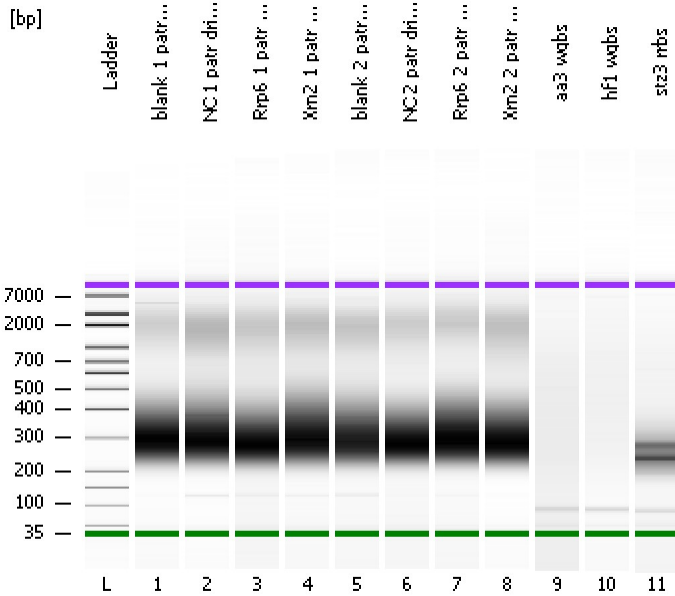


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2017-02-08\2017-02-08_001.xad

Created: 2/8/2017 10:32:50 AM
Modified: 2/8/2017 11:15:31 AM

Electrophoresis File Run Summary



Instrument Information:

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

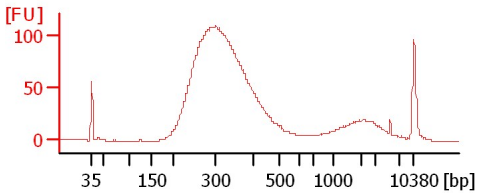
Assay Information:

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

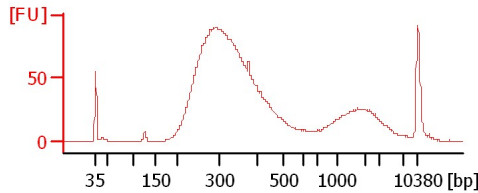
Chip Information:

