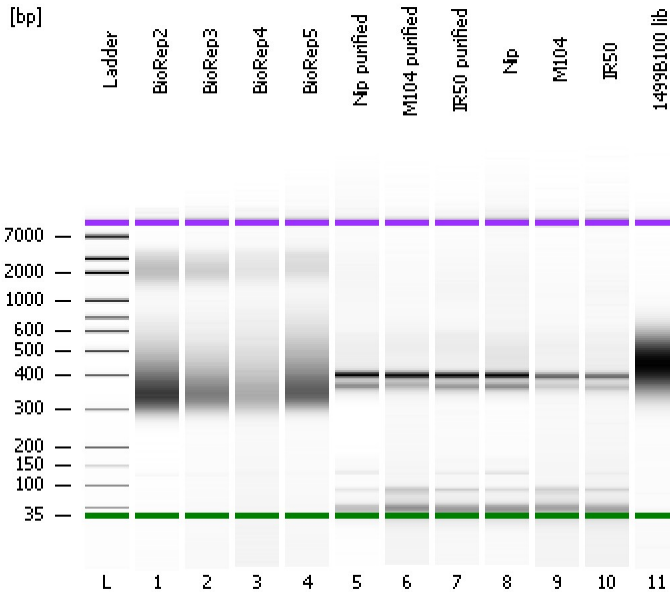


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-24\2013-05-24_004.xad

Created: 5/24/2013 1:34:26 PM
Modified: 5/24/2013 2:15:50 PM

Electrophoresis File Run Summary



Instrument Information:

Instrument Name: DE13701086 Firmware: C.01.069
Serial#: DE13701086 Type: G2938B

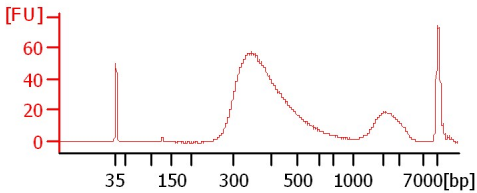
Assay Information:

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

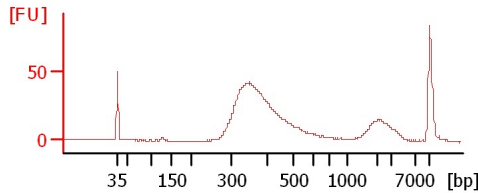
Chip Information:

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

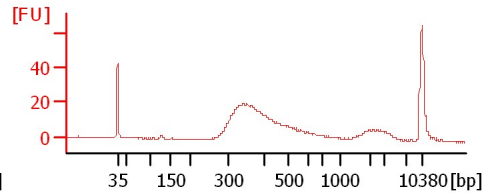
BioRep2



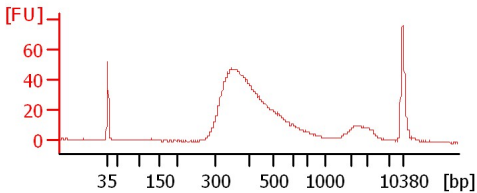
BioRep3



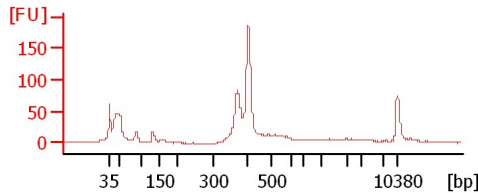
BioRep4



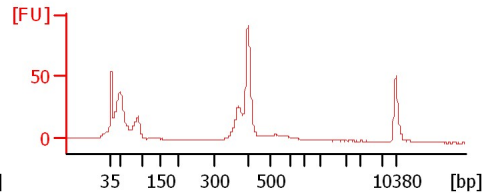
BioRep5



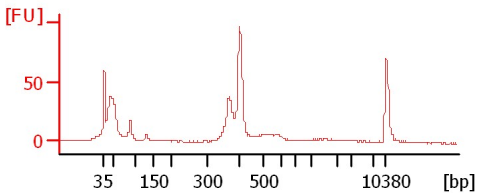
Nip purified



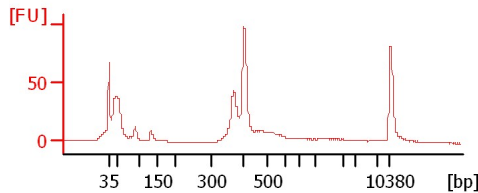
M104 purified



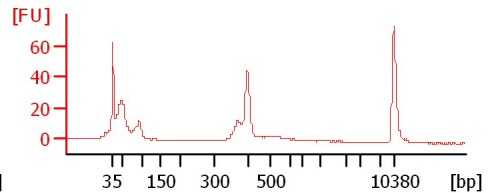
IR50 purified



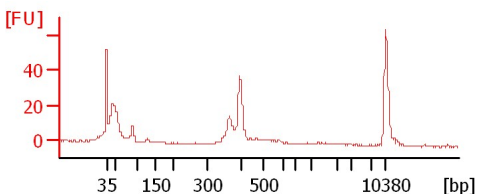
Nip



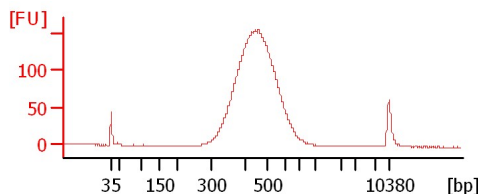
M104



IR50



1499B100 lib



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-24\2013-05-24_004.xad

Created: 5/24/2013 1:34:26 PM
Modified: 5/24/2013 2:15:50 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
BioRep2		<input type="checkbox"/>	✓			
BioRep3		<input type="checkbox"/>	✓			
BioRep4		<input type="checkbox"/>	✓			
BioRep5		<input type="checkbox"/>	✓			
Nip purified		<input type="checkbox"/>	✓			
M104 purified		<input type="checkbox"/>	✓			
IR50 purified		<input type="checkbox"/>	✓			
Nip		<input type="checkbox"/>	✓			
M104		<input type="checkbox"/>	✓			
IR50		<input type="checkbox"/>	✓			
1499B100 lib		<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\2013-05-24\2013-05-24_004.xad

Created: 5/24/2013 1:34:26 PM
Modified: 5/24/2013 2:15:50 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

