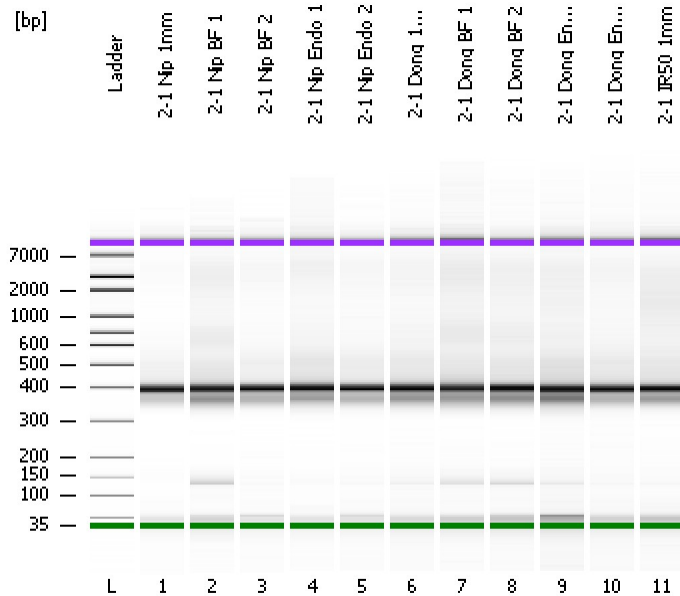


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-19\2012-11-19\_005.xad

Created: 11/19/2012 2:54:57 PM  
Modified: 11/19/2012 3:45:20 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

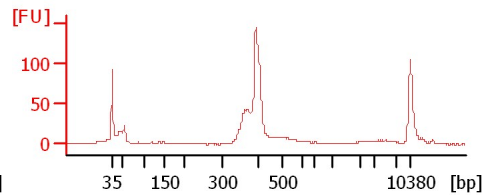
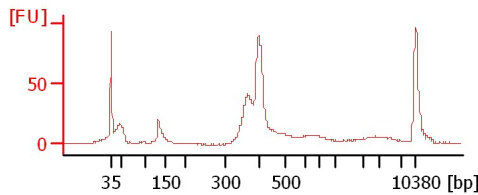
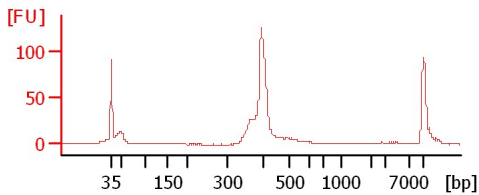
Chip Information:

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

**2-1 Nip 1mm**

**2-1 Nip BF 1**

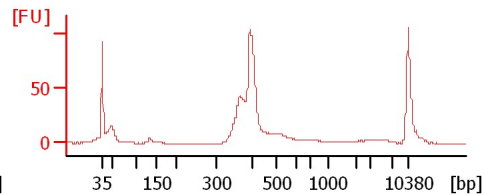
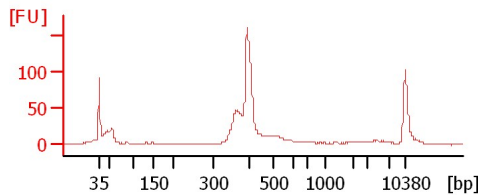
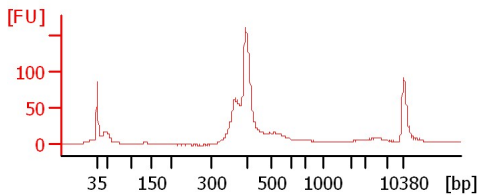
**2-1 Nip BF 2**



**2-1 Nip Endo 1**

**2-1 Nip Endo 2**

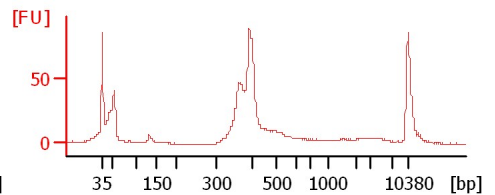
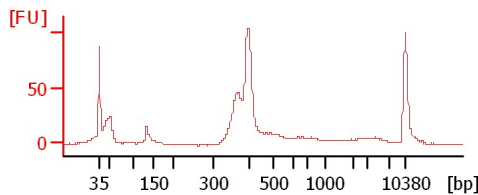
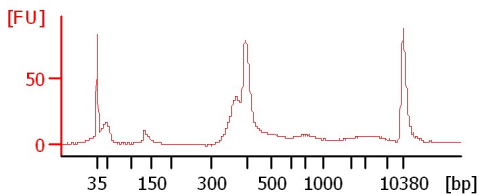
**2-1 Dong 1mm**



**2-1 Dong BF 1**

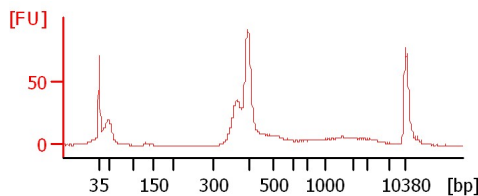
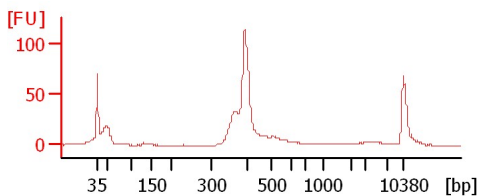
**2-1 Dong BF 2**

**2-1 Dong Endo 1**



**2-1 Dong Endo 2**

**2-1 IR50 1mm**



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-19\2012-11-19\_005.xad

Created: 11/19/2012 2:54:57 PM  
 Modified: 11/19/2012 3:45:20 PM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
2-1 Nip 1mm		<input type="checkbox"/>	✓			
2-1 Nip BF 1		<input type="checkbox"/>	✓			
2-1 Nip BF 2		<input type="checkbox"/>	✓			
2-1 Nip Endo 1		<input type="checkbox"/>	✓			
2-1 Nip Endo 2		<input type="checkbox"/>	✓			
2-1 Dong 1mm		<input type="checkbox"/>	✓			
2-1 Dong BF 1		<input type="checkbox"/>	✓			
2-1 Dong BF 2		<input type="checkbox"/>	✓			
2-1 Dong Endo 1		<input type="checkbox"/>	✓			
2-1 Dong Endo 2		<input type="checkbox"/>	✓			
2-1 IR50 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\2012-11-19\2012-11-19\_005.xad

Created: 11/19/2012 2:54:57 PM  
Modified: 11/19/2012 3:45:20 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

