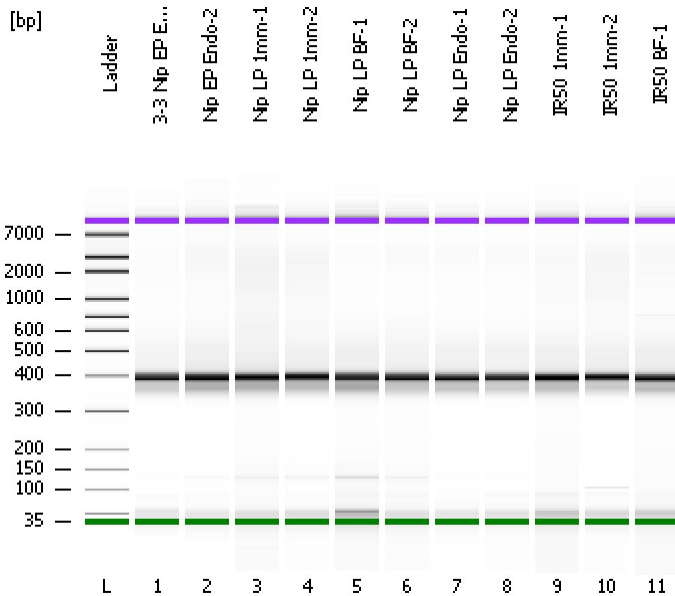


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-13\2012-11-13\_006.xad

Created: 11/13/2012 2:47:10 PM  
Modified: 11/13/2012 3:29:03 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

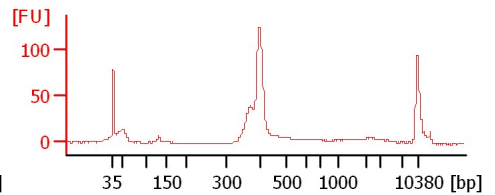
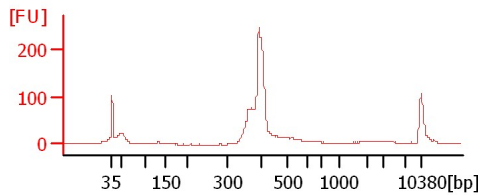
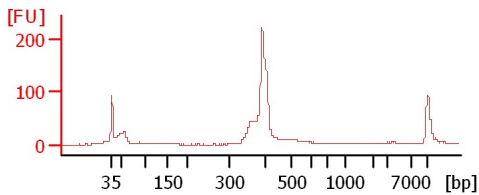
Chip Information:

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

**3-3 Nip EP Endo-1**

**Nip EP Endo-2**

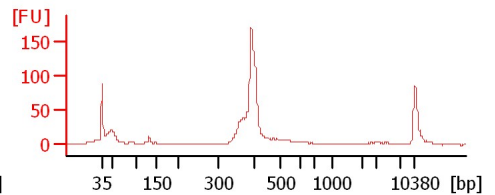
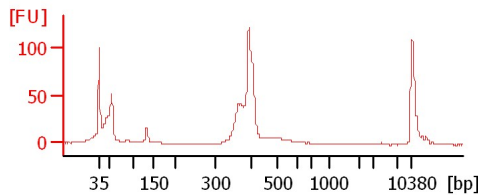
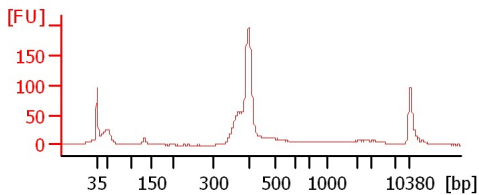
**Nip LP 1mm-1**



**Nip LP 1mm-2**

**Nip LP BF-1**

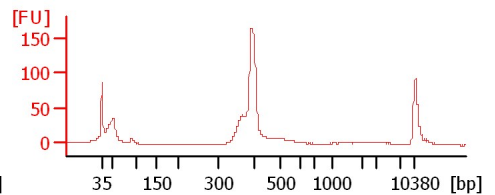
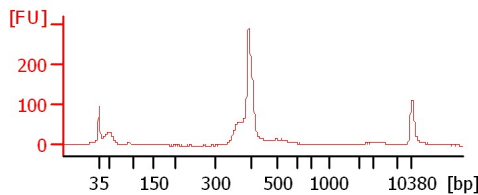
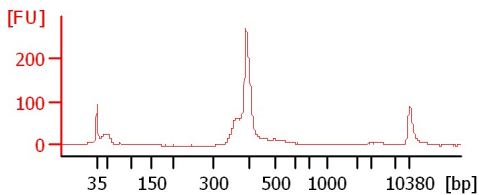
**Nip LP BF-2**



**Nip LP Endo-1**

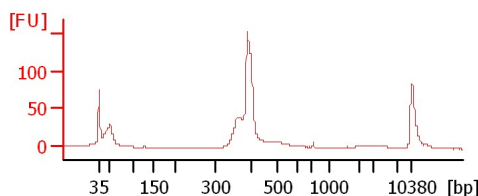
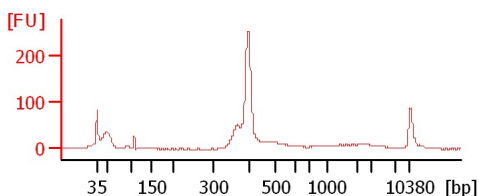
**Nip LP Endo-2**

**IR50 1mm-1**



**IR50 1mm-2**

**IR50 BF-1**



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-13\2012-11-13\_006.xad

Created: 11/13/2012 2:47:10 PM  
Modified: 11/13/2012 3:29:03 PM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
3-3 Nip EP Endo-1		<input type="checkbox"/>	✓			
Nip EP Endo-2		<input type="checkbox"/>	✓			
Nip LP 1mm-1		<input type="checkbox"/>	✓			
Nip LP 1mm-2		<input type="checkbox"/>	✓			
Nip LP BF-1		<input type="checkbox"/>	✓			
Nip LP BF-2		<input type="checkbox"/>	✓			
Nip LP Endo-1		<input type="checkbox"/>	✓			
Nip LP Endo-2		<input type="checkbox"/>	✓			
IR50 1mm-1		<input type="checkbox"/>	✓			
IR50 1mm-2		<input type="checkbox"/>	✓			
IR50 BF-1		<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\2012-11-13\2012-11-13\_006.xad

Created: 11/13/2012 2:47:10 PM  
Modified: 11/13/2012 3:29:03 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