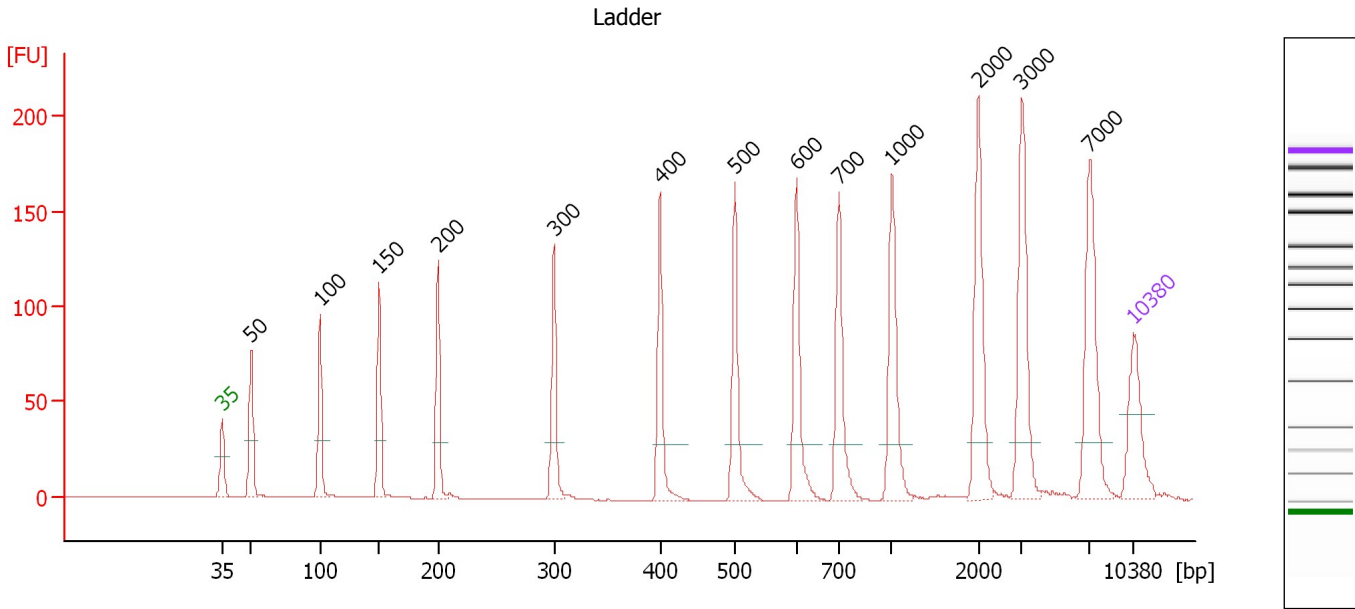
Ladder

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\2013-05-24\2013-05-24_004.xad

Created: 5/24/2013 1:34:26 PM
 Modified: 5/24/2013 2:15:50 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

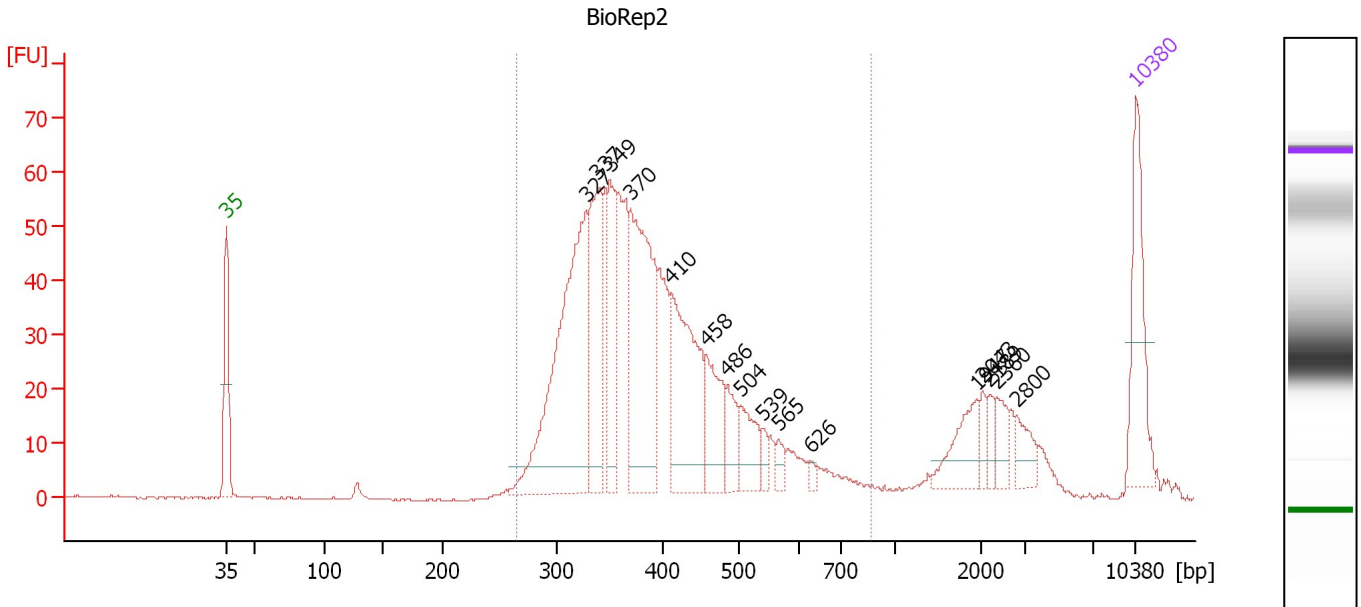
Peak table for Ladder

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\2013-05-24\2013-05-24_004.xad

Created: 5/24/2013 1:34:26 PM
 Modified: 5/24/2013 2:15:50 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : BioRep2

Number of peaks found: 16 Corr. Area 1: 949.0
 Noise: 0.2

Peak table for sample 1 : BioRep2

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	327	364.68	1,691.2	
3	337	154.51	694.1	
4	349	97.25	421.7	
5	370	237.83	975.2	
6	410	175.21	646.9	
7	458	73.93	244.8	
8	486	37.23	116.0	
9	504	45.35	136.3	
10	539	11.27	31.7	
11	565	12.38	33.2	
12	626	5.45	13.2	
13	1,947	42.78	33.3	
14	2,043	11.89	8.8	
15	2,189	12.57	8.7	
16	2,360	20.19	13.0	
17	2,800	21.16	11.5	
18	10,380	75.00	10.9	Upper Marker

