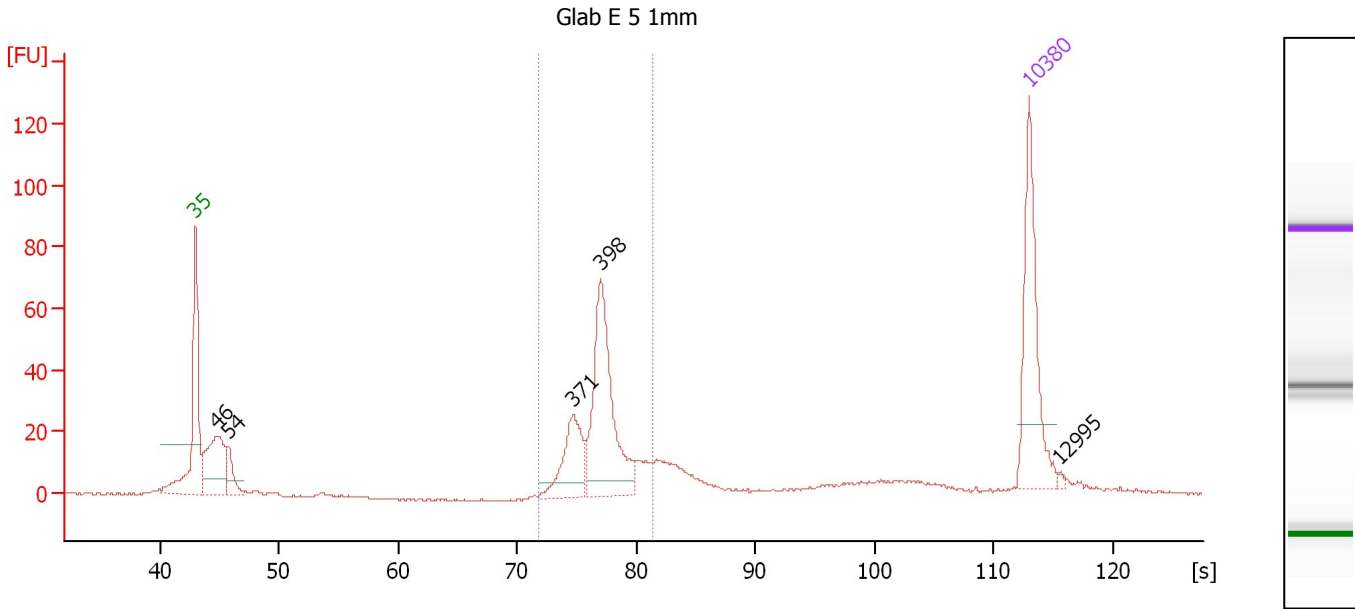
**Region table for sample 3 : 93-11 5 Endo**

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
71.39	80.94	400	1,042.6	274.51	357.8	59	6.0	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-10\2013-06-10\_006.xad

Created: 6/10/2013 2:15:34 PM  
 Modified: 6/10/2013 2:57:28 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : Glab E 5 1mm**

Number of peaks found: 5                      Corr. Area 1: 250.7  
 Noise: 0.3

**Peak table for sample 4 : Glab E 5 1mm**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	46	94.19	3,087.2	
3	54	27.58	770.2	
4	371	57.97	237.0	
5	398	138.76	527.6	
6	10,380	75.00	10.9	Upper Marker
7	12,995	0.00	0.0	