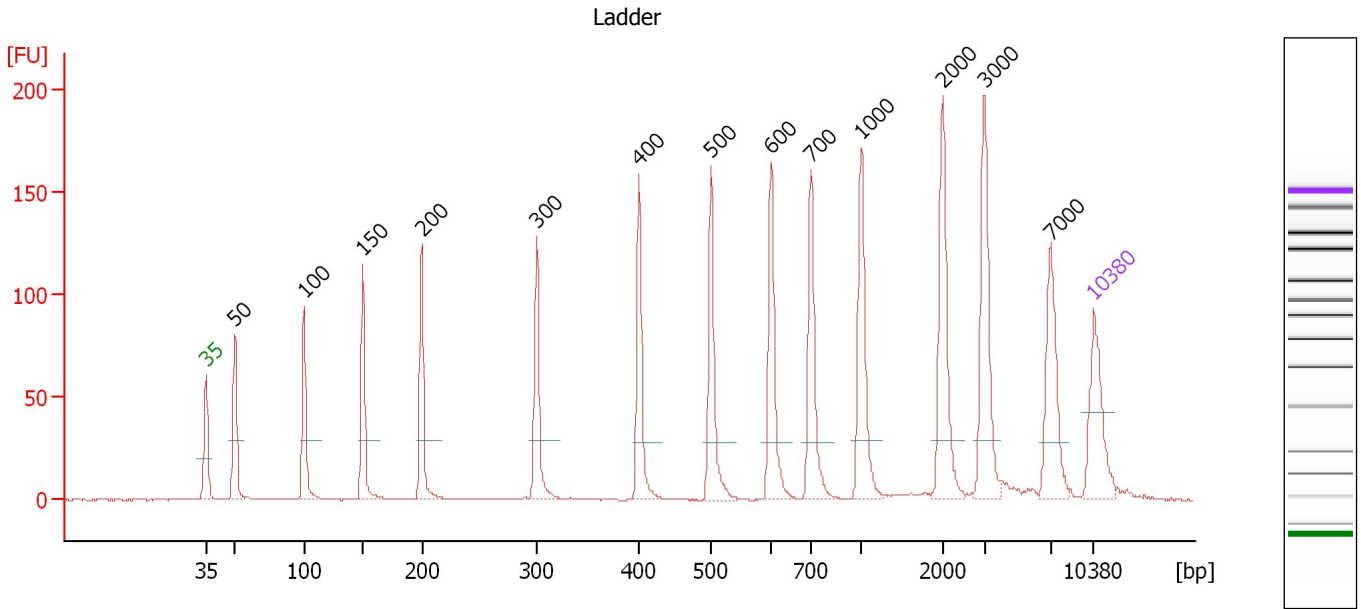
**Ladder**

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\2012-11-19\2012-11-19\_005.xad

Created: 11/19/2012 2:54:57 PM  
 Modified: 11/19/2012 3:45:20 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.2

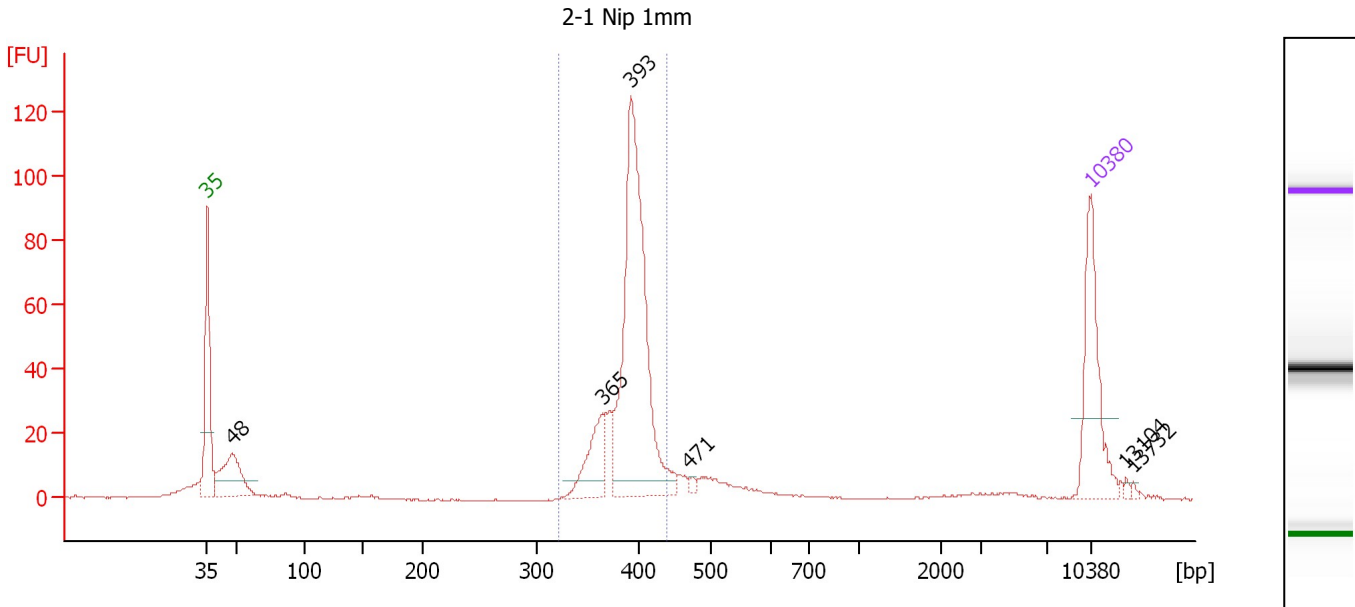
**Peak table for Ladder**

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\2012-11-19\2012-11-19\_005.xad

Created: 11/19/2012 2:54:57 PM  
 Modified: 11/19/2012 3:45:20 PM

**Electropherogram Summary Continued ...**



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

Number of peaks found: 6                      Corr. Area 1: 410.8  
 Noise: 0.2

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

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	48	86.39	2,720.8	
3	365	60.60	251.4	
4	393	326.92	1,260.7	
5	471	4.10	13.2	
6	10,380	75.00	10.9	Upper Marker
7	13,104	0.00	0.0	
8	13,732	0.00	0.0	