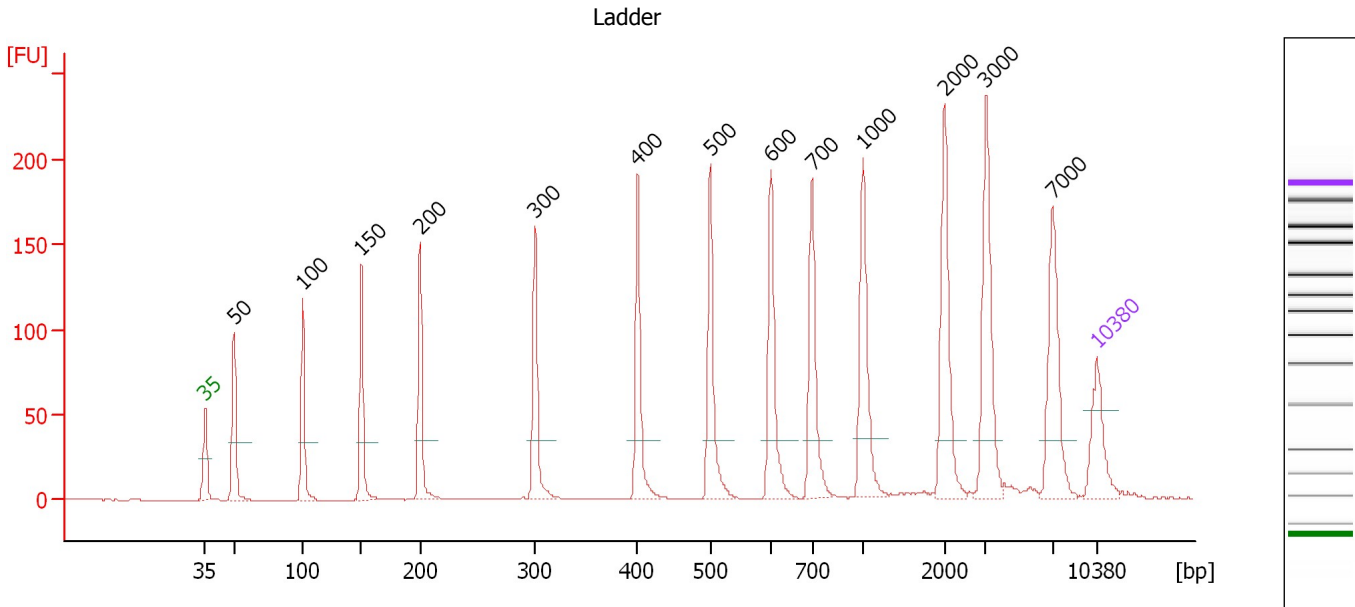
**Ladder**

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\2012-11-13\2012-11-13\_006.xad

Created: 11/13/2012 2:47:10 PM  
 Modified: 11/13/2012 3:29:03 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.1

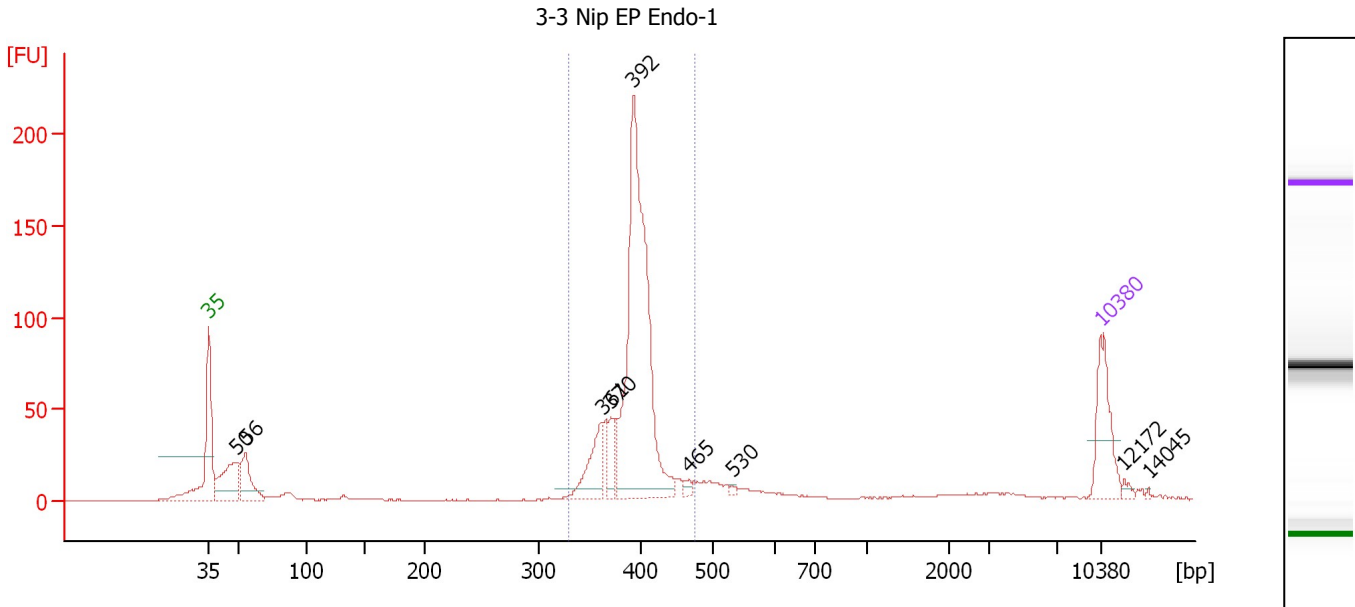
**Peak table for Ladder**

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\2012-11-13\2012-11-13\_006.xad

Created: 11/13/2012 2:47:10 PM  
 Modified: 11/13/2012 3:29:03 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : 3-3 Nip EP Endo-1**

Number of peaks found: 9                      Corr. Area 1: 692.0  
 Noise: 0.2

**Peak table for sample 1 : 3-3 Nip EP Endo-1**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	50	123.05	3,749.5	
3	56	88.27	2,396.2	
4	361	83.96	351.9	
5	370	40.70	166.8	
6	392	567.33	2,191.8	
7	465	8.46	27.5	
8	530	3.36	9.6	
9	10,380	75.00	10.9	Upper Marker
10	12,172	0.00	0.0	
11	14,045	0.00	0.0	