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

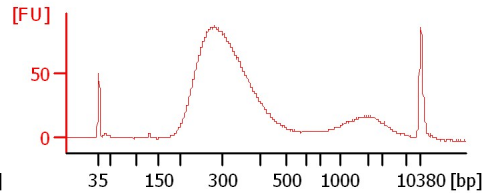
blank 1 patr drips I18



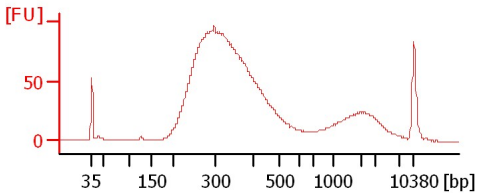
NC 1 patr drips I10



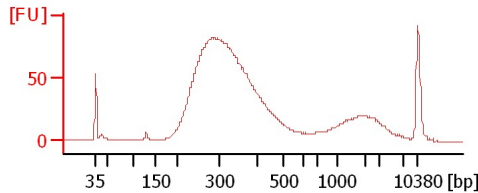
Rrp6 1 patr drips I20



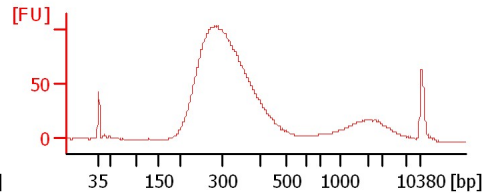
Xrn2 1 patr drips I21



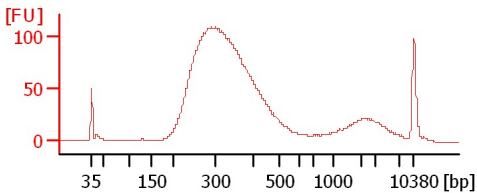
blank 2 patr drips I22



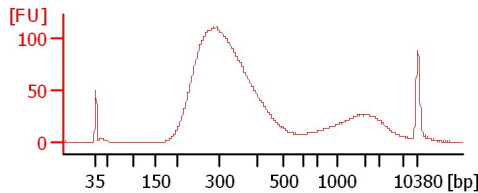
NC 2 patr drips I23



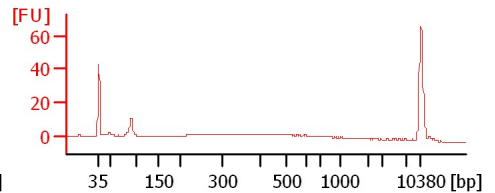
Rrp6 2 patr drips I25



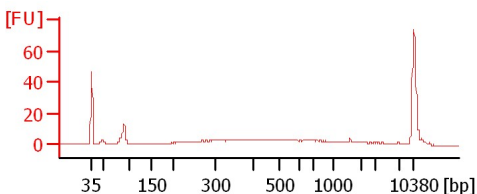
Xrn2 2 patr drips I27



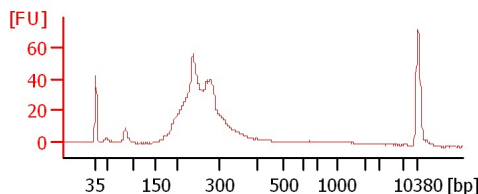
aa3 wgbs



hf1 wgbs



stz3 rrb



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-02-08\2017-02-08_001.xad

Created: 2/8/2017 10:32:50 AM
 Modified: 2/8/2017 11:15:31 AM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
blank 1 patr drips I8		<input type="checkbox"/>	✓			
NC 1 patr drips I10		<input type="checkbox"/>	✓			
Rrp6 1 patr drips I20		<input type="checkbox"/>	✓			
Xrn2 1 patr drips I21		<input type="checkbox"/>	✓			
blank 2 patr drips I22		<input type="checkbox"/>	✓			
NC 2 patr drips I23		<input type="checkbox"/>	✓			
Rrp6 2 patr drips I25		<input type="checkbox"/>	✓			
Xrn2 2 patr drips I27		<input type="checkbox"/>	✓			
aa3 wgbs		<input type="checkbox"/>	✓			
hf1 wgbs		<input type="checkbox"/>	✓			
stz3 rrbs		<input type="checkbox"/>	✓			
Ladder		<input type="checkbox"/>	✓			

Chip Lot #

Reagent Kit Lot #

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2017-02-08\2017-02-08_001.xad