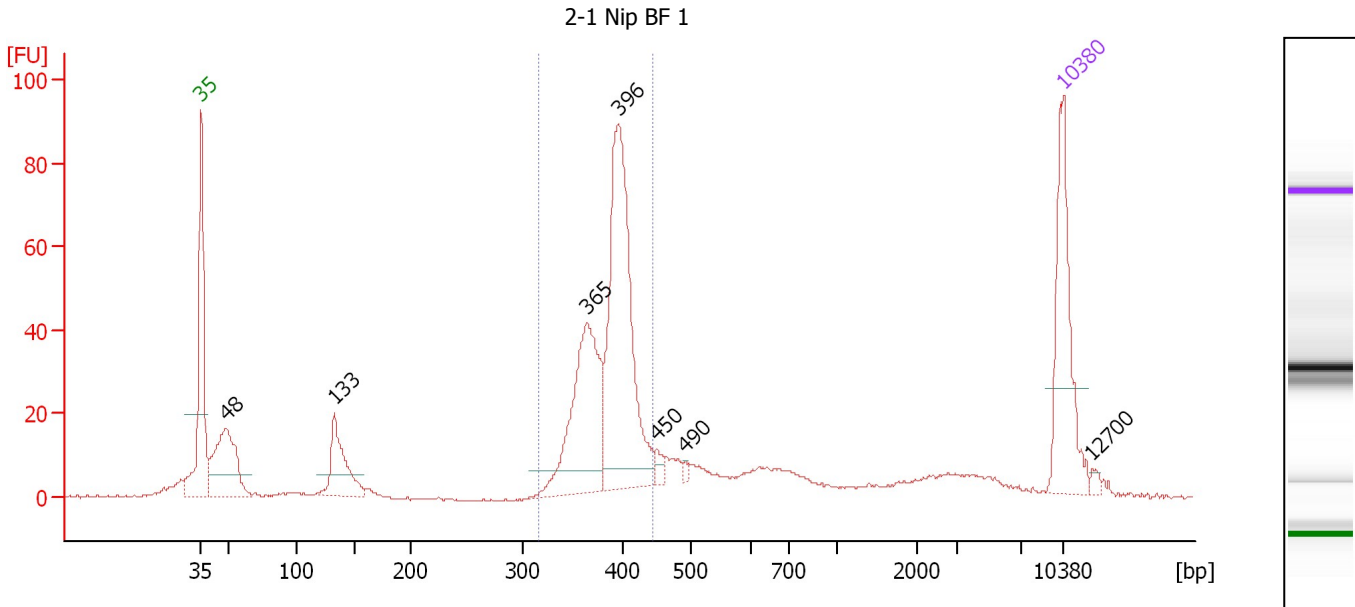
**Region table for sample 1 : 2-1 Nip 1mm**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
321	439	391	1,575.2	405.67	410.8	69	5.0	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-19\2012-11-19\_005.xad

Created: 11/19/2012 2:54:57 PM  
 Modified: 11/19/2012 3:45:20 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : 2-1 Nip BF 1**

Number of peaks found: 7                      Corr. Area 1: 412.6  
 Noise: 0.2

**Peak table for sample 2 : 2-1 Nip BF 1**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	48	112.91	3,552.4	
3	133	66.68	760.2	
4	365	148.45	616.5	
5	396	233.03	891.7	
6	450	7.32	24.7	
7	490	3.17	9.8	
8	10,380	75.00	10.9	Upper Marker
9	12,700	0.00	0.0	

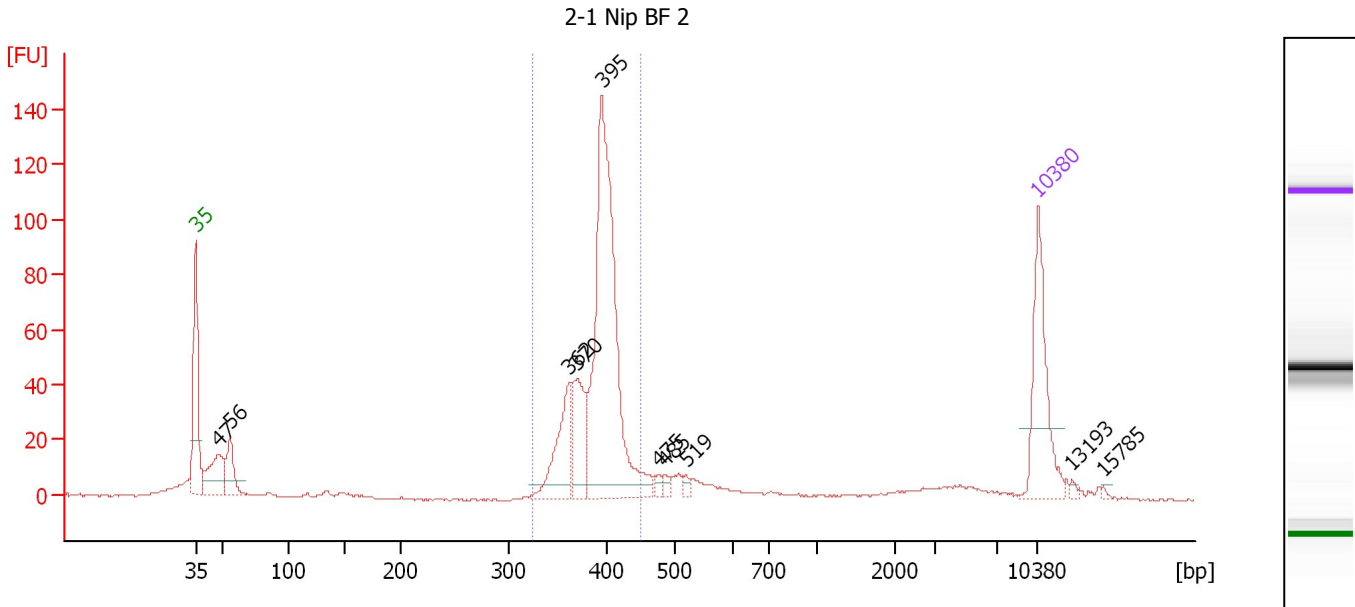
**Region table for sample 2 : 2-1 Nip BF 1**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
315	443	387	1,561.9	397.57	412.6	54	6.2	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-19\2012-11-19\_005.xad

Created: 11/19/2012 2:54:57 PM  
 Modified: 11/19/2012 3:45:20 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : 2-1 Nip BF 2**

Number of peaks found: 10      Corr. Area 1: 516.4  
 Noise: 0.3

**Peak table for sample 3 : 2-1 Nip BF 2**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	47	70.92	2,272.5	
3	56	44.88	1,223.9	
4	362	76.83	321.9	
5	370	60.10	246.2	
6	395	343.80	1,318.6	
7	475	5.60	17.9	
8	485	6.11	19.1	
9	519	4.66	13.6	
10	10,380	75.00	10.9	Upper Marker
11	13,193	0.00	0.0	
12	15,785	0.00	0.0	