**Region table for sample 4 : Glab E 5 1mm**

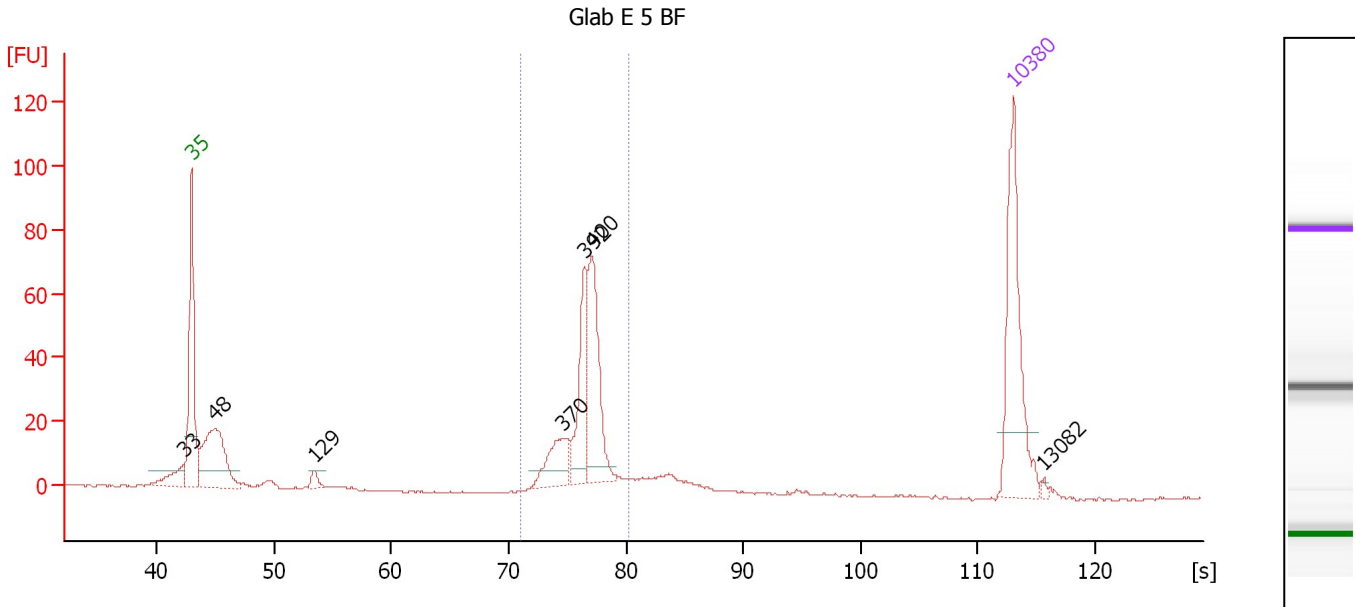
From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area % of Total	Size distribution in CV [%]	Color
71.86	81.42	402	753.9	199.08	250.7 54	6.8	Blue



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-10\2013-06-10\_006.xad

Created: 6/10/2013 2:15:34 PM  
 Modified: 6/10/2013 2:57:28 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : Glab E 5 BF**

Number of peaks found: 7                      Corr. Area 1: 250.1  
 Noise: 0.3

**Peak table for sample 5 : Glab E 5 BF**

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	107.64	3,426.6	
4	129	7.63	89.3	
5	370	34.37	140.8	
6	392	57.72	222.9	
7	400	78.95	298.8	
8	10,380	75.00	10.9	Upper Marker
9	13,082	0.00	0.0	