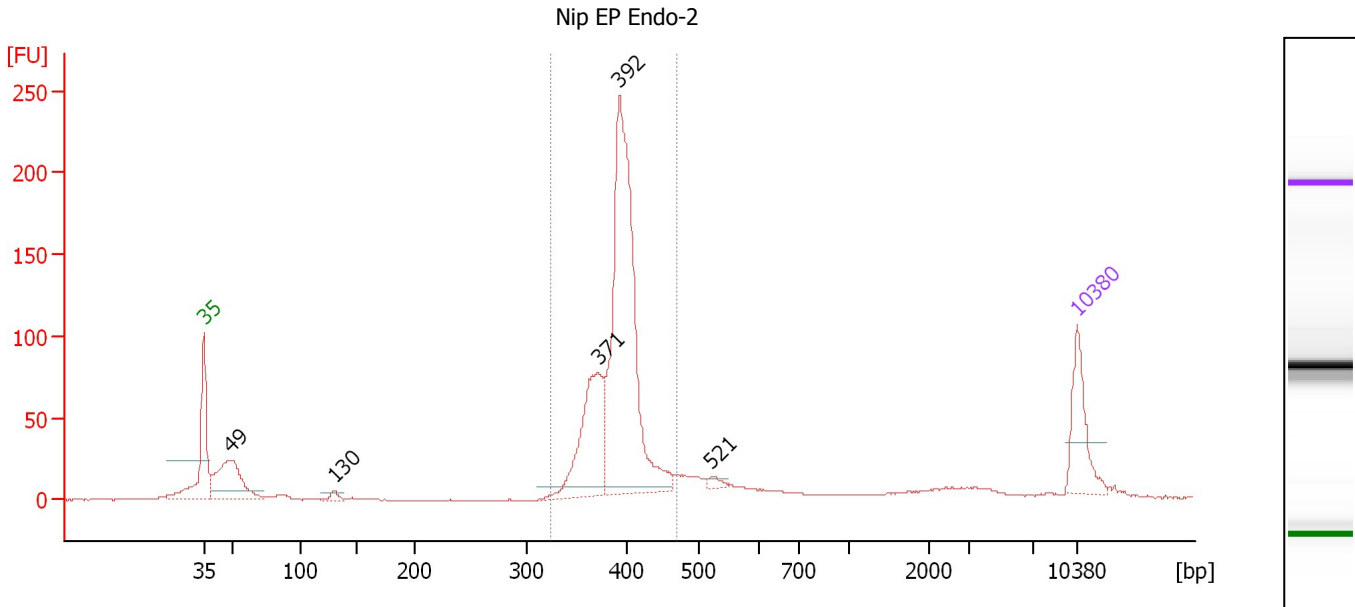
**Region table for sample 1 : 3-3 Nip EP Endo-1**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
330	473	393	2,935.1	759.76	692.0	71	5.8	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-13\2012-11-13\_006.xad

Created: 11/13/2012 2:47:10 PM  
 Modified: 11/13/2012 3:29:03 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : Nip EP Endo-2**

Number of peaks found: 5                      Corr. Area 1: 922.7  
 Noise: 0.3

**Peak table for sample 2 : Nip EP Endo-2**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	49	189.31	5,865.5	
3	130	11.89	138.5	
4	371	219.95	898.9	
5	392	616.88	2,384.3	
6	521	8.59	25.0	
7	10,380	75.00	10.9	Upper Marker

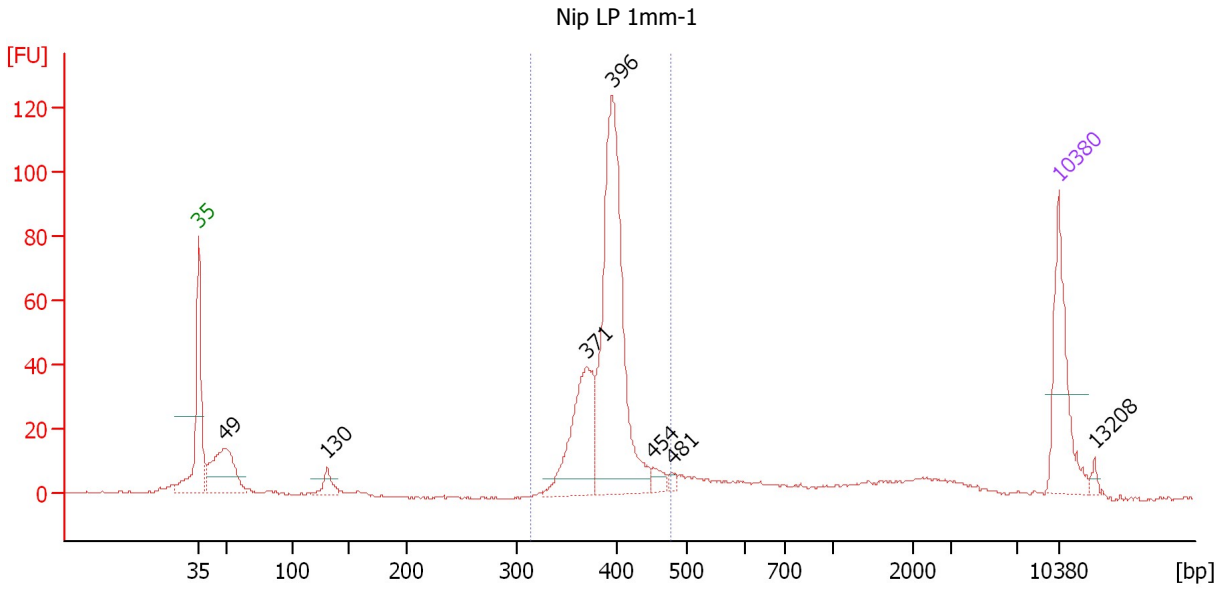
**Region table for sample 2 : Nip EP Endo-2**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
324	469	391	3,360.4	865.86	922.7	74	5.9	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-13\2012-11-13\_006.xad

Created: 11/13/2012 2:47:10 PM  
 Modified: 11/13/2012 3:29:03 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : Nip LP 1mm-1**

Number of peaks found: 7                      Corr. Area 1: 461.9  
 Noise: 0.3

**Peak table for sample 3 : Nip LP 1mm-1**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	49	117.71	3,674.8	
3	130	21.80	253.4	
4	371	130.48	533.4	
5	396	340.42	1,302.4	
6	454	11.19	37.4	
7	481	4.51	14.2	
8	10,380	75.00	10.9	Upper Marker
9	13,208	0.00	0.0	