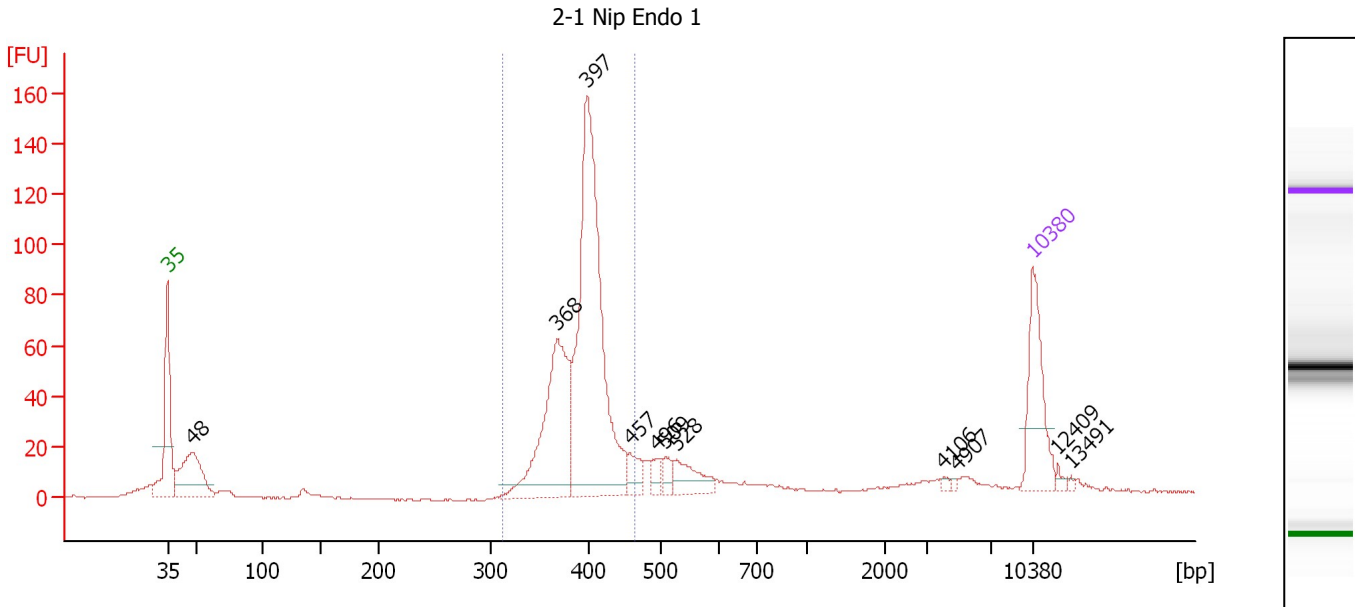
**Region table for sample 3 : 2-1 Nip BF 2**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
325	449	390	1,836.1	471.97	516.4	67	5.6	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-19\2012-11-19\_005.xad

Created: 11/19/2012 2:54:57 PM  
 Modified: 11/19/2012 3:45:20 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : 2-1 Nip Endo 1**

Number of peaks found: 11                      Corr. Area 1: 655.2  
 Noise: 0.3

**Peak table for sample 4 : 2-1 Nip Endo 1**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	48	127.09	3,994.6	
3	368	222.33	916.3	
4	397	445.94	1,702.3	
5	457	24.35	80.7	
6	496	15.22	46.5	
7	509	15.16	45.1	
8	528	37.82	108.5	
9	4,106	2.88	1.1	
10	4,907	2.22	0.7	
11	10,380	75.00	10.9	Upper Marker
12	12,409	0.00	0.0	
13	13,491	0.00	0.0	

**Region table for sample 4 : 2-1 Nip Endo 1**

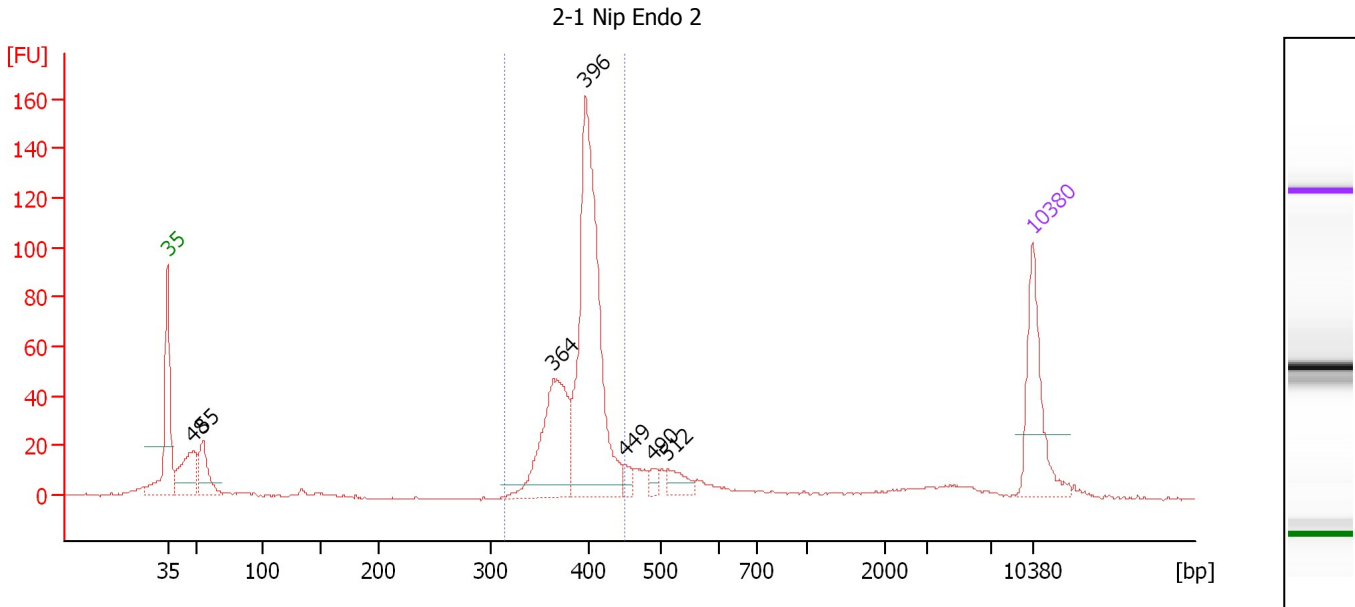
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
312	465	394	2,578.6	667.29	655.2	68	6.6	Blue