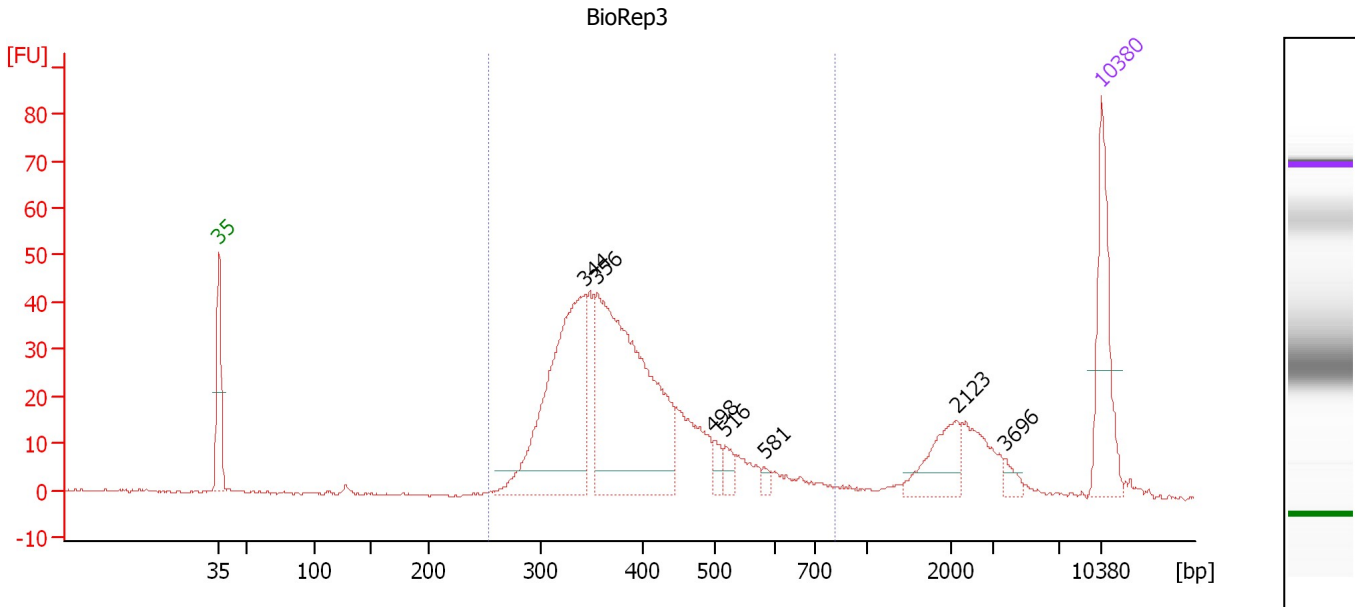
Region table for sample 1 : BioRep2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
264	869	395	6,343.0	1,568.93	949.0	87	22.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-24\2013-05-24_004.xad

Created: 5/24/2013 1:34:26 PM
 Modified: 5/24/2013 2:15:50 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : BioRep3

Number of peaks found: 7 Corr. Area 1: 658.0
 Noise: 0.2

Peak table for sample 2 : BioRep3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	344	299.42	1,319.1	
3	356	393.08	1,673.6	
4	498	12.82	39.0	
5	516	13.81	40.5	
6	581	6.04	15.8	
7	2,123	43.85	31.3	
8	3,696	8.10	3.3	
9	10,380	75.00	10.9	Upper Marker

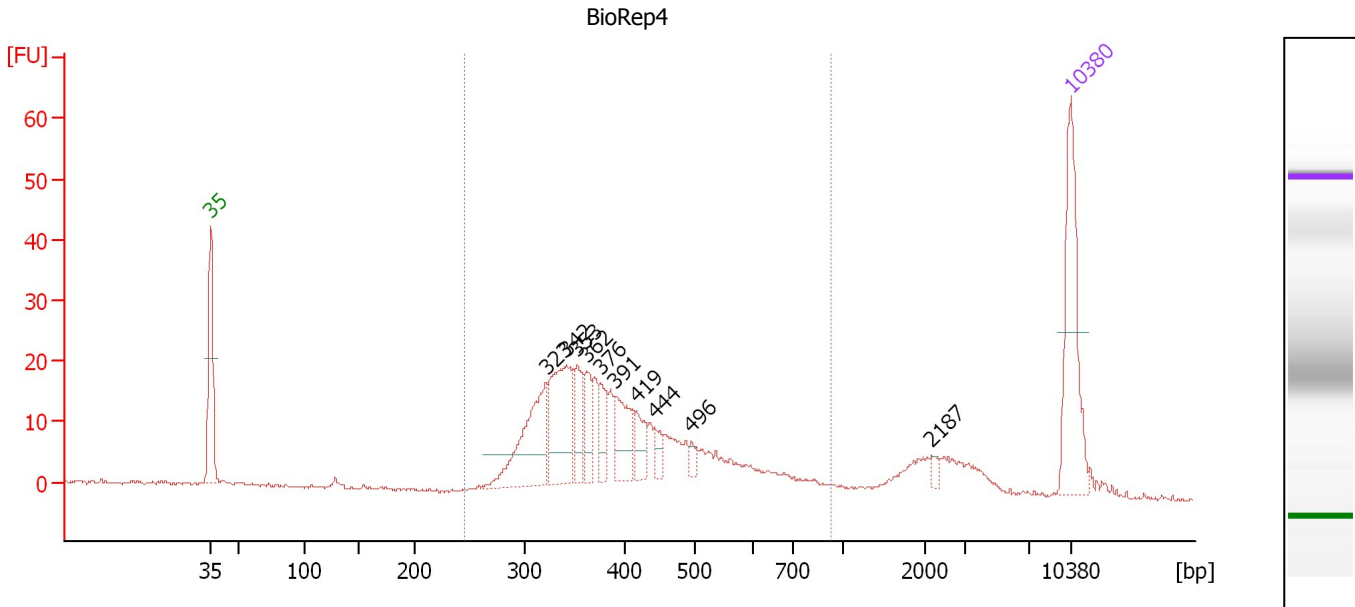
Region table for sample 2 : BioRep3

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
255	808	394	3,589.1	887.99	658.0	84	21.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-24\2013-05-24_004.xad