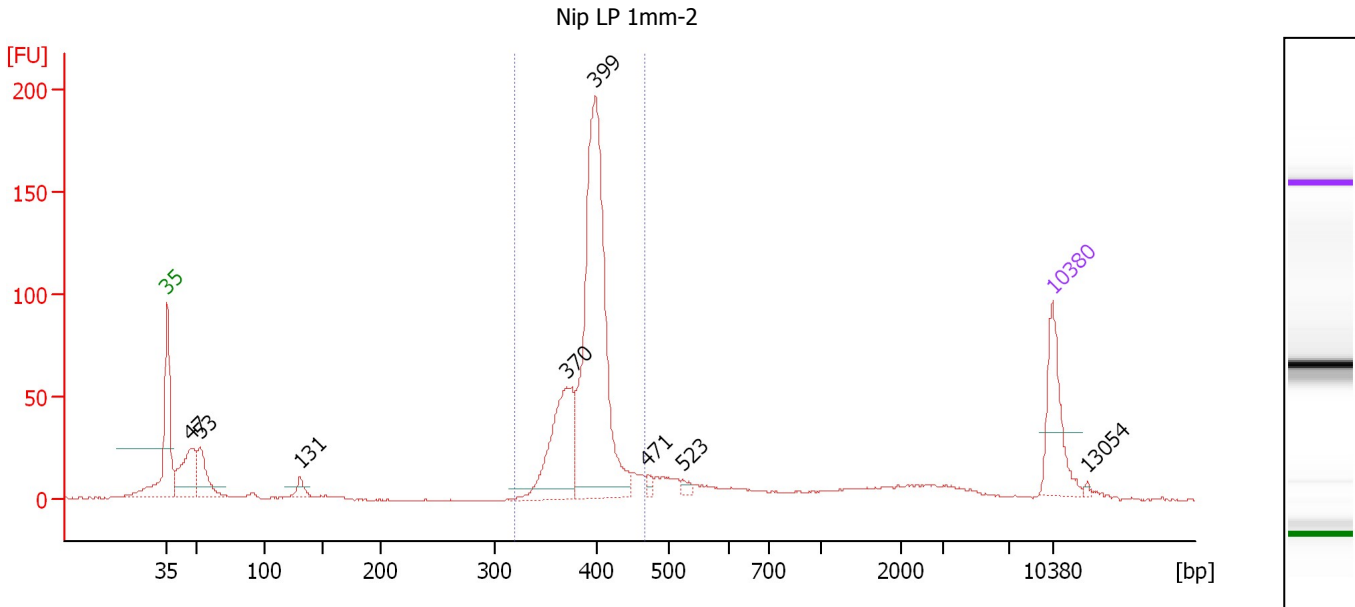
**Region table for sample 3 : Nip LP 1mm-1**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
314	478	393	1,920.7	496.45	461.9	64	6.3	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-13\2012-11-13\_006.xad

Created: 11/13/2012 2:47:10 PM  
 Modified: 11/13/2012 3:29:03 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : Nip LP 1mm-2**

Number of peaks found: 8                      Corr. Area 1: 690.4  
 Noise: 0.3

**Peak table for sample 4 : Nip LP 1mm-2**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	47	123.51	3,951.9	
3	53	77.11	2,192.5	
4	131	18.11	209.6	
5	370	174.68	714.8	
6	399	499.32	1,896.3	
7	471	7.79	25.1	
8	523	7.39	21.4	
9	10,380	75.00	10.9	Upper Marker
10	13,054	0.00	0.0	

**Region table for sample 4 : Nip LP 1mm-2**

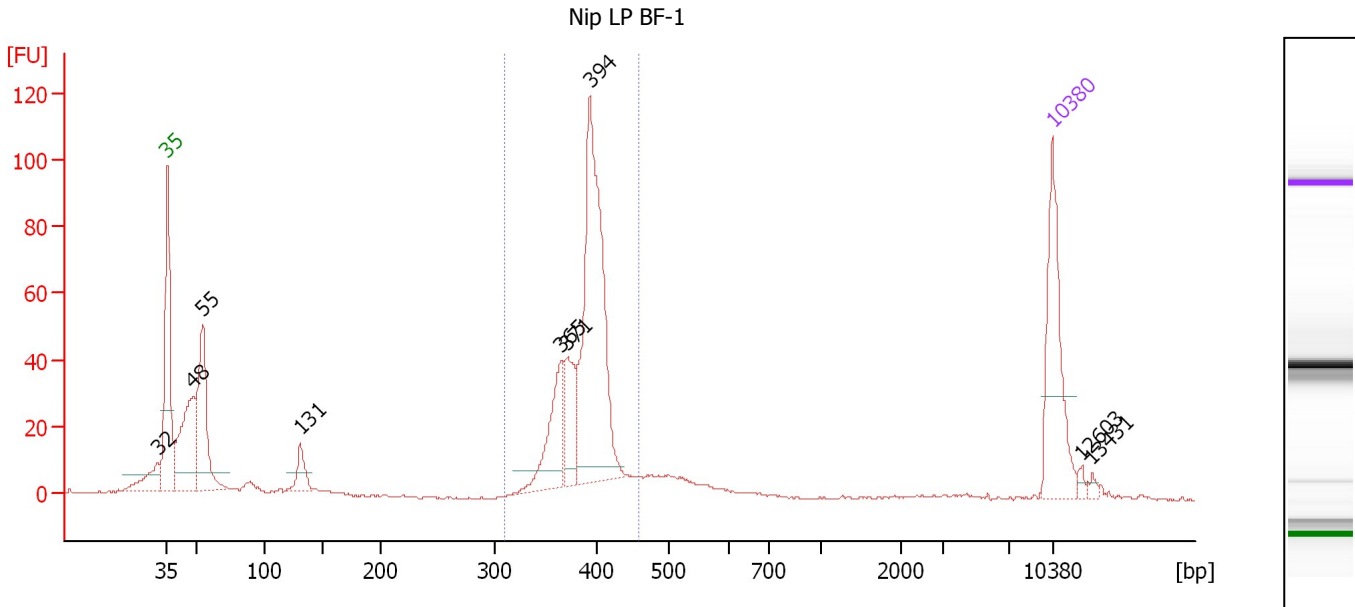
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
319	468	394	2,696.6	699.06	690.4	65	5.8	Blue