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-19\2012-11-19\_005.xad

Created: 11/19/2012 2:54:57 PM  
 Modified: 11/19/2012 3:45:20 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : 2-1 Nip Endo 2**

Number of peaks found: 7                      Corr. Area 1: 560.1  
 Noise: 0.3

**Peak table for sample 5 : 2-1 Nip Endo 2**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	48	81.45	2,548.4	
3	55	56.75	1,551.4	
4	364	156.00	649.7	
5	396	346.46	1,326.2	
6	449	11.43	38.6	
7	490	10.31	31.9	
8	512	20.85	61.6	
9	10,380	75.00	10.9	Upper Marker

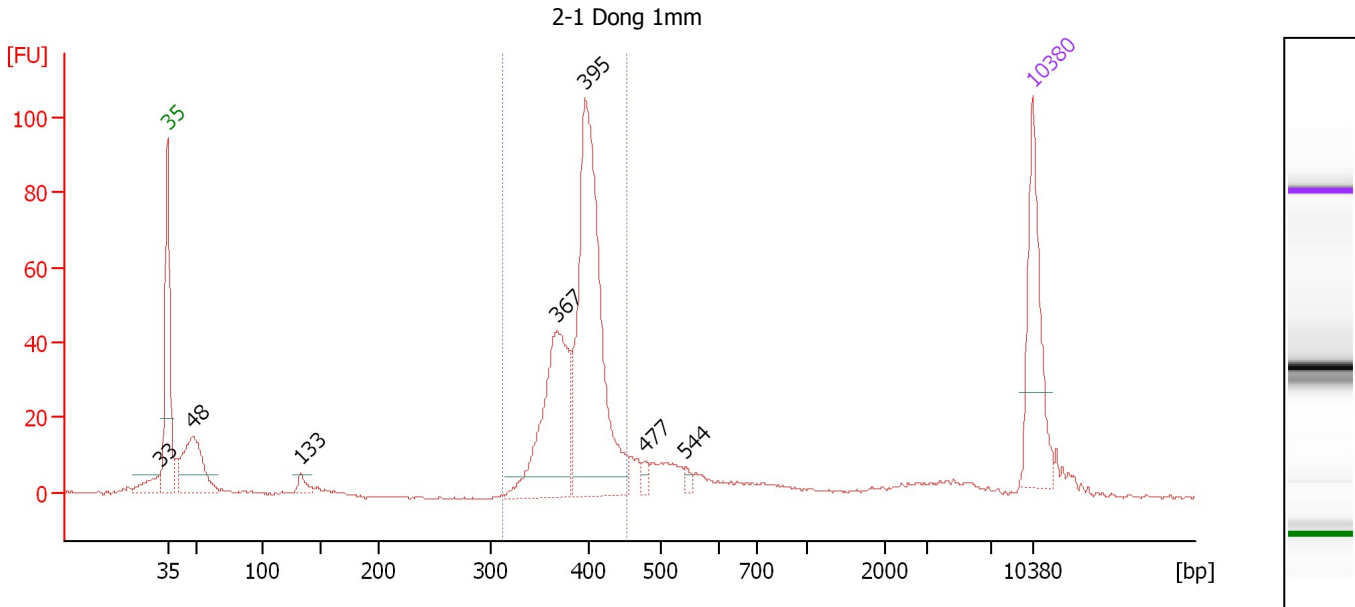
**Region table for sample 5 : 2-1 Nip Endo 2**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
314	449	391	1,940.3	499.98	560.1	65	5.8	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-19\2012-11-19\_005.xad

Created: 11/19/2012 2:54:57 PM  
 Modified: 11/19/2012 3:45:20 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : 2-1 Dong 1mm**

Number of peaks found: 7                      Corr. Area 1: 450.3  
 Noise: 0.3

**Peak table for sample 6 : 2-1 Dong 1mm**

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	98.42	3,088.4	
4	133	11.44	130.2	
5	367	160.30	661.8	
6	395	300.12	1,150.2	
7	477	6.55	20.8	
8	544	4.87	13.6	
9	10,380	75.00	10.9	Upper Marker

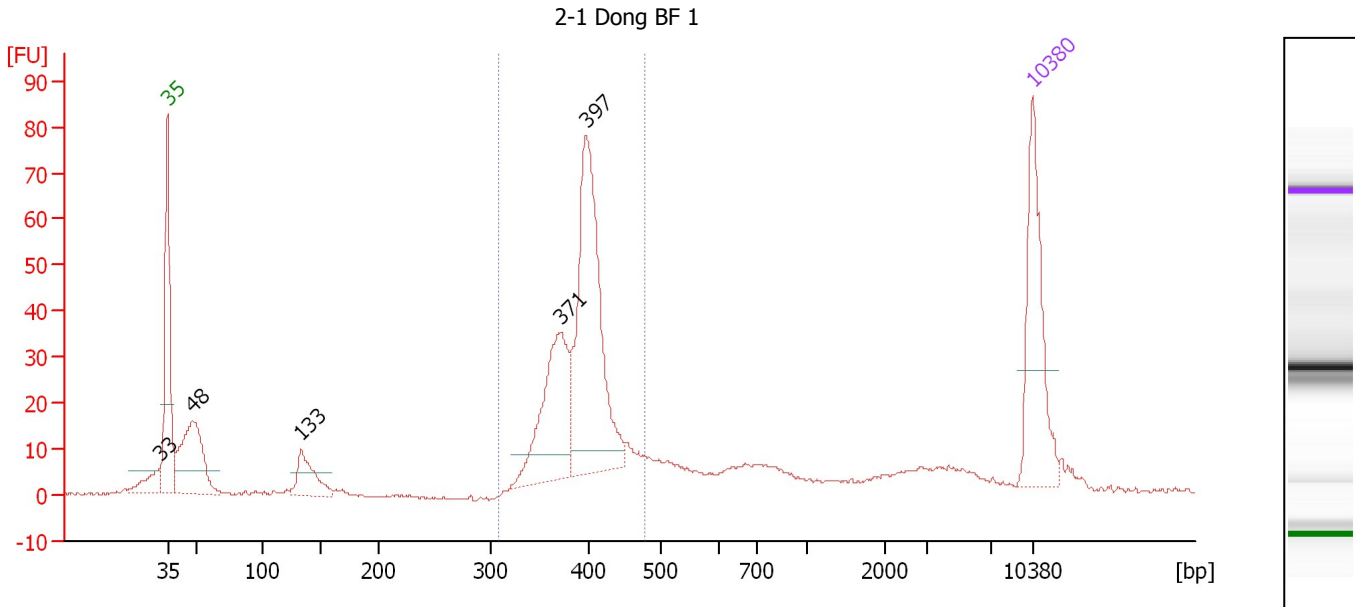
**Region table for sample 6 : 2-1 Dong 1mm**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
312	452	390	1,795.6	461.05	450.3	61	6.2	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-19\2012-11-19\_005.xad