Created: 5/24/2013 1:34:26 PM
 Modified: 5/24/2013 2:15:50 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : BioRep4

Number of peaks found: 10 Corr. Area 1: 357.0
 Noise: 0.2

Peak table for sample 3 : BioRep4

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	323	95.46	448.4	
3	342	94.72	419.3	
4	353	34.80	149.4	
5	362	27.01	112.9	
6	376	21.35	86.0	
7	391	43.34	168.1	
8	419	22.22	80.4	
9	444	12.03	41.1	
10	496	7.17	21.9	
11	2,187	4.15	2.9	
12	10,380	75.00	10.9	Upper Marker

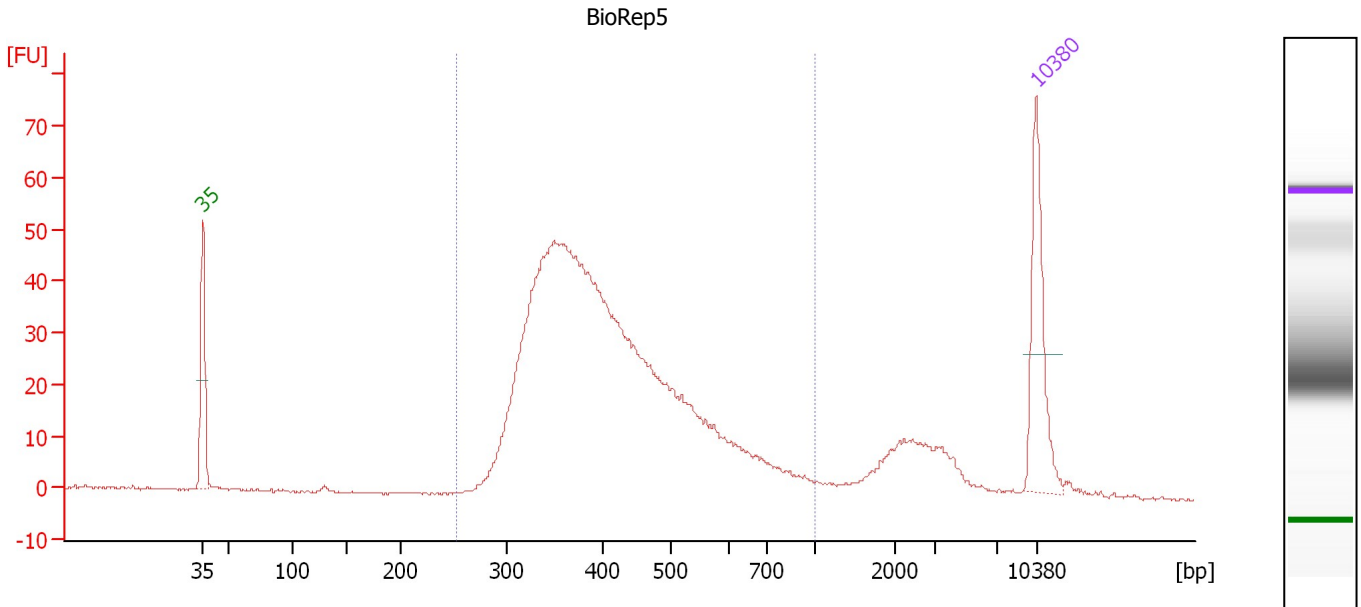
Region table for sample 3 : BioRep4

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
246	926	415	2,274.0	577.75	357.0	83	26.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-24\2013-05-24_004.xad

Created: 5/24/2013 1:34:26 PM
 Modified: 5/24/2013 2:15:50 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : BioRep5

Number of peaks found: 0 Corr. Area 1: 821.5
 Noise: 0.2

Peak table for sample 4 : BioRep5

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	10,380	75.00	10.9	Upper Marker

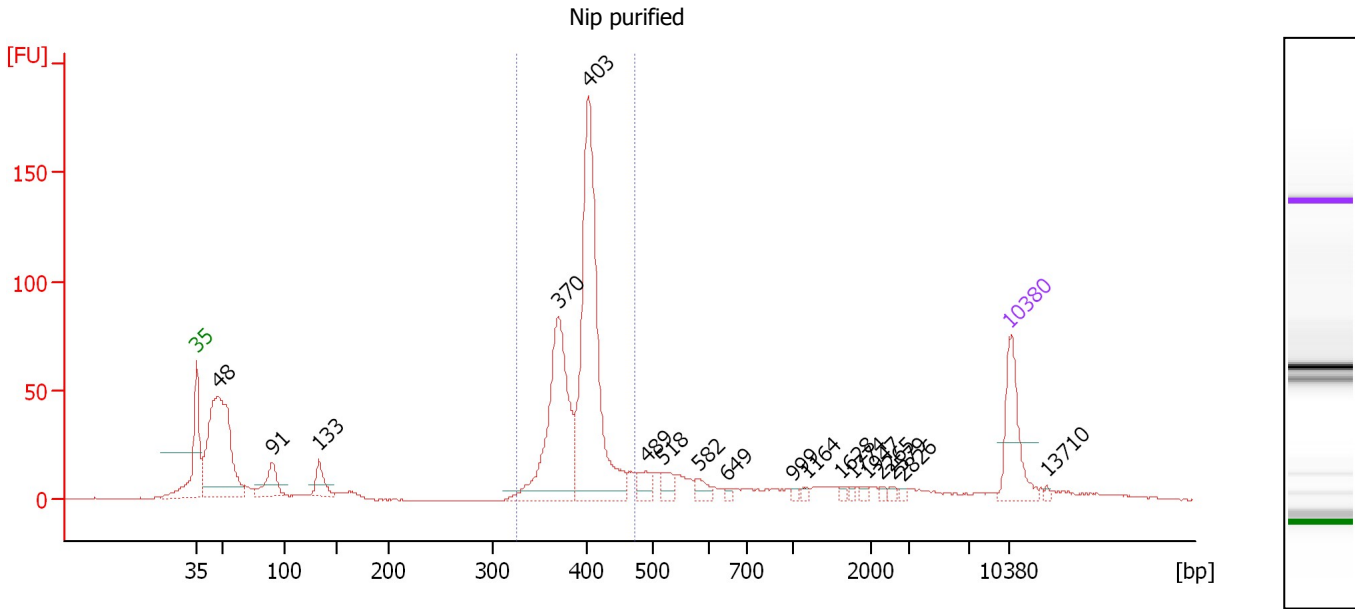
Region table for sample 4 : BioRep5

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
253	1,000	424	4,435.6	1,158.35	821.5	90	26.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-24\2013-05-24_004.xad