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-13\2012-11-13\_006.xad

Created: 11/13/2012 2:47:10 PM  
 Modified: 11/13/2012 3:29:03 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : Nip LP BF-1**

Number of peaks found: 9                      Corr. Area 1: 430.6  
 Noise: 0.3

**Peak table for sample 5 : Nip LP BF-1**

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	120.64	3,778.2	
4	55	129.75	3,560.9	
5	131	25.18	290.9	
6	365	66.75	277.0	
7	371	46.97	191.7	
8	394	243.24	936.5	
9	10,380	75.00	10.9	Upper Marker
10	12,603	0.00	0.0	
11	13,431	0.00	0.0	

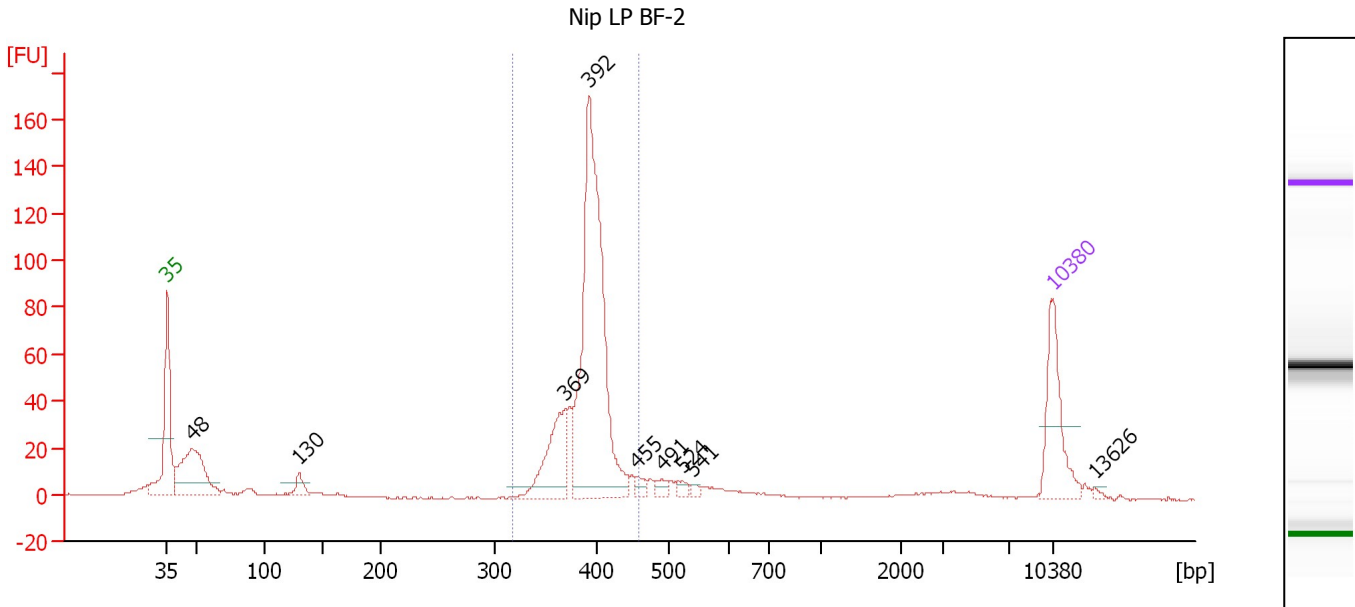
**Region table for sample 5 : Nip LP BF-1**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
311	458	389	1,562.8	400.71	430.6	56	5.6	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-13\2012-11-13\_006.xad

Created: 11/13/2012 2:47:10 PM  
 Modified: 11/13/2012 3:29:03 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : Nip LP BF-2**

Number of peaks found: 9                      Corr. Area 1: 545.3  
 Noise: 0.2

**Peak table for sample 6 : Nip LP BF-2**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	48	163.26	5,167.5	
3	130	20.80	242.6	
4	369	102.80	421.8	
5	392	459.46	1,774.7	
6	455	10.25	34.1	
7	491	10.31	31.8	
8	524	9.05	26.2	
9	541	5.61	15.7	
10	10,380	75.00	10.9	Upper Marker
11	13,626	0.00	0.0	

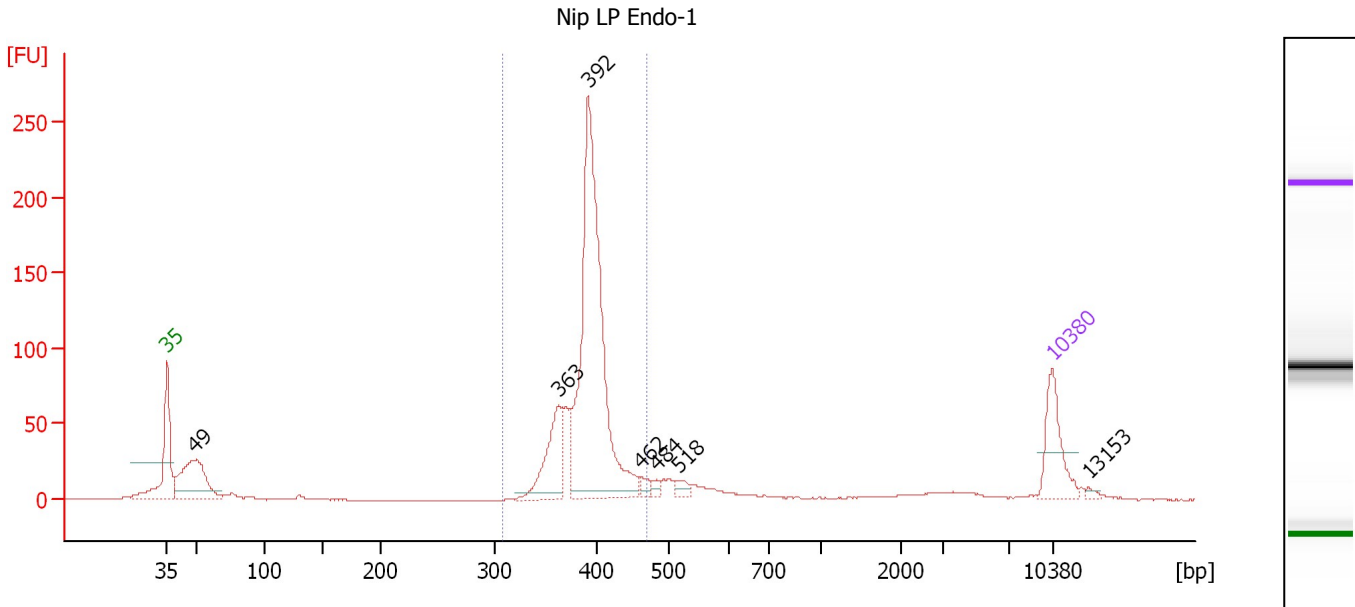
**Region table for sample 6 : Nip LP BF-2**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
317	460	392	2,297.2	592.97	545.3	69	5.4	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-13\2012-11-13\_006.xad