Created: 11/19/2012 2:54:57 PM  
 Modified: 11/19/2012 3:45:20 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : 2-1 Dong BF 1**

Number of peaks found: 5                      Corr. Area 1: 382.9  
 Noise: 0.2

**Peak table for sample 7 : 2-1 Dong BF 1**

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	116.60	3,672.2	
4	133	42.65	486.6	
5	371	114.73	468.6	
6	397	210.24	803.1	
7	10,380	75.00	10.9	Upper Marker

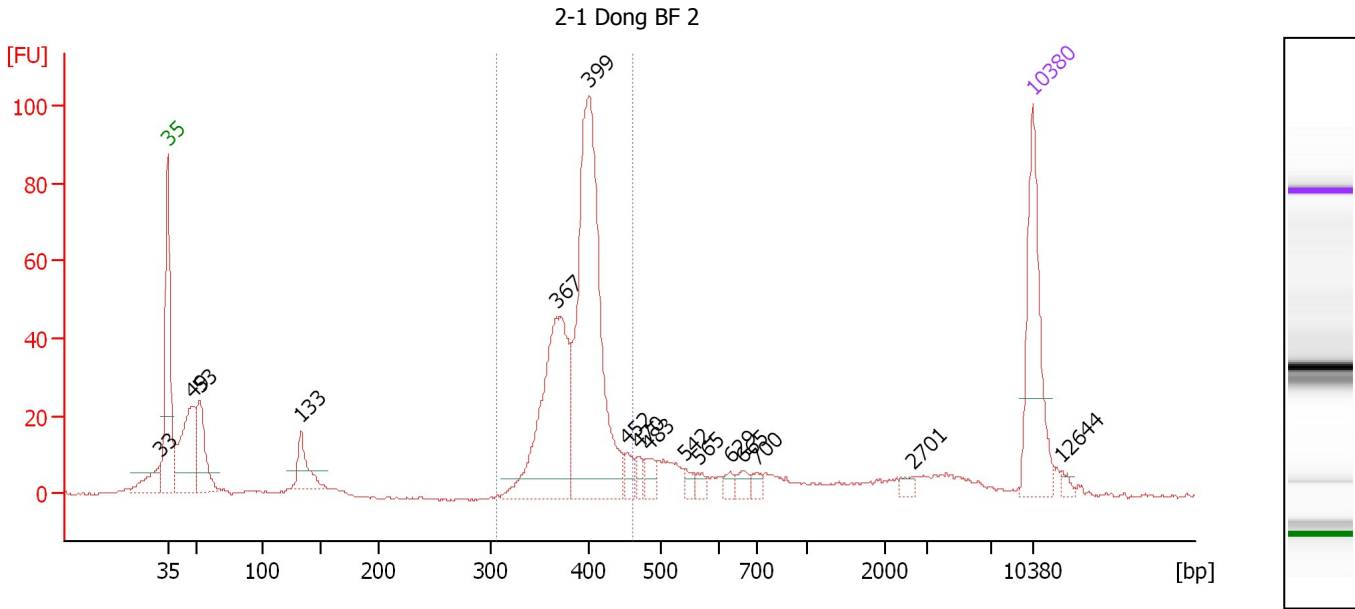
**Region table for sample 7 : 2-1 Dong BF 1**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
308	480	394	1,542.0	398.50	382.9	55	7.6	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-19\2012-11-19\_005.xad

Created: 11/19/2012 2:54:57 PM  
 Modified: 11/19/2012 3:45:20 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : 2-1 Dong BF 2**

Number of peaks found: 16      Corr. Area 1: 464.5  
 Noise: 0.3

**Peak table for sample 8 : 2-1 Dong BF 2**

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	102.19	3,192.3	
4	53	61.56	1,755.2	
5	133	36.98	421.2	
6	367	179.54	741.5	
7	399	289.62	1,099.2	
8	452	12.16	40.7	
9	470	8.05	26.0	
10	483	12.00	37.6	
11	542	6.33	17.7	
12	565	6.07	16.3	
13	629	5.61	13.5	
14	665	8.52	19.4	
15	700	5.99	13.0	
16	2,701	4.92	2.8	
17	10,380	75.00	10.9	Upper Marker
18	12,644	0.00	0.0	

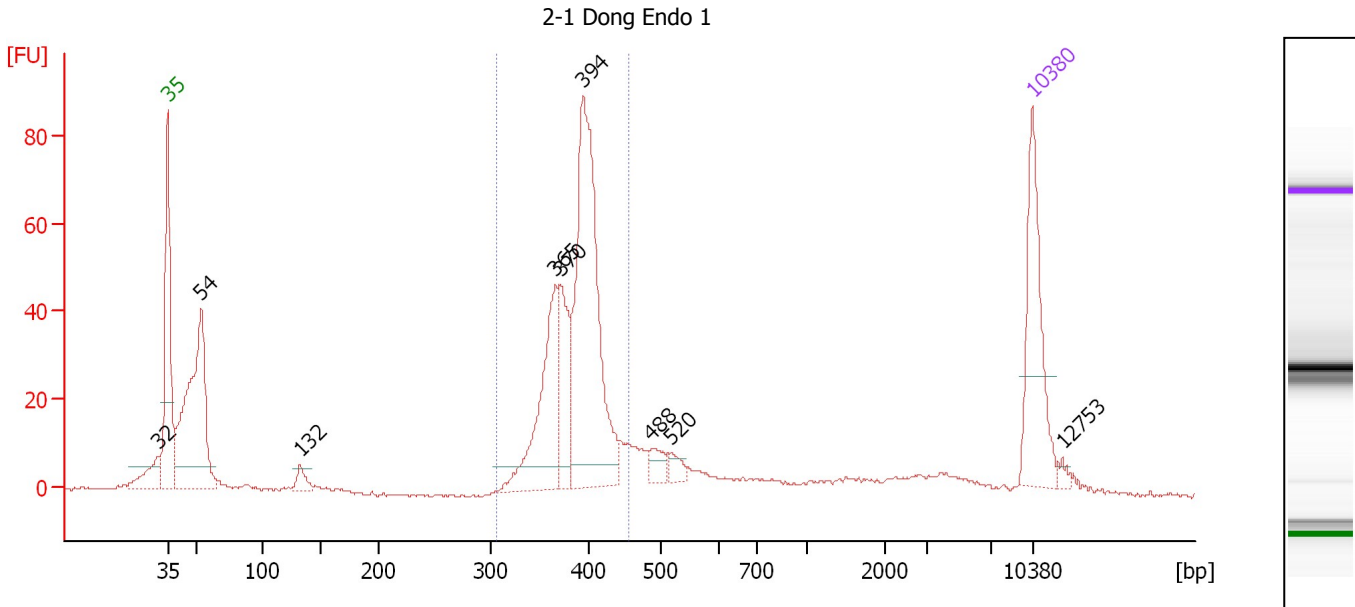
**Region table for sample 8 : 2-1 Dong BF 2**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
308	461	390	1,834.8	470.49	464.5	54	6.6	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-19\2012-11-19\_005.xad