Created: 5/24/2013 1:34:26 PM
 Modified: 5/24/2013 2:15:50 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : Nip purified

Number of peaks found: 18 Corr. Area 1: 631.7
 Noise: 0.3

Peak table for sample 5 : Nip purified

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	48	420.70	13,340.9	
3	91	64.90	1,086.3	
4	133	42.33	481.7	
5	370	295.72	1,210.0	
6	403	461.03	1,734.7	
7	489	29.07	90.0	
8	518	22.41	65.5	
9	582	16.74	43.6	
10	649	4.74	11.1	
11	999	4.61	7.0	
12	1,164	4.67	6.1	
13	1,628	3.83	3.6	
14	1,774	3.72	3.2	
15	1,947	5.04	3.9	
16	2,265	4.23	2.8	
17	2,579	4.54	2.7	
18	2,826	2.80	1.5	
19	10,380	75.00	10.9	Upper Marker
20	13,710	0.00	0.0	

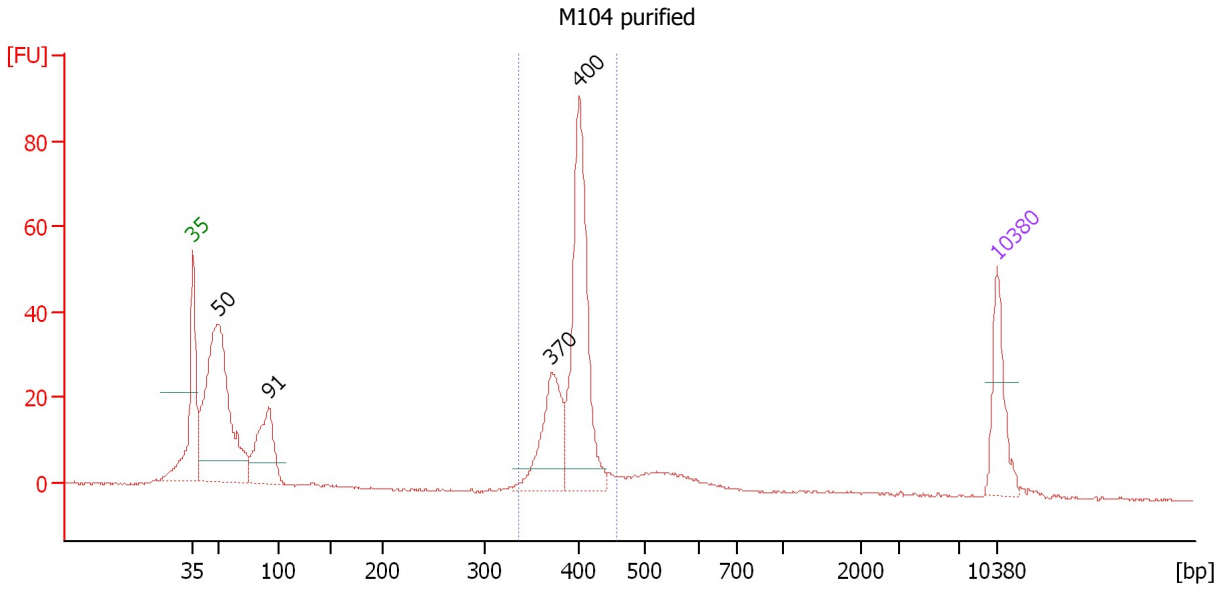
Region table for sample 5 : Nip purified

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
325	471	394	2,906.1	753.61	631.7	52	6.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-24\2013-05-24_004.xad

Created: 5/24/2013 1:34:26 PM
 Modified: 5/24/2013 2:15:50 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : M104 purified

Number of peaks found: 4 Corr. Area 1: 266.4
 Noise: 0.2

Peak table for sample 6 : M104 purified

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	50	571.27	17,382.3	
3	91	169.90	2,824.8	
4	370	156.58	641.0	
5	400	345.85	1,310.9	
6	10,380	75.00	10.9	Upper Marker

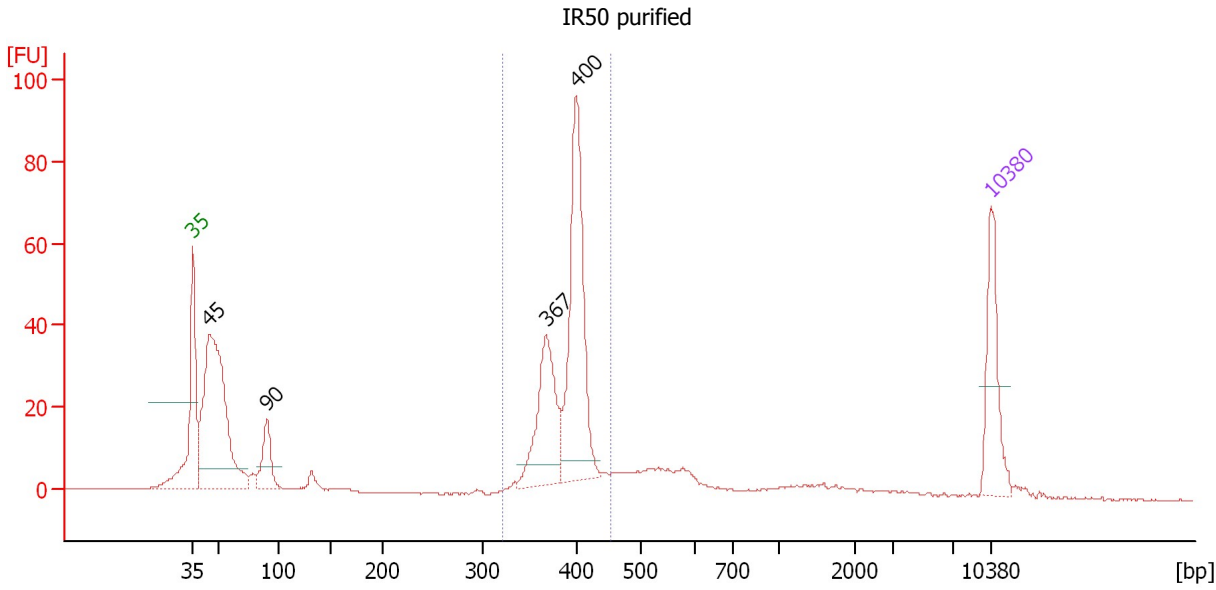
Region table for sample 6 : M104 purified