Created: 11/13/2012 2:47:10 PM  
 Modified: 11/13/2012 3:29:03 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : Nip LP Endo-1**

Number of peaks found: 7                      Corr. Area 1: 846.5  
 Noise: 0.2

**Peak table for sample 7 : Nip LP Endo-1**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	49	212.89	6,608.6	
3	363	130.91	546.9	
4	392	655.50	2,534.2	
5	462	13.05	42.7	
6	484	9.64	30.2	
7	518	15.88	46.5	
8	10,380	75.00	10.9	Upper Marker
9	13,153	0.00	0.0	

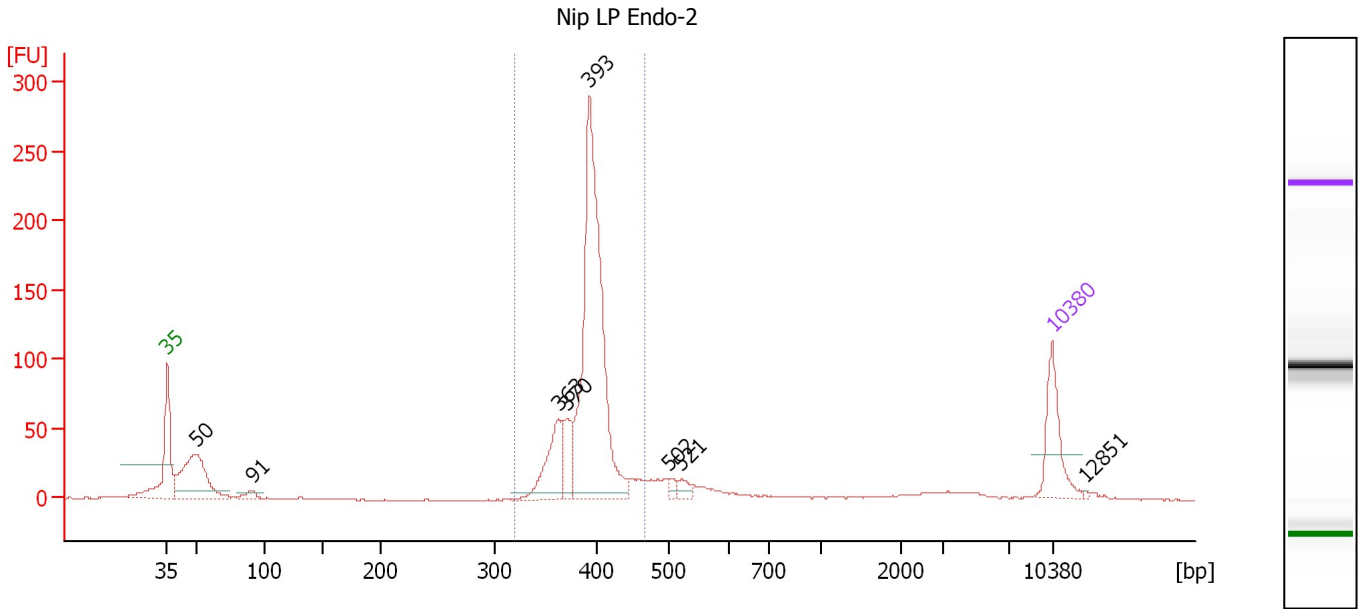
**Region table for sample 7 : Nip LP Endo-1**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
308	469	392	3,292.3	849.26	846.5	71	5.9	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-13\2012-11-13\_006.xad

Created: 11/13/2012 2:47:10 PM  
 Modified: 11/13/2012 3:29:03 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : Nip LP Endo-2**

Number of peaks found: 8                      Corr. Area 1: 846.2  
 Noise: 0.3

**Peak table for sample 8 : Nip LP Endo-2**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	50	225.81	6,833.1	
3	91	17.56	292.9	
4	363	108.85	455.0	
5	370	57.04	233.3	
6	393	583.55	2,249.9	
7	502	11.16	33.7	
8	521	14.82	43.1	
9	10,380	75.00	10.9	Upper Marker
10	12,851	0.00	0.0	

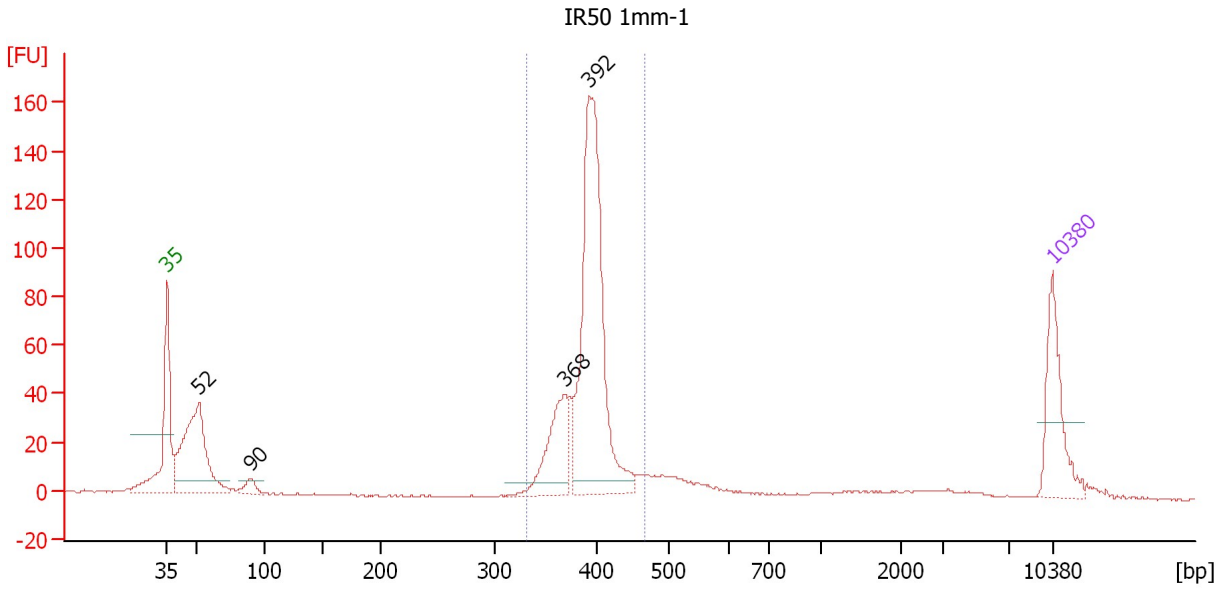
**Region table for sample 8 : Nip LP Endo-2**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
319	468	393	2,969.5	767.85	846.2	69	5.6	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-13\2012-11-13\_006.xad