Created: 11/19/2012 2:54:57 PM  
 Modified: 11/19/2012 3:45:20 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : 2-1 Dong Endo 1**

Number of peaks found: 9                      Corr. Area 1: 429.4  
 Noise: 0.3

**Peak table for sample 9 : 2-1 Dong Endo 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	54	234.84	6,569.1	
4	132	14.20	162.7	
5	365	114.64	475.8	
6	370	64.67	264.5	
7	394	255.59	984.0	
8	488	13.94	43.3	
9	520	9.94	29.0	
10	10,380	75.00	10.9	Upper Marker
11	12,753	0.00	0.0	

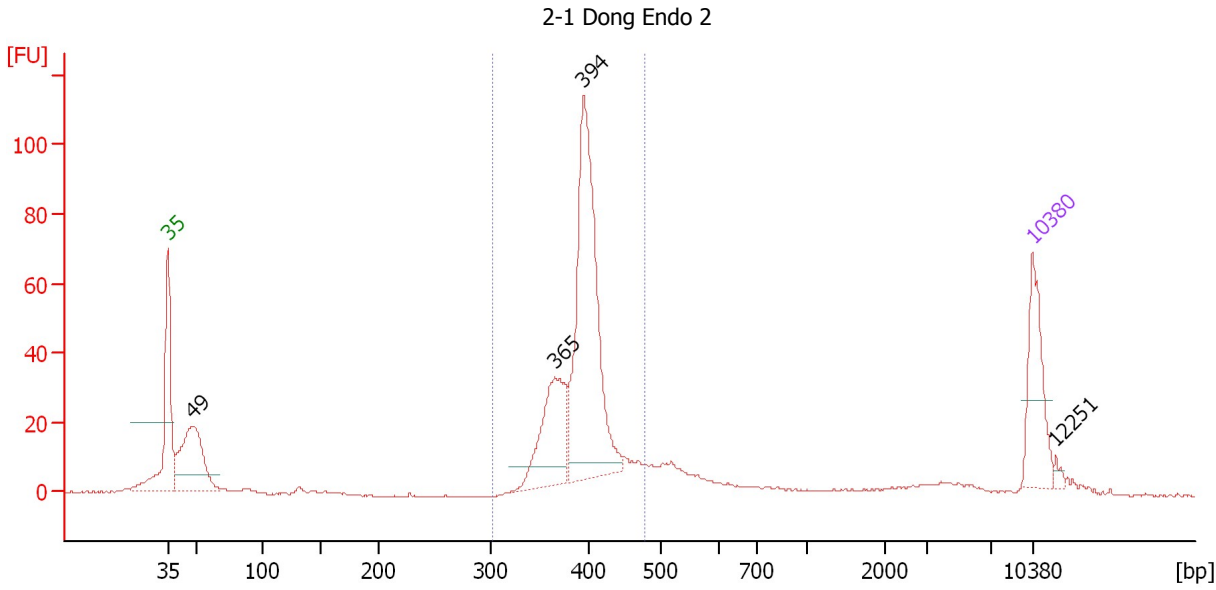
**Region table for sample 9 : 2-1 Dong Endo 1**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
307	455	387	1,814.6	461.65	429.4	53	6.6	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-19\2012-11-19\_005.xad

Created: 11/19/2012 2:54:57 PM  
 Modified: 11/19/2012 3:45:20 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : 2-1 Dong Endo 2**

Number of peaks found: 4                      Corr. Area 1: 436.8  
 Noise: 0.2

**Peak table for sample 10 : 2-1 Dong Endo 2**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	49	182.31	5,667.9	
3	365	142.44	591.9	
4	394	375.15	1,442.9	
5	10,380	75.00	10.9	Upper Marker
6	12,251	0.00	0.0	

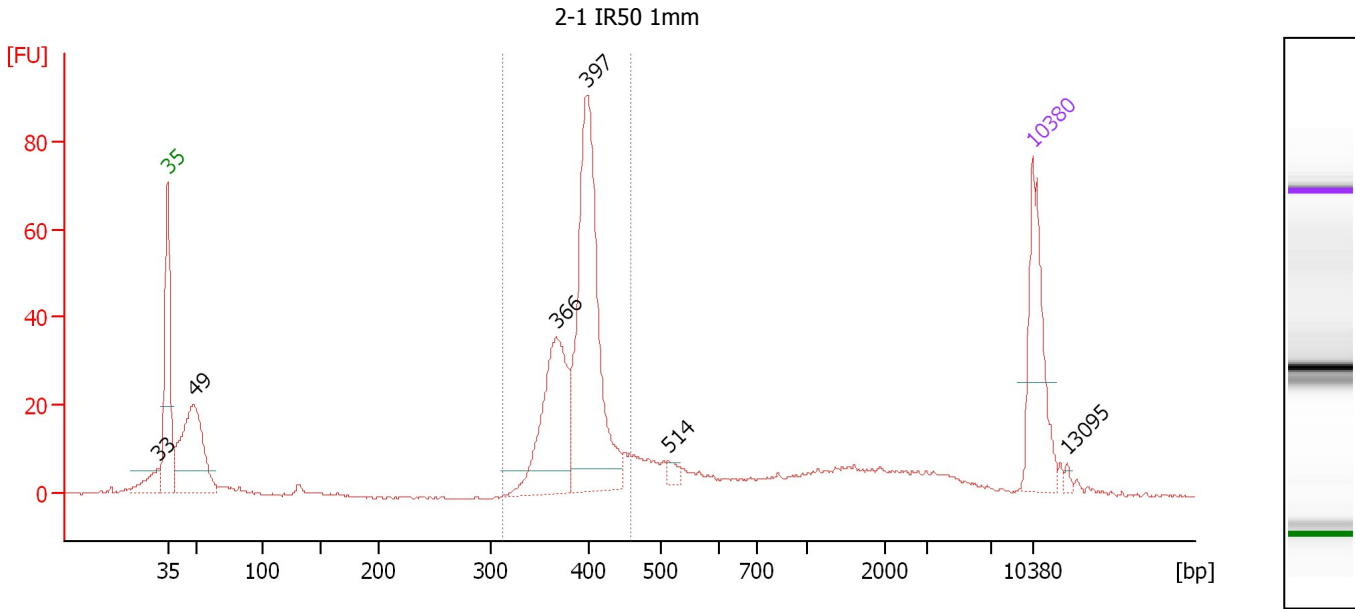
**Region table for sample 10 : 2-1 Dong Endo 2**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
304	478	394	2,350.1	608.89	436.8	64	6.9	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-19\2012-11-19\_005.xad