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
335	458	394	1,951.4	506.66	266.4	44	5.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-24\2013-05-24_004.xad

Created: 5/24/2013 1:34:26 PM
 Modified: 5/24/2013 2:15:50 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : IR50 purified

Number of peaks found: 4 Corr. Area 1: 304.4
 Noise: 0.2

Peak table for sample 7 : IR50 purified

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	45	444.53	15,021.7	
3	90	65.75	1,103.2	
4	367	149.53	616.6	
5	400	257.27	973.9	
6	10,380	75.00	10.9	Upper Marker

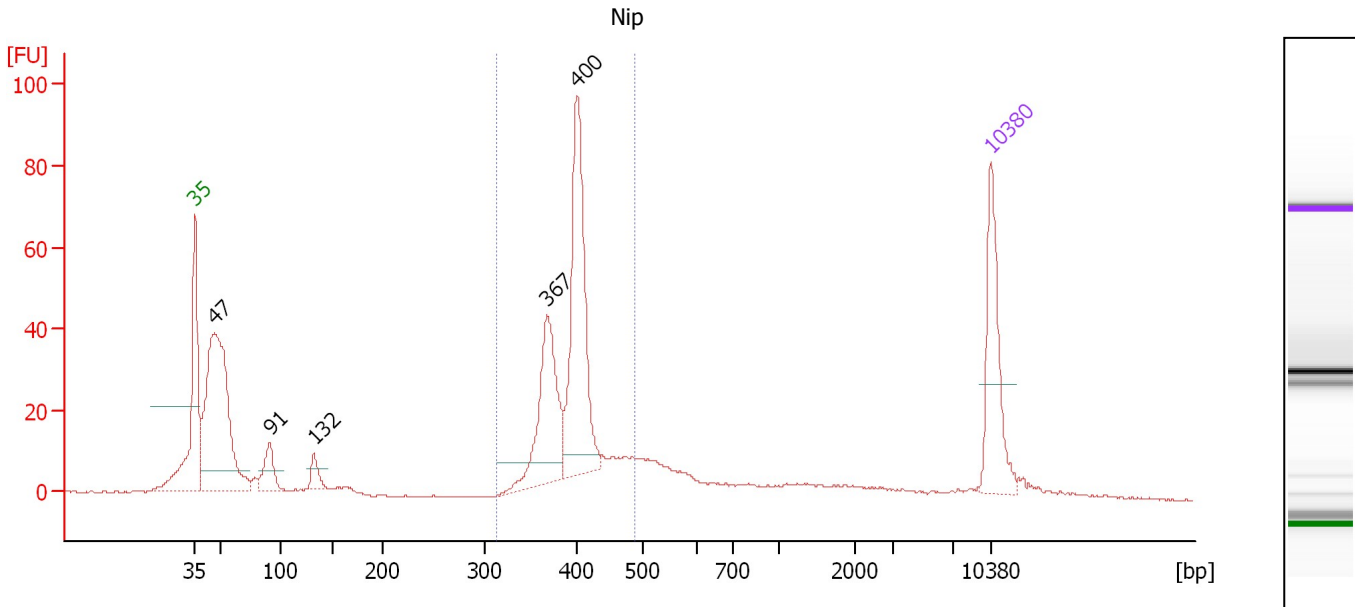
Region table for sample 7 : IR50 purified

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
321	454	391	1,796.2	461.84	304.4	46	5.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-24\2013-05-24_004.xad

Created: 5/24/2013 1:34:26 PM
 Modified: 5/24/2013 2:15:50 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : Nip

Number of peaks found: 5 Corr. Area 1: 351.5
 Noise: 0.2

Peak table for sample 8 : Nip

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	47	367.01	11,889.0	
3	91	42.10	701.7	
4	132	21.54	246.4	
5	367	135.21	557.7	
6	400	206.77	782.8	
7	10,380	75.00	10.9	Upper Marker