Created: 2/8/2017 10:32:50 AM
Modified: 2/8/2017 11:15:31 AM

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

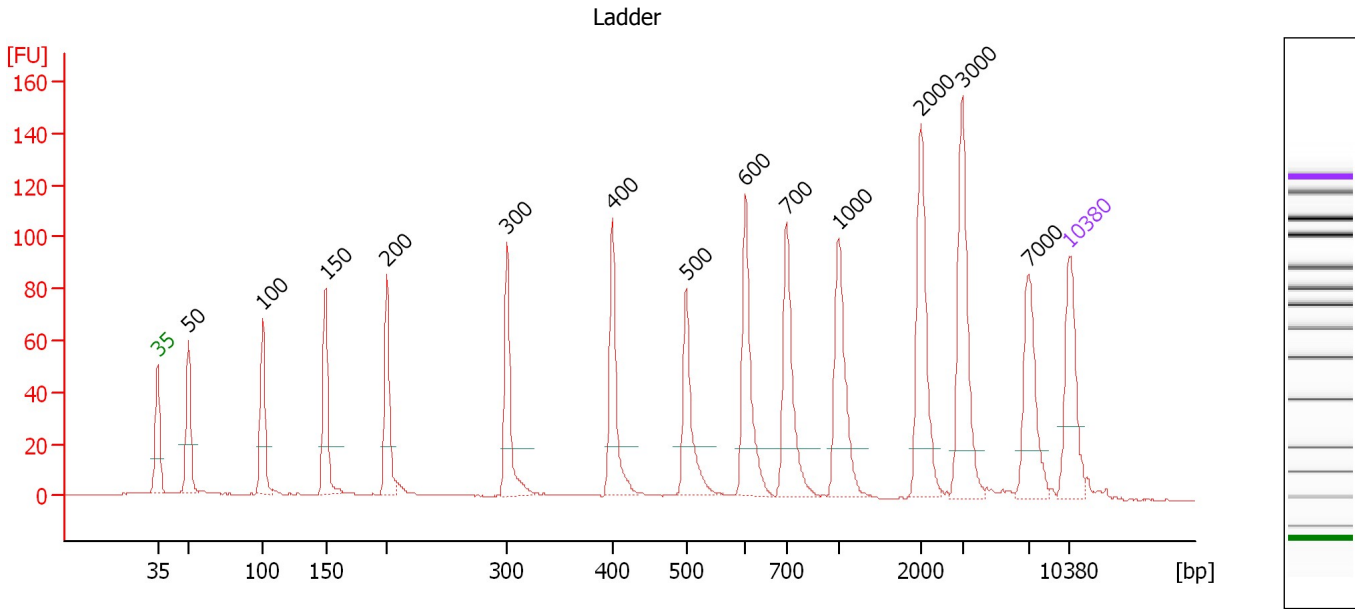
Ladder

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:\... bioanalyzer\2100 expert\data\2017-02-08\2017-02-08_001.xad

Created: 2/8/2017 10:32:50 AM
 Modified: 2/8/2017 11:15:31 AM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

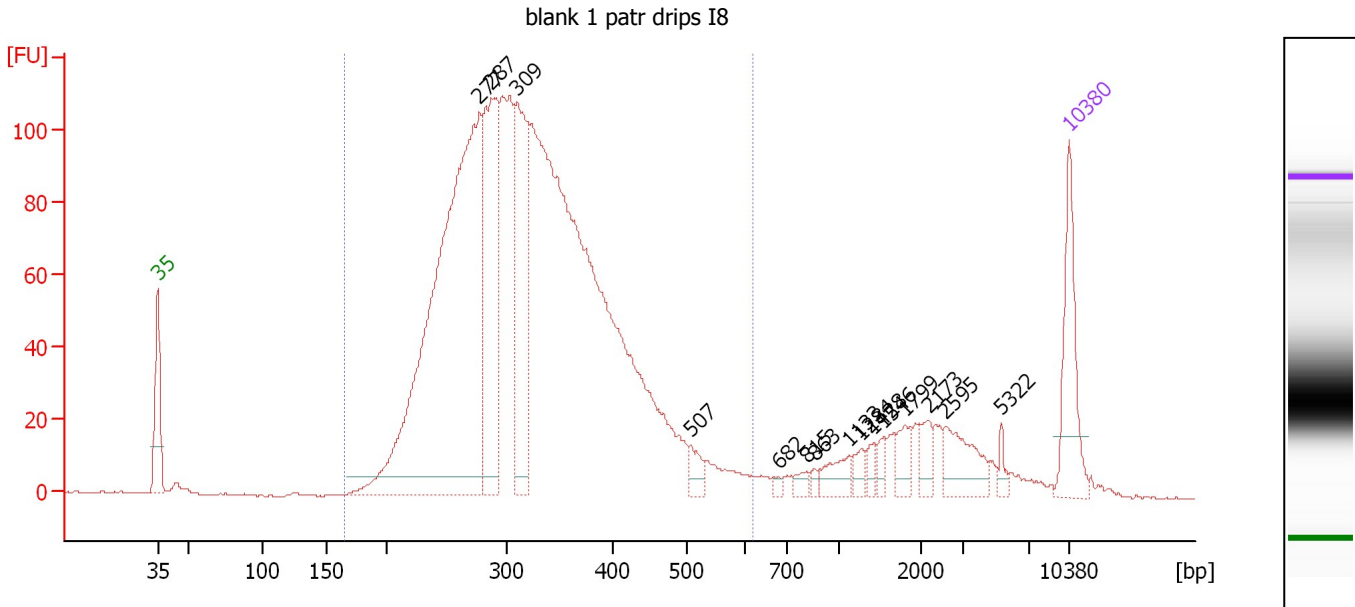
Peak table for Ladder

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	50	150.00	4,545.5	Ladder Peak	45.38
3	100	150.00	2,272.7	Ladder Peak	51.09
4	150	150.00	1,515.2	Ladder Peak	55.90
5	200	150.00	1,136.4	Ladder Peak	60.61
6	300	150.00	757.6	Ladder Peak	69.86
7	400	150.00	568.2	Ladder Peak	77.89
8	500	150.00	454.5	Ladder Peak	83.60
9	600	150.00	378.8	Ladder Peak	88.15
10	700	150.00	324.7	Ladder Peak	91.27
11	1,000	150.00	227.3	Ladder Peak	95.29
12	2,000	150.00	113.6	Ladder Peak	101.63
13	3,000	150.00	75.8	Ladder Peak	104.81
14	7,000	150.00	32.5	Ladder Peak	109.88
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-02-08\2017-02-08_001.xad