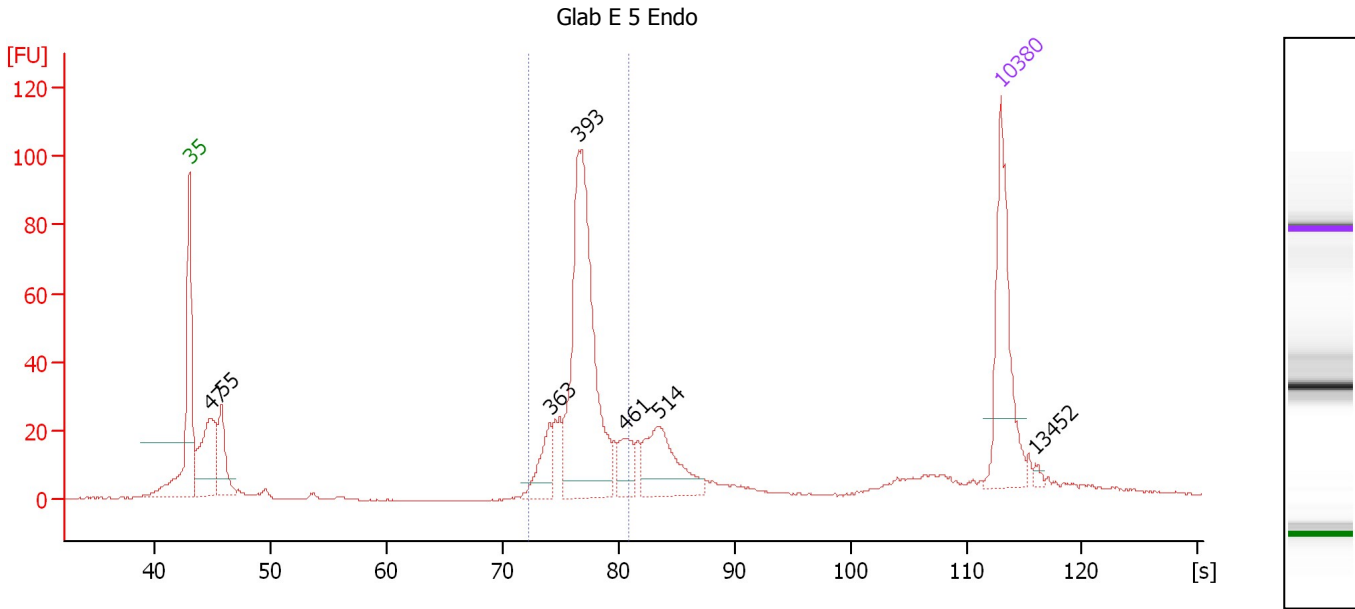
**Region table for sample 5 : Glab E 5 BF**

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area % of Total	Size distribution in CV [%]	Color
71.05	80.24	393	734.6	190.05	250.1 59	5.0	■

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-10\2013-06-10\_006.xad

Created: 6/10/2013 2:15:34 PM  
 Modified: 6/10/2013 2:57:28 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : Glab E 5 Endo**

Number of peaks found: 7                      Corr. Area 1: 381.8  
 Noise: 0.2

**Peak table for sample 6 : Glab E 5 Endo**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	47	97.72	3,140.2	
3	55	51.77	1,438.4	
4	363	31.90	133.3	
5	393	237.43	915.5	
6	461	25.33	83.2	
7	514	66.67	196.5	
8	10,380	75.00	10.9	Upper Marker
9	13,452	0.00	0.0	

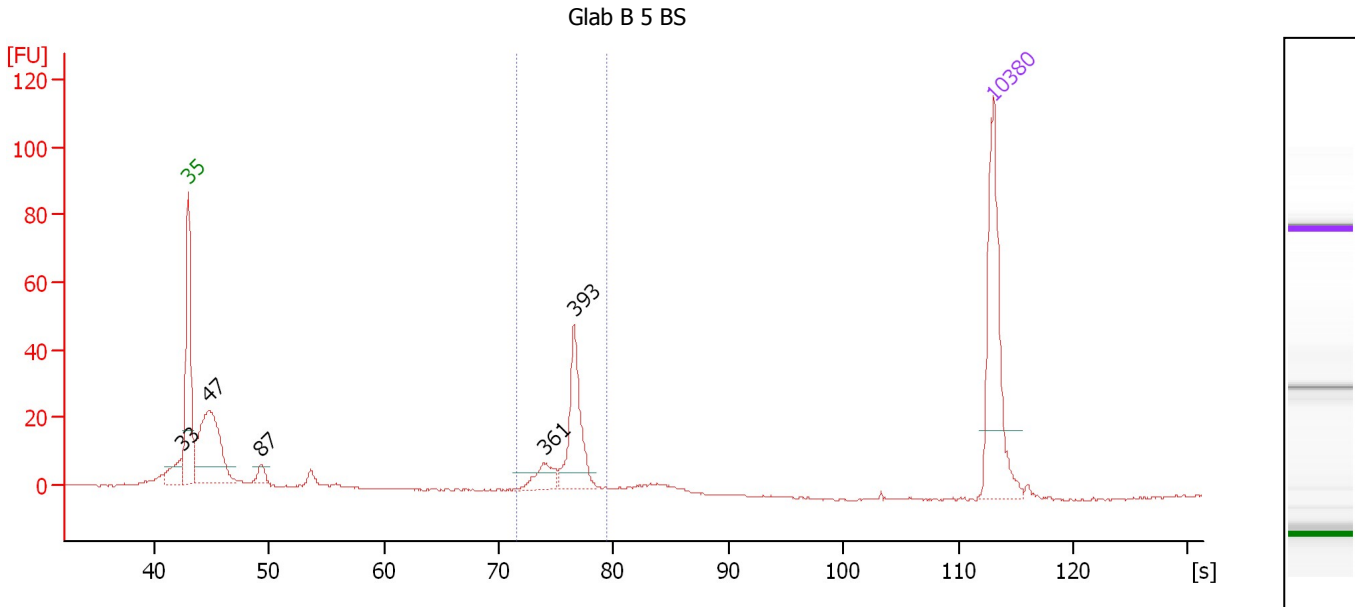
**Region table for sample 6 : Glab E 5 Endo**