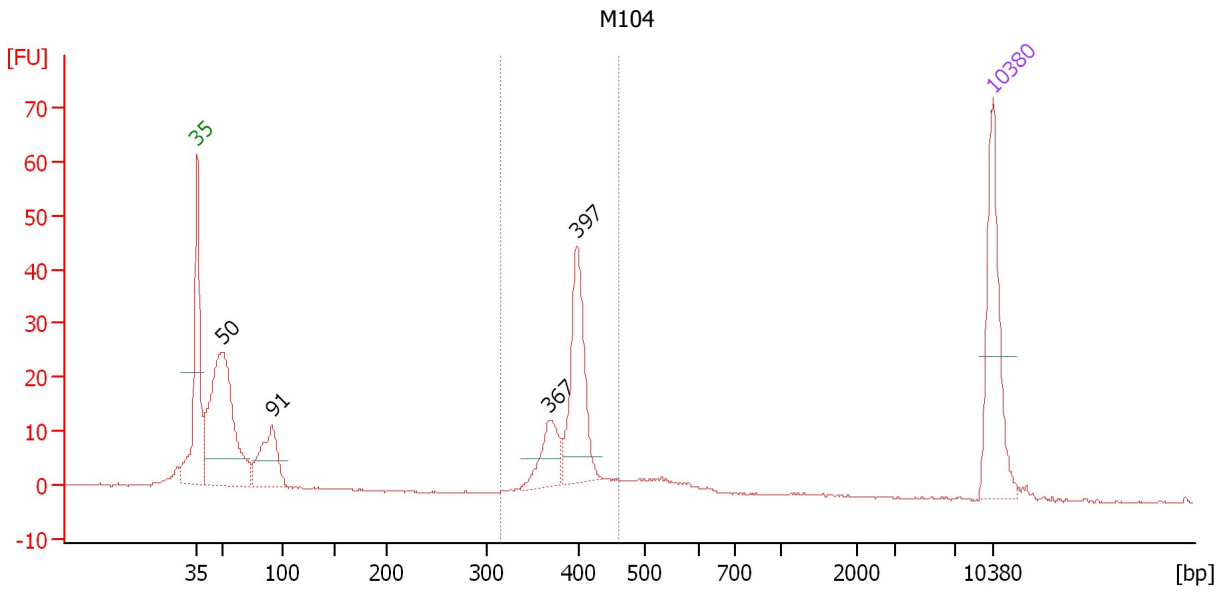
Region table for sample 8 : Nip

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
314	487	397	1,654.3	431.38	351.5	47	7.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-24\2013-05-24_004.xad

Created: 5/24/2013 1:34:26 PM
 Modified: 5/24/2013 2:15:50 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : M104

Number of peaks found: 4 Corr. Area 1: 132.0
 Noise: 0.1

Peak table for sample 9 : M104

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	50	258.30	7,834.4	
3	91	74.99	1,243.8	
4	367	42.11	173.7	
5	397	104.40	398.2	
6	10,380	75.00	10.9	Upper Marker

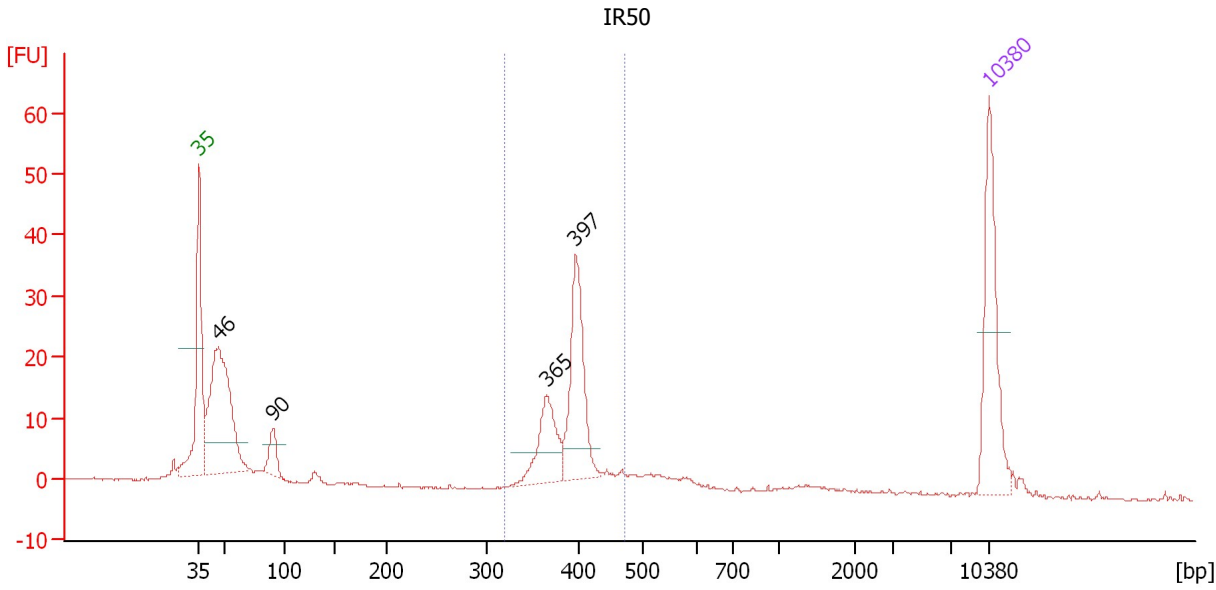
Region table for sample 9 : M104

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
316	462	393	664.7	171.87	132.0	38	5.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-24\2013-05-24_004.xad

Created: 5/24/2013 1:34:26 PM
 Modified: 5/24/2013 2:15:50 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : IR50

Number of peaks found: 4 Corr. Area 1: 121.5
 Noise: 0.2

Peak table for sample 10 : IR50

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	46	226.06	7,410.6	
3	90	27.69	463.8	
4	365	58.81	244.2	
5	397	102.28	390.5	
6	10,380	75.00	10.9	Upper Marker