Created: 2/8/2017 10:32:50 AM
 Modified: 2/8/2017 11:15:31 AM

Electropherogram Summary Continued ...



Overall Results for sample 1 : blank 1 patr drips I8

Number of peaks found: 15 Corr. Area 1: 2,085.5
 Noise: 0.2

Peak table for sample 1 : blank 1 patr drips I8

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	277	917.96	5,028.9		67.69
3	287	283.94	1,499.1		68.65
4	309	231.35	1,134.4		70.58
5	507	21.49	64.2		83.92
6	682	5.46	12.1		90.72
7	815	10.17	18.9		92.81
8	863	5.97	10.5		93.45
9	1,133	24.42	32.7		96.13
10	1,284	12.88	15.2		97.09
11	1,428	9.81	10.4		98.00
12	1,546	10.71	10.5		98.75
13	1,799	19.65	16.5		100.36
14	2,173	18.61	13.0		102.18
15	2,595	46.61	27.2		103.52
16	5,322	8.93	2.5		107.75
17	10,380	75.00	10.9	Upper Marker	113.00

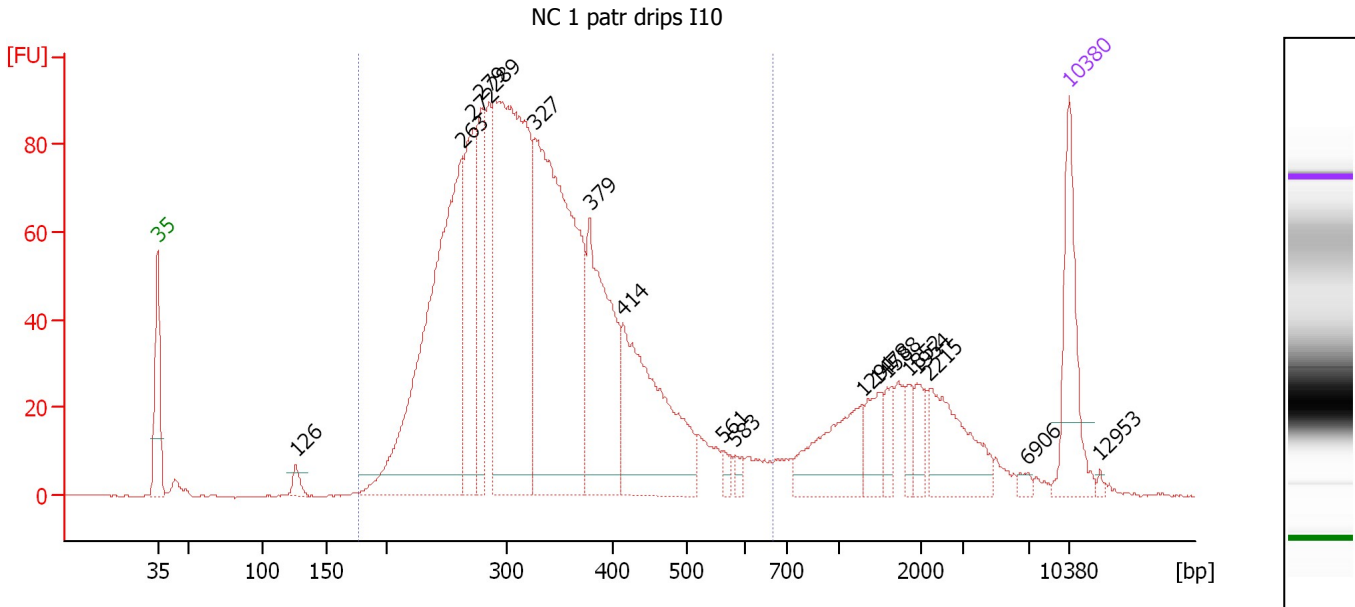
Region table for sample 1 : blank 1 patr drips I8

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
166	616	326	2,085.5	14,210.8	2,877.04	89	22.1

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-02-08\2017-02-08_001.xad

Created: 2/8/2017 10:32:50 AM
 Modified: 2/8/2017 11:15:31 AM

Electropherogram Summary Continued ...