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area % of Total	Size distribution in CV [%]	Color
72.29	80.89	399	1,184.2	311.04	381.8 52	6.3	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-10\2013-06-10\_006.xad

Created: 6/10/2013 2:15:34 PM  
 Modified: 6/10/2013 2:57:28 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : Glab B 5 BS**

Number of peaks found: 5                      Corr. Area 1: 96.6  
 Noise: 0.2

**Peak table for sample 7 : Glab B 5 BS**

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	47	134.68	4,346.7	
4	87	10.24	178.2	
5	361	18.63	78.2	
6	393	60.67	233.8	
7	10,380	75.00	10.9	Upper Marker

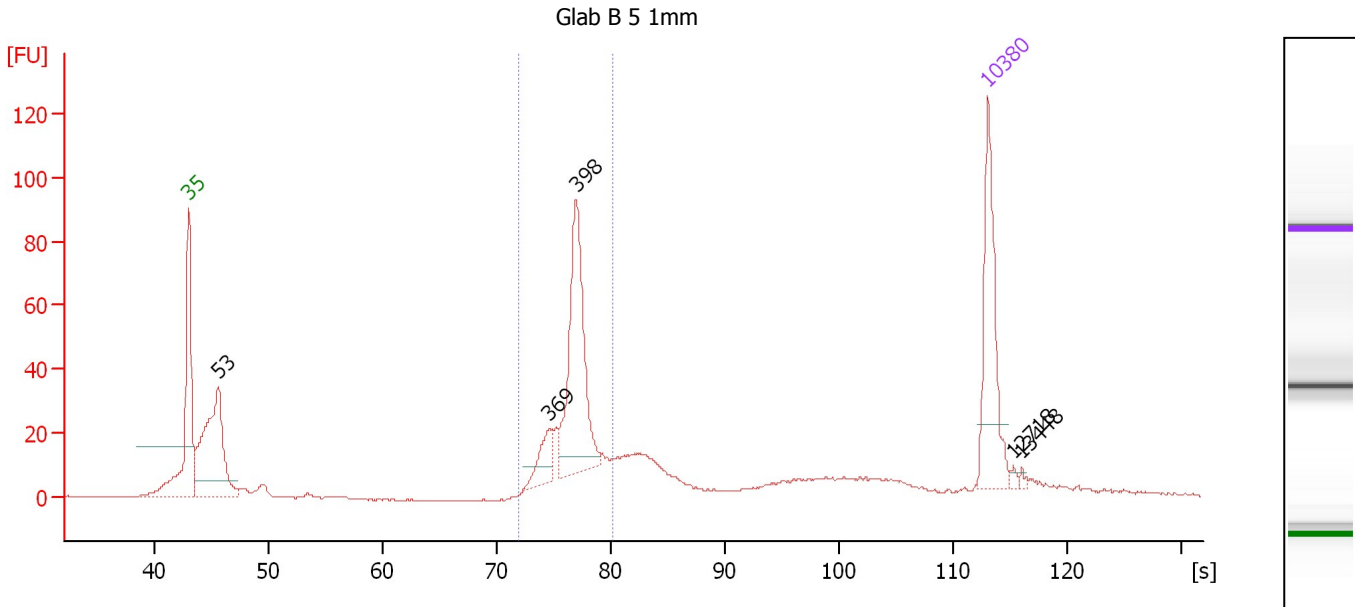
**Region table for sample 7 : Glab B 5 BS**