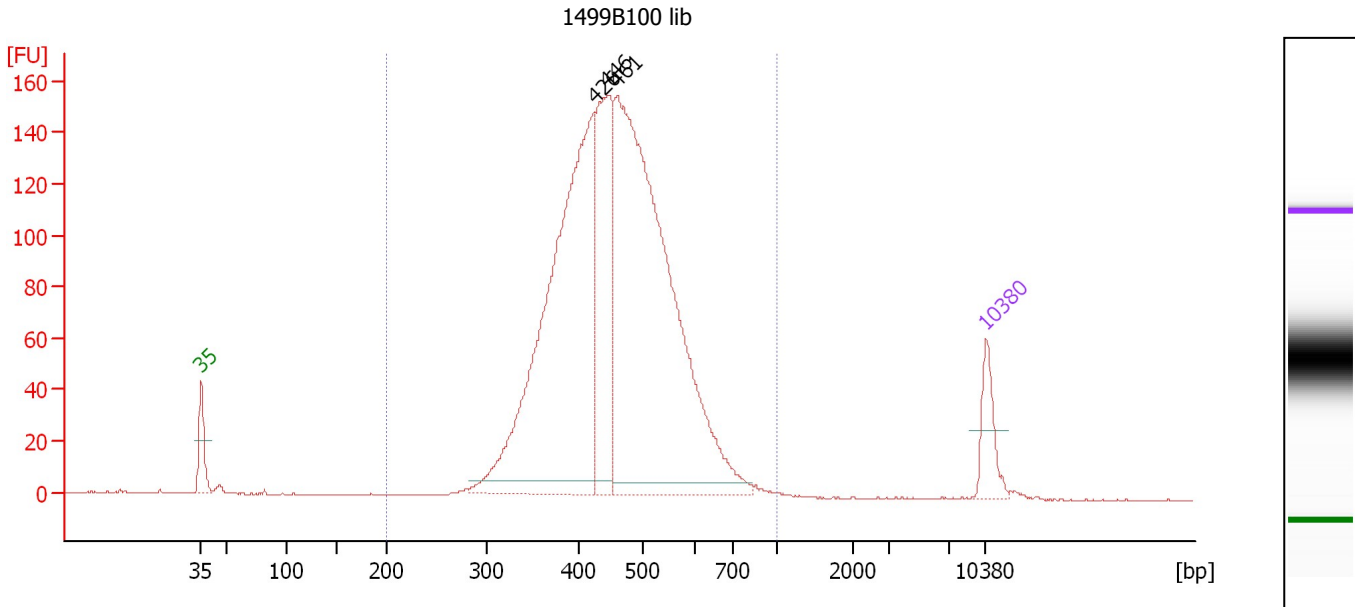
Region table for sample 10 : IR50

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
320	473	392	731.9	188.62	121.5	41	6.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-24\2013-05-24_004.xad

Created: 5/24/2013 1:34:26 PM
 Modified: 5/24/2013 2:15:50 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : 1499B100 lib

Number of peaks found: 3 Corr. Area 1: 2,346.8
 Noise: 0.2

Peak table for sample 11 : 1499B100 lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	426	1,399.07	4,976.0	
3	446	457.86	1,555.7	
4	461	1,721.98	5,661.3	
5	10,380	75.00	10.9	Upper Marker

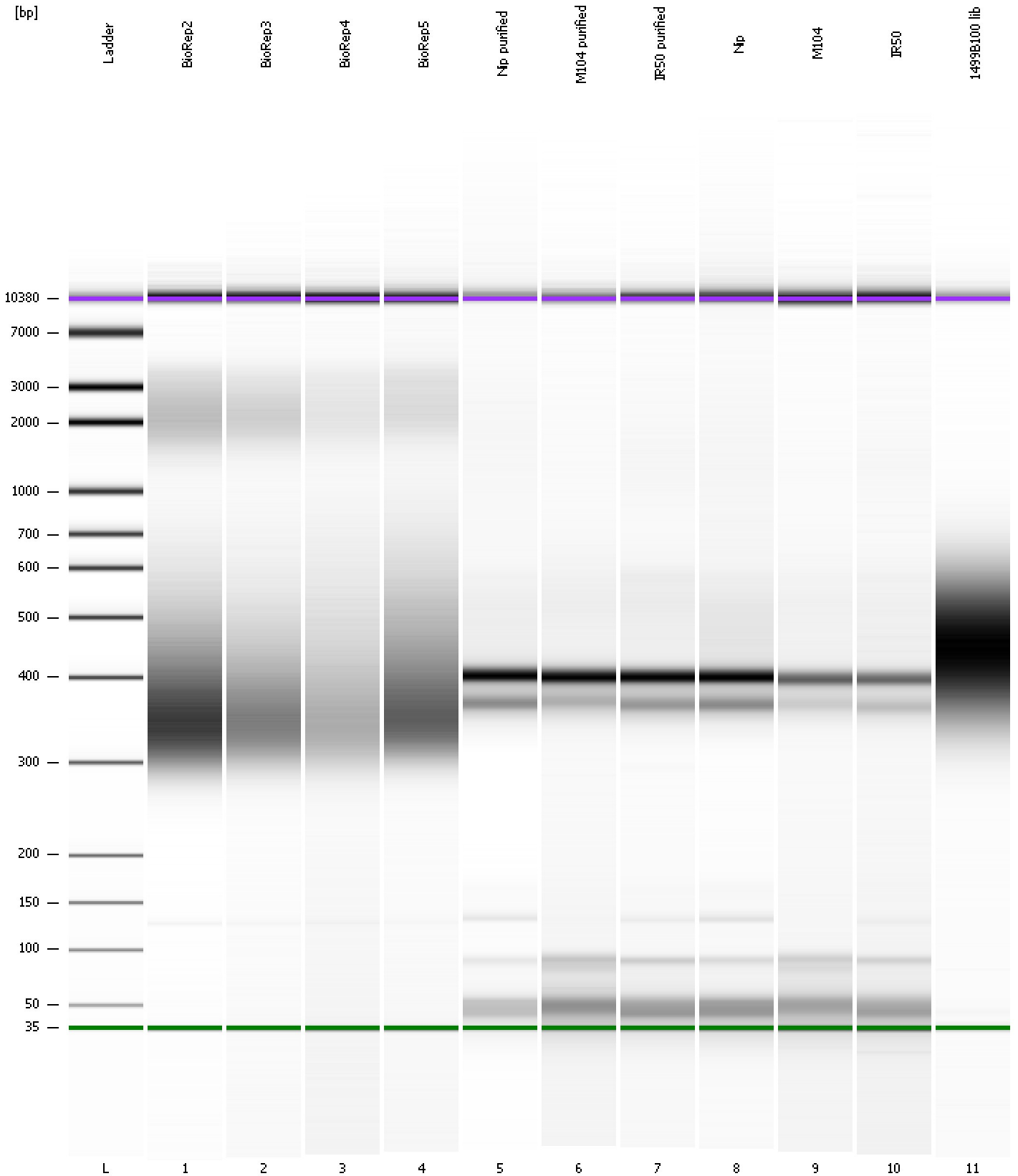
Region table for sample 11 : 1499B100 lib

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	461	12,479.0	3,635.61	2,346.8	99	18.6	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-24\2013-05-24_004.xad

Created: 5/24/2013 1:34:26 PM
Modified: 5/24/2013 2:15:50 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-24\2013-05-24_004.xad

Created: 5/24/2013 1:34:26 PM
 Modified: 5/24/2013 2:15:50 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		5/24/2013 2:15:45 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-05-24\2013-05-24_004.xad)		Instrument	Run		5/24/2013 1:34:32 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		5/24/2013 1:34:32 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		5/24/2013 1:34:32 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		5/24/2013 1:34:32 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		5/24/2013 1:34:32 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		5/24/2013 1:34:32 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		5/24/2013 1:34:32 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1