Overall Results for sample 2 : NC 1 patr drips I10

Number of peaks found: 18 Corr. Area 1: 1,811.8
 Noise: 0.2

Peak table for sample 2 : NC 1 patr drips I10

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	126	14.13	169.3		53.63
3	263	513.28	2,958.4		66.42
4	272	162.99	909.2		67.23
5	279	123.82	673.3		67.88
6	289	549.76	2,881.0		68.85
7	327	507.21	2,349.4		72.04
8	379	207.25	828.9		76.19
9	414	221.81	812.4		78.67
10	561	8.91	24.1		86.39
11	583	7.87	20.5		87.36
12	1,291	79.85	93.7		97.13
13	1,478	31.35	32.1		98.32
14	1,588	17.37	16.6		99.02
15	1,852	15.89	13.0		100.69
16	1,954	20.24	15.7		101.34
17	2,215	72.52	49.6		102.31
18	6,906	4.80	1.1		109.76
19	10,380	75.00	10.9	Upper Marker	113.00
20	12,953	0.00	0.0		115.37

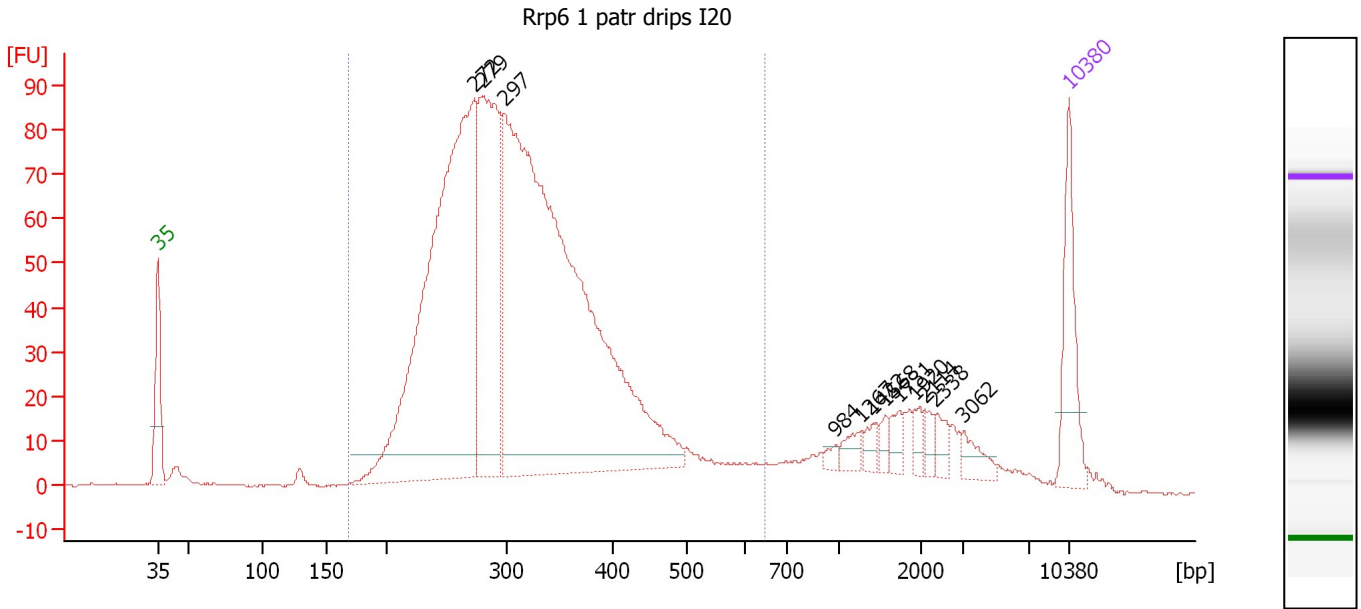
Region table for sample 2 : NC 1 patr drips I10

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
177	669	335	1,811.8	11,855.2	2,432.42	84	25.2

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-02-08\2017-02-08_001.xad

Created: 2/8/2017 10:32:50 AM
 Modified: 2/8/2017 11:15:31 AM

Electropherogram Summary Continued ...