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area % of Total	Size distribution in CV [%]	Color	
71.58	79.37	388	322.1	82.36	96.6	33	4.4	■

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-10\2013-06-10\_006.xad

Created: 6/10/2013 2:15:34 PM  
 Modified: 6/10/2013 2:57:28 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : Glab B 5 1mm**

Number of peaks found: 5                      Corr. Area 1: 283.7  
 Noise: 0.1

**Peak table for sample 8 : Glab B 5 1mm**

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	53	188.99	5,384.9	
3	369	28.66	117.7	
4	398	150.46	572.9	
5	10,380	75.00	10.9	Upper Marker
6	12,718	0.00	0.0	
7	13,448	0.00	0.0	

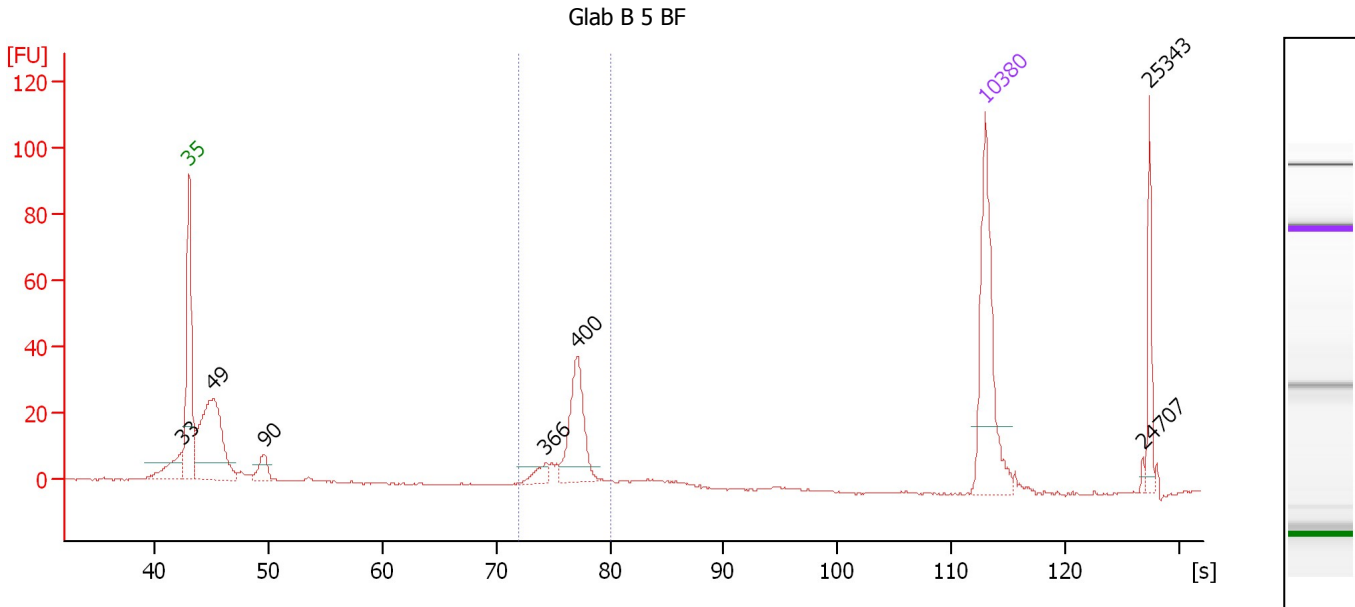
**Region table for sample 8 : Glab B 5 1mm**