Created: 11/13/2012 2:47:10 PM  
 Modified: 11/13/2012 3:29:03 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : IR50 1mm-1**

Number of peaks found: 4                      Corr. Area 1: 551.1  
 Noise: 0.2

**Peak table for sample 9 : IR50 1mm-1**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	52	252.57	7,320.5	
3	90	19.59	328.9	
4	368	104.63	430.5	
5	392	409.18	1,581.4	
6	10,380	75.00	10.9	Upper Marker

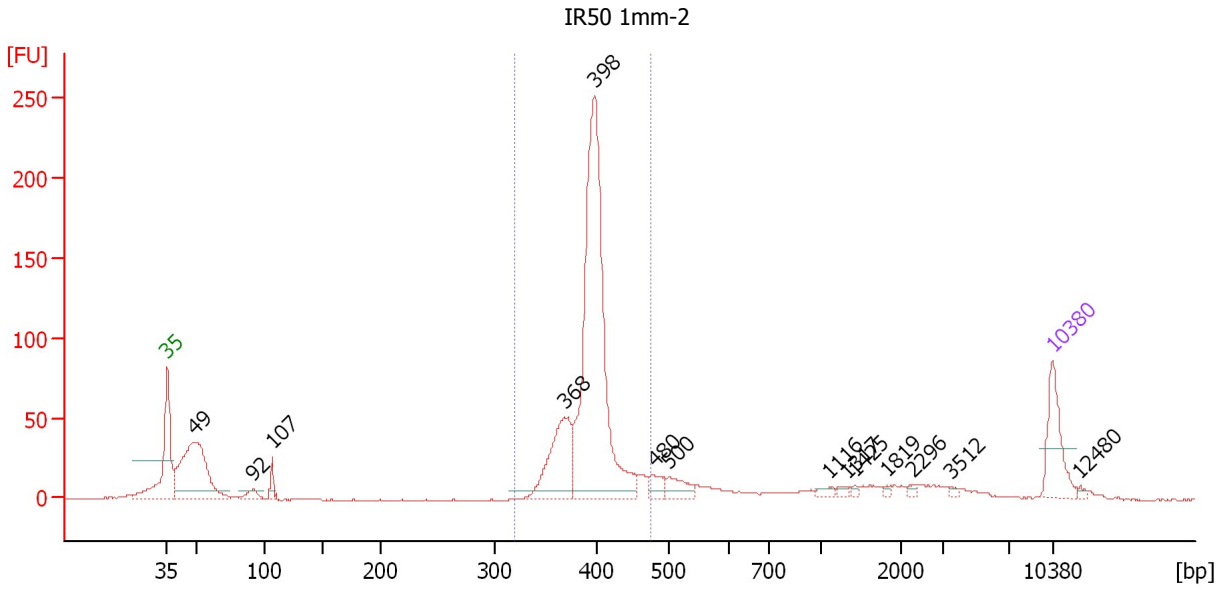
**Region table for sample 9 : IR50 1mm-1**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
331	467	392	2,091.6	539.70	551.1	66	5.5	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-13\2012-11-13\_006.xad

Created: 11/13/2012 2:47:10 PM  
 Modified: 11/13/2012 3:29:03 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : IR50 1mm-2**

Number of peaks found: 14      Corr. Area 1: 760.4  
 Noise: 0.2

**Peak table for sample 10 : IR50 1mm-2**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	49	338.09	10,385.7	
3	92	23.83	392.5	
4	107	24.36	344.7	
5	368	171.80	706.5	
6	398	699.28	2,661.0	
7	480	25.27	79.8	
8	500	36.07	109.3	
9	1,116	9.54	13.0	
10	1,317	6.67	7.7	
11	1,425	4.39	4.7	
12	1,819	3.77	3.1	
13	2,296	5.28	3.5	
14	3,512	4.08	1.8	
15	10,380	75.00	10.9	Upper Marker
16	12,480	0.00	0.0	

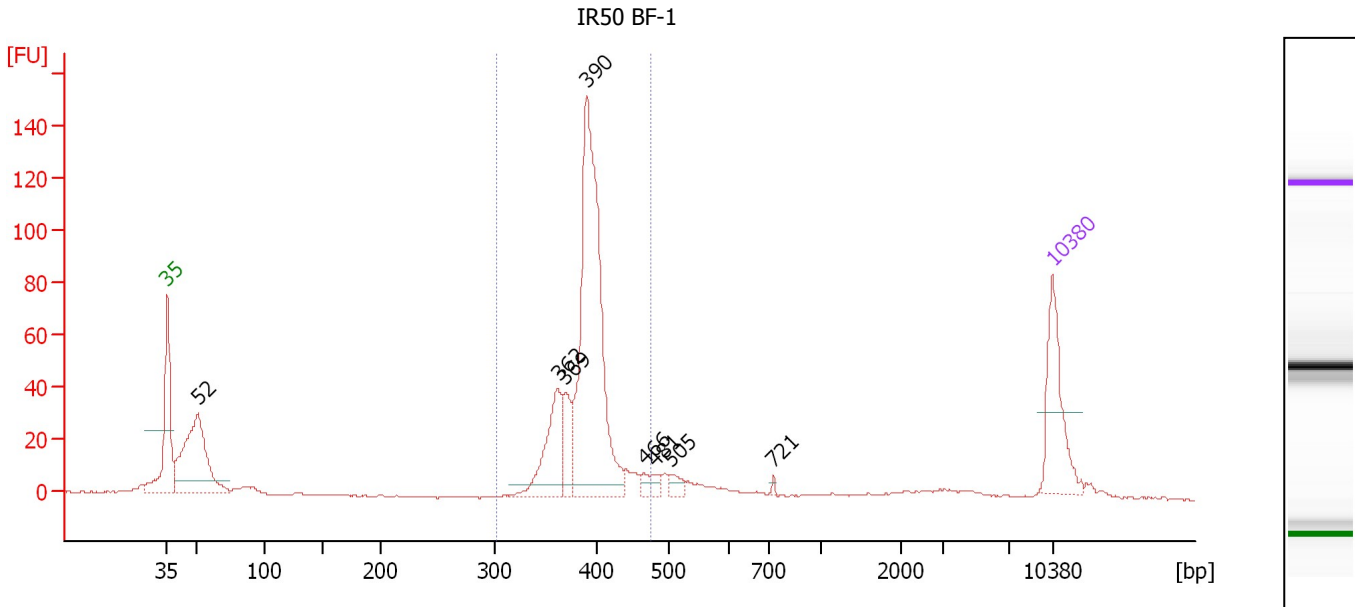
**Region table for sample 10 : IR50 1mm-2**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
320	476	396	3,444.4	896.96	760.4	62	5.9	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-13\2012-11-13\_006.xad