Overall Results for sample 3 : Rrp6 1 patr drips I20

Number of peaks found: 12 Corr. Area 1: 1,619.3
 Noise: 0.2

Peak table for sample 3 : Rrp6 1 patr drips I20

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	272	894.77	4,978.6		67.30
3	279	371.51	2,019.1		67.89
4	297	1,261.76	6,436.2		69.58
5	984	6.92	10.6		95.08
6	1,267	16.47	19.7		96.98
7	1,422	12.26	13.1		97.96
8	1,568	9.90	9.6		98.89
9	1,731	15.41	13.5		99.93
10	1,920	13.84	10.9		101.12
11	2,114	10.81	7.7		102.00
12	2,338	16.53	10.7		102.70
13	3,062	19.82	9.8		104.88
14	10,380	75.00	10.9	Upper Marker	113.00

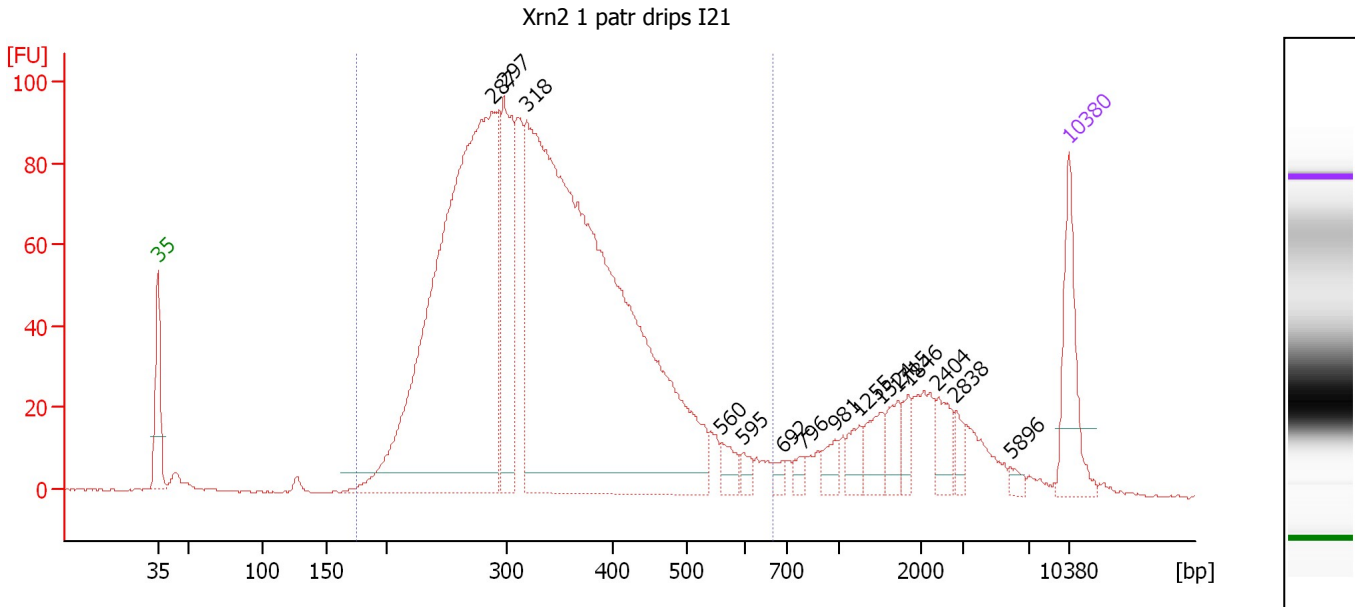
Region table for sample 3 : Rrp6 1 patr drips I20

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
169	649	318	1,619.3	13,639.3	2,680.12	86	24.1

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-02-08\2017-02-08_001.xad

Created: 2/8/2017 10:32:50 AM
 Modified: 2/8/2017 11:15:31 AM

Electropherogram Summary Continued ...