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area % of Total	Size distribution in CV [%]	Color
71.93	80.12	396	956.5	249.57	283.7 44	5.4	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-10\2013-06-10\_006.xad

Created: 6/10/2013 2:15:34 PM  
 Modified: 6/10/2013 2:57:28 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : Glab B 5 BF**

Number of peaks found: 7                      Corr. Area 1: 98.1  
 Noise: 0.2

**Peak table for sample 9 : Glab B 5 BF**

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	162.22	5,023.8	
4	90	19.46	328.2	
5	366	10.97	45.4	
6	400	64.91	245.7	
7	10,380	75.00	10.9	Upper Marker
8	24,707	0.00	0.0	
9	25,343	0.00	0.0	

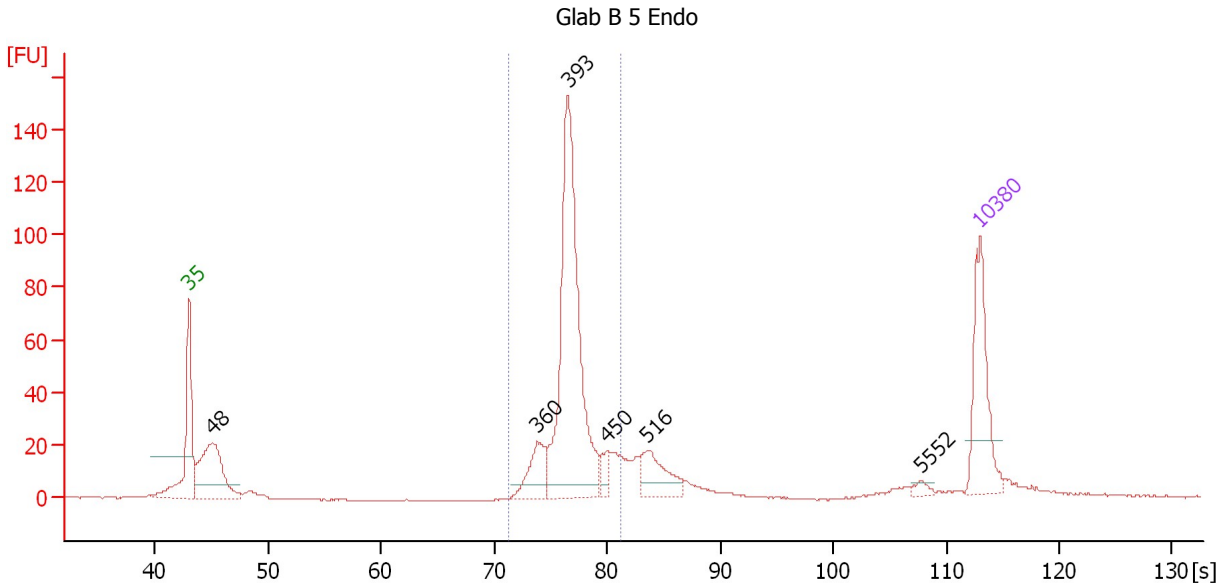
**Region table for sample 9 : Glab B 5 BF**

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area % of Total	Size distribution in CV [%]	Color
72.00	80.05	395	333.1	86.66	98.1	29	4.7

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-10\2013-06-10\_006.xad

Created: 6/10/2013 2:15:34 PM  
 Modified: 6/10/2013 2:57:28 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : Glab B 5 Endo**

Number of peaks found: 6                      Corr. Area 1: 457.0  
 Noise: 0.2

**Peak table for sample 10 : Glab B 5 Endo**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	48	147.30	4,611.6	
3	360	47.23	199.0	
4	393	339.49	1,308.6	
5	450	15.56	52.3	
6	516	49.06	144.1	
7	5,552	5.42	1.5	
8	10,380	75.00	10.9	Upper Marker