Created: 11/13/2012 2:47:10 PM  
 Modified: 11/13/2012 3:29:03 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : IR50 BF-1**

Number of peaks found: 8                      Corr. Area 1: 510.3  
 Noise: 0.2

**Peak table for sample 11 : IR50 BF-1**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	52	228.20	6,678.6	
3	362	97.39	407.5	
4	369	47.28	194.2	
5	390	404.40	1,570.0	
6	466	9.11	29.6	
7	481	8.98	28.3	
8	505	12.69	38.1	
9	721	2.57	5.4	
10	10,380	75.00	10.9	Upper Marker

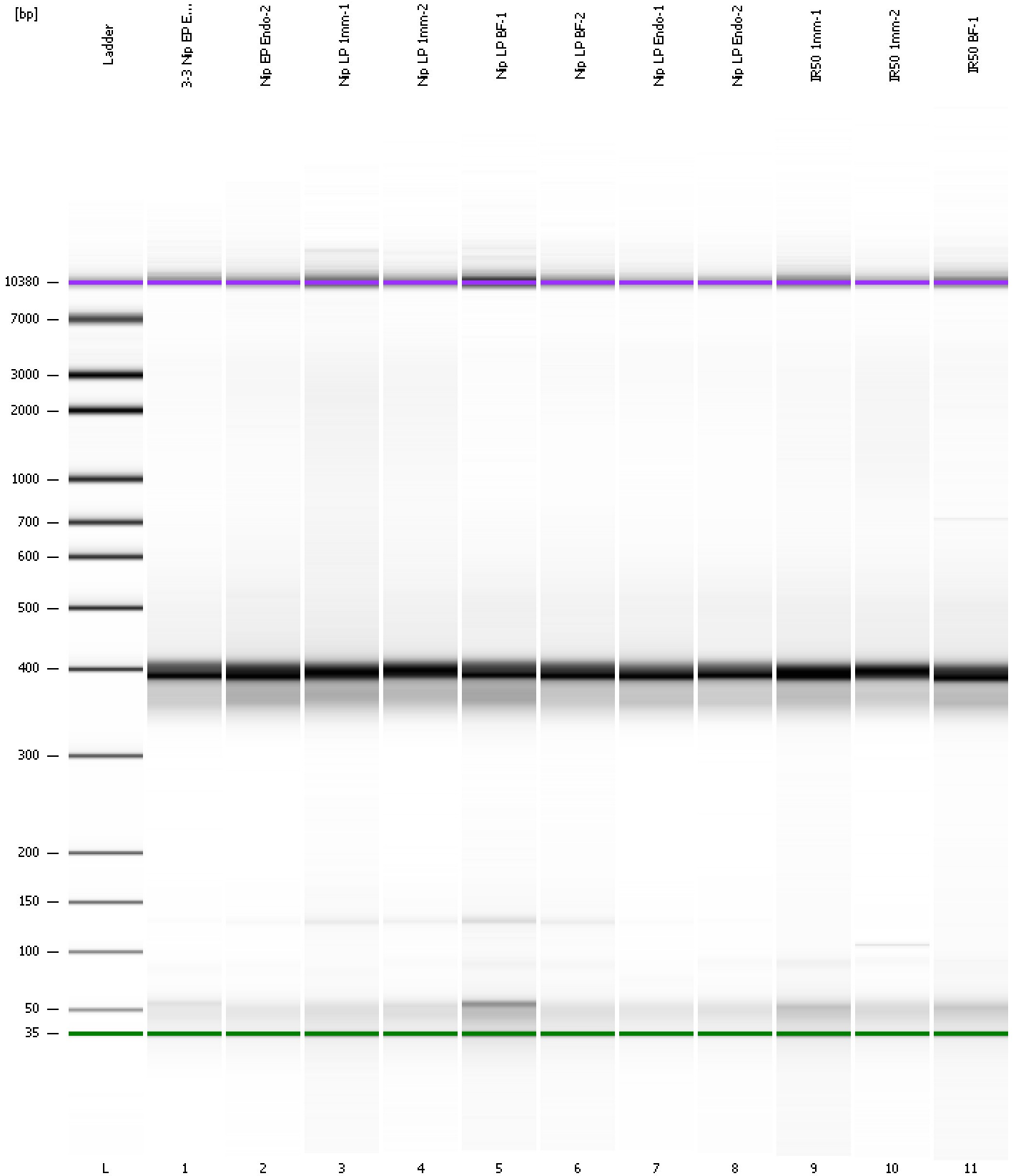
**Region table for sample 11 : IR50 BF-1**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
302	477	391	2,206.5	567.86	510.2	66	6.2	Blue

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-13\2012-11-13\_006.xad

Created: 11/13/2012 2:47:10 PM  
Modified: 11/13/2012 3:29:03 PM

**Gel Image**





Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-13\2012-11-13\_006.xad

Created: 11/13/2012 2:47:10 PM  
 Modified: 11/13/2012 3:29:03 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		11/13/2012 3:28:30 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2012-11-13\2012-11-13_006.xad)		Instrument	Run		11/13/2012 2:47:15 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		11/13/2012 2:47:15 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		11/13/2012 2:47:15 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		11/13/2012 2:47:15 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		11/13/2012 2:47:15 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		11/13/2012 2:47:15 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		11/13/2012 2:47:15 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1