Overall Results for sample 4 : Xrn2 1 patr drips I21

Number of peaks found: 15 Corr. Area 1: 1,997.7
 Noise: 0.2

Peak table for sample 4 : Xrn2 1 patr drips I21

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	287	1,115.04	5,880.0		68.69
3	297	228.90	1,165.9		69.62
4	318	1,486.97	7,077.6		71.33
5	560	22.98	62.2		86.32
6	595	12.77	32.5		87.92
7	692	9.66	21.2		91.01
8	796	11.39	21.7		92.55
9	981	18.80	29.0		95.03
10	1,255	23.87	28.8		96.91
11	1,524	31.35	31.2		98.61
12	1,715	28.99	25.6		99.83
13	1,846	17.94	14.7		100.65
14	2,404	28.16	17.7		102.91
15	2,838	14.79	7.9		104.29
16	5,896	6.82	1.8		108.48
17	10,380	75.00	10.9	Upper Marker	113.00

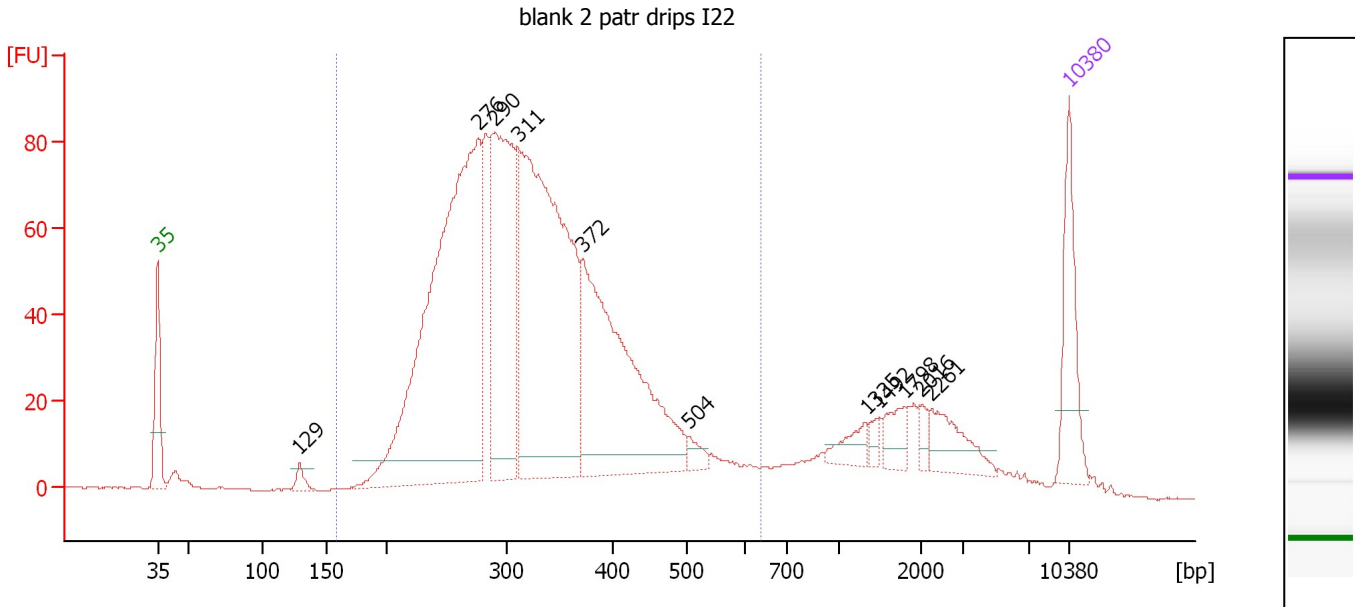
Region table for sample 4 : Xrn2 1 patr drips I21

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
176	669	339	1,997.7	14,154.5	2,928.17	86	25.3

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-02-08\2017-02-08_001.xad

Created: 2/8/2017 10:32:50 AM
 Modified: 2/8/2017 11:15:31 AM

Electropherogram Summary Continued ...