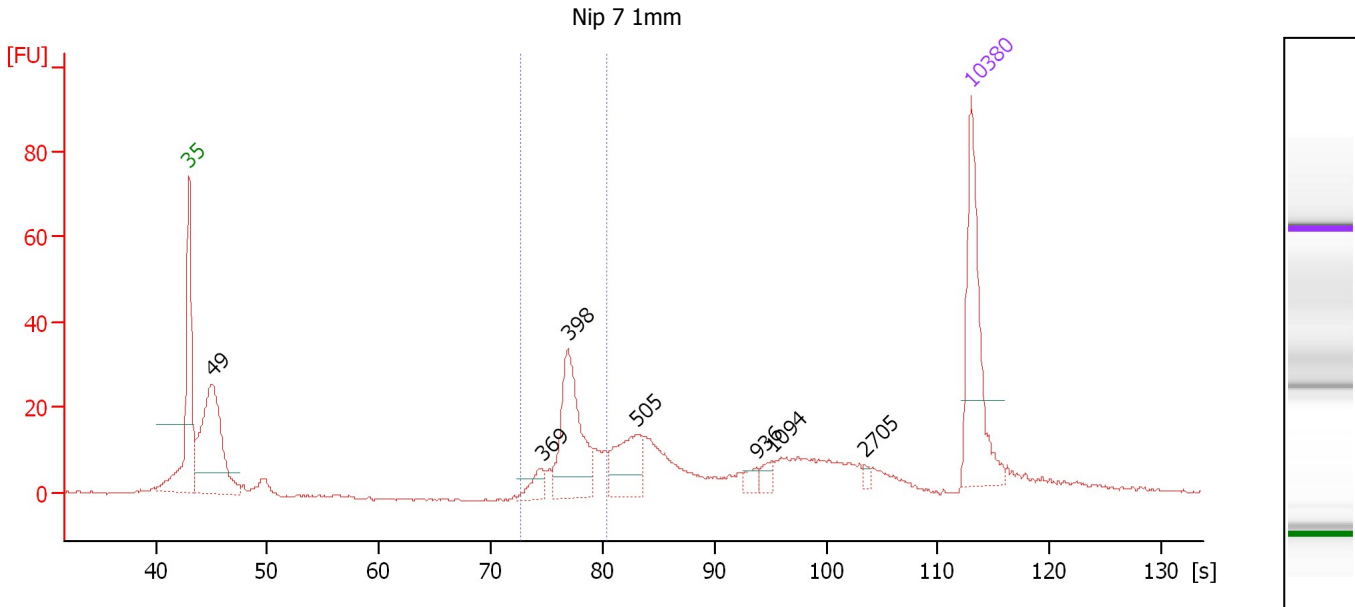
**Region table for sample 10 : Glab B 5 Endo**

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
71.30	81.20	399	1,593.2	417.78	457.0	63	6.2	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-10\2013-06-10\_006.xad

Created: 6/10/2013 2:15:34 PM  
 Modified: 6/10/2013 2:57:28 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : Nip 7 1mm**

Number of peaks found: 7                      Corr. Area 1: 114.5  
 Noise: 0.3

**Peak table for sample 11 : Nip 7 1mm**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	49	180.65	5,638.5	
3	369	14.95	61.4	
4	398	93.50	356.3	
5	505	47.61	142.8	
6	936	6.88	11.1	
7	1,094	7.04	9.8	
8	2,705	3.13	1.8	
9	10,380	75.00	10.9	Upper Marker