Created: 11/19/2012 2:54:57 PM  
 Modified: 11/19/2012 3:45:20 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : 2-1 IR50 1mm**

Number of peaks found: 6                      Corr. Area 1: 360.7  
 Noise: 0.3

**Peak table for sample 11 : 2-1 IR50 1mm**

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	165.90	5,142.6	
4	366	145.54	602.1	
5	397	272.91	1,041.3	
6	514	7.48	22.0	
7	10,380	75.00	10.9	Upper Marker
8	13,095	0.00	0.0	

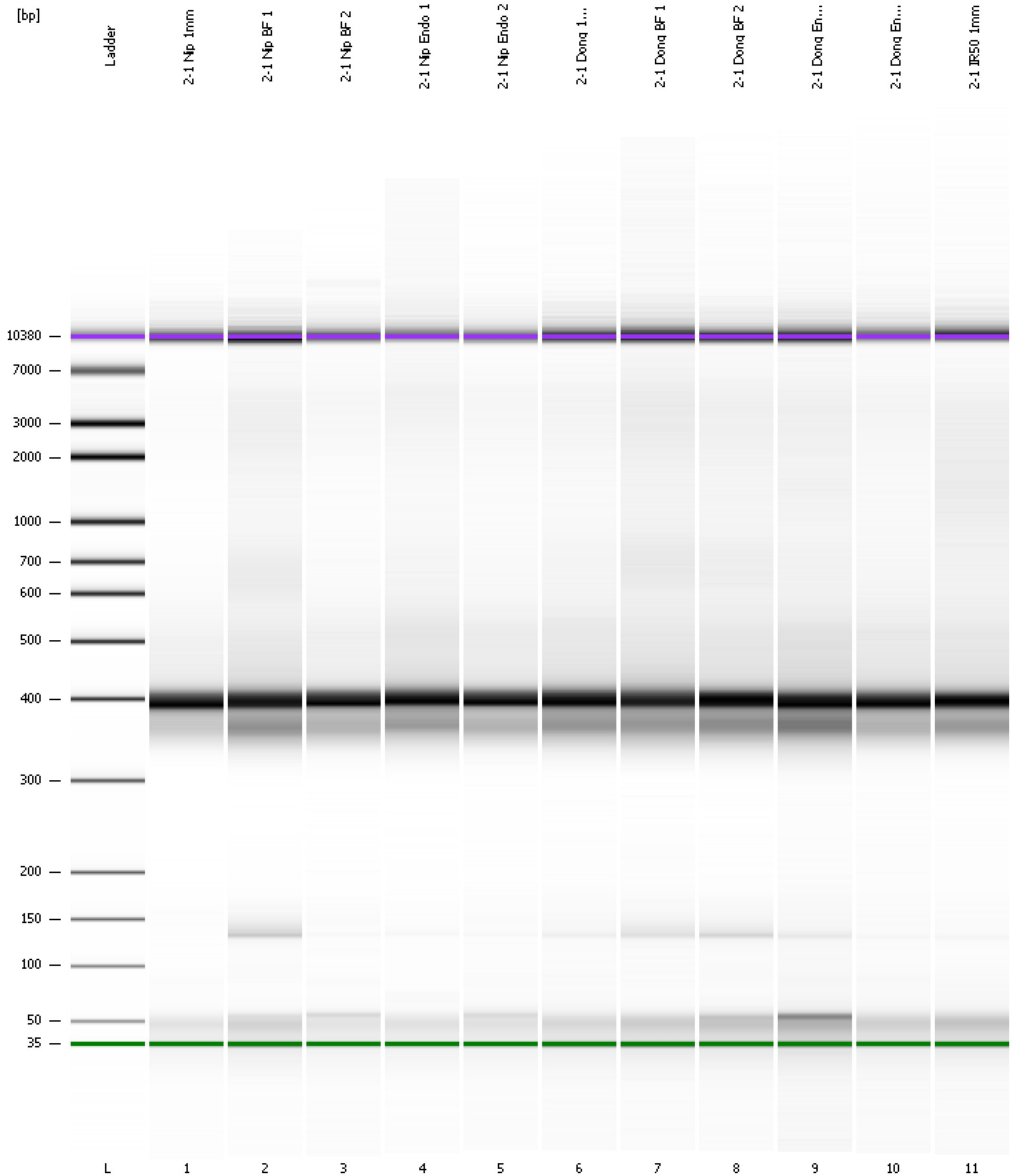
**Region table for sample 11 : 2-1 IR50 1mm**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
313	458	390	1,710.5	439.30	360.7	52	6.3	Blue

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-19\2012-11-19\_005.xad

Created: 11/19/2012 2:54:57 PM  
Modified: 11/19/2012 3:45:20 PM

**Gel Image**





Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-19\2012-11-19\_005.xad

Created: 11/19/2012 2:54:57 PM  
 Modified: 11/19/2012 3:45:20 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		11/19/2012 3:36:15 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2012-11-19\2012-11-19_005.xad)		Instrument	Run		11/19/2012 2:55:03 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		11/19/2012 2:55:03 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		11/19/2012 2:55:03 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		11/19/2012 2:55:03 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		11/19/2012 2:55:03 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		11/19/2012 2:55:03 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		11/19/2012 2:55:03 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1