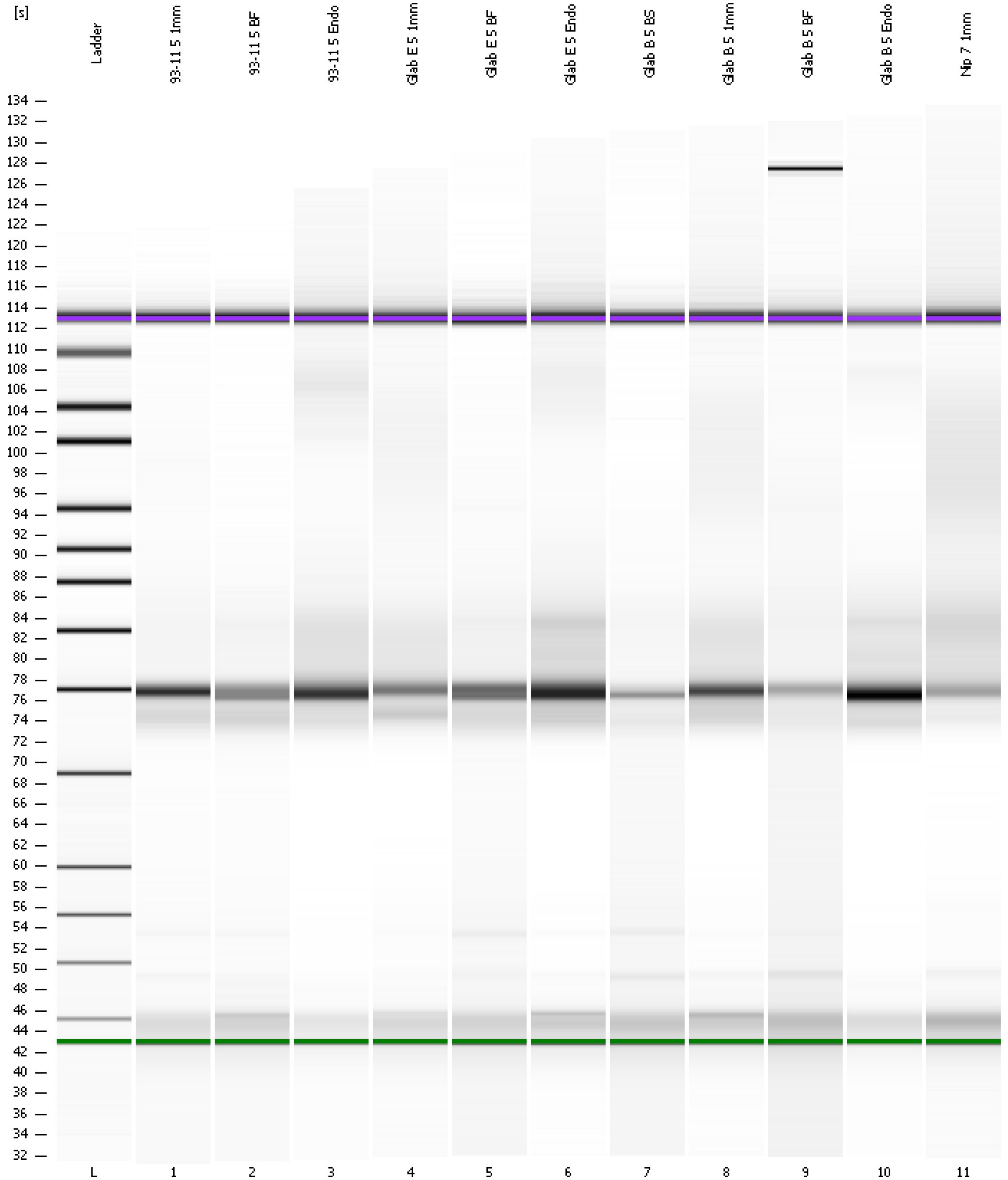
**Region table for sample 11 : Nip 7 1mm**

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area % of Total	Size distribution in CV [%]	Color
72.70	80.34	406	430.5	114.92	114.5 24	5.6	■

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-10\2013-06-10\_006.xad

Created: 6/10/2013 2:15:34 PM  
Modified: 6/10/2013 2:57:28 PM

**Gel Image**





Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-10\2013-06-10\_006.xad

Created: 6/10/2013 2:15:34 PM  
 Modified: 6/10/2013 2:57:28 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		6/10/2013 2:56:48 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-06-10\2013-06-10_006.xad)		Instrument	Run		6/10/2013 2:15:35 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		6/10/2013 2:15:35 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		6/10/2013 2:15:35 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		6/10/2013 2:15:35 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		6/10/2013 2:15:35 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		6/10/2013 2:15:35 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		6/10/2013 2:15:35 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1