Overall Results for sample 5 : blank 2 patr drips I22

Number of peaks found: 11 Corr. Area 1: 1,637.7
 Noise: 0.2

Peak table for sample 5 : blank 2 patr drips I22

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	129	15.24	179.1		53.87
3	276	798.67	4,386.2		67.63
4	290	338.98	1,773.0		68.90
5	311	650.70	3,171.2		70.73
6	372	399.07	1,627.0		75.61
7	504	15.06	45.3		83.77
8	1,335	21.97	24.9		97.41
9	1,492	9.16	9.3		98.41
10	1,798	25.68	21.6		100.35
11	2,016	10.50	7.9		101.68
12	2,261	45.71	30.6		102.46
13	10,380	75.00	10.9	Upper Marker	113.00

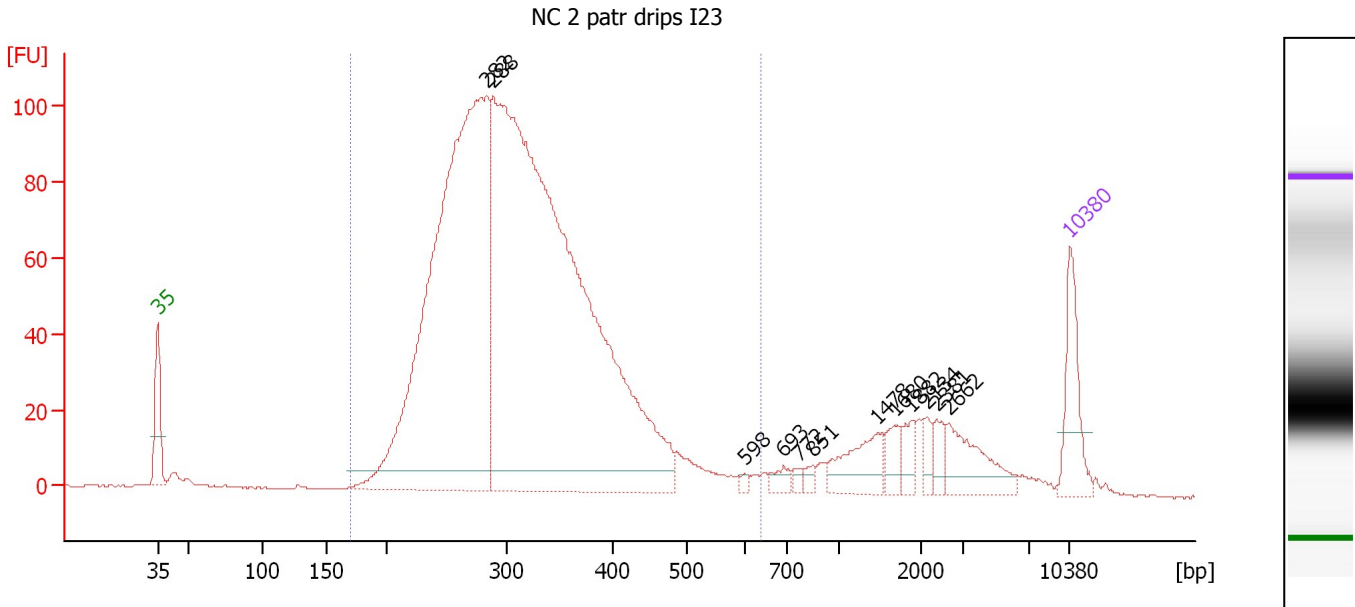
Region table for sample 5 : blank 2 patr drips I22

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
158	635	327	1,637.7	12,392.4	2,499.03	86	23.8

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-02-08\2017-02-08_001.xad

Created: 2/8/2017 10:32:50 AM
 Modified: 2/8/2017 11:15:31 AM

Electropherogram Summary Continued ...



Overall Results for sample 6 : NC 2 patr drips I23

Number of peaks found: 12 Corr. Area 1: 1,841.9
 Noise: 0.2

Peak table for sample 6 : NC 2 patr drips I23

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	282	1,405.23	7,538.9		68.23
3	288	2,112.11	11,094.3		68.79
4	598	5.69	14.4		88.05
5	693	16.52	36.1		91.06
6	772	8.08	15.9		92.23
7	851	9.53	17.0		93.30
8	1,478	65.21	66.9		98.32
9	1,680	27.87	25.1		99.60
10	1,882	22.45	18.1		100.89
11	2,134	16.90	12.0		102.06
12	2,381	22.33	14.2		102.84
13	2,662	72.65	41.3		103.73
14	10,380	75.00	10.9	Upper Marker	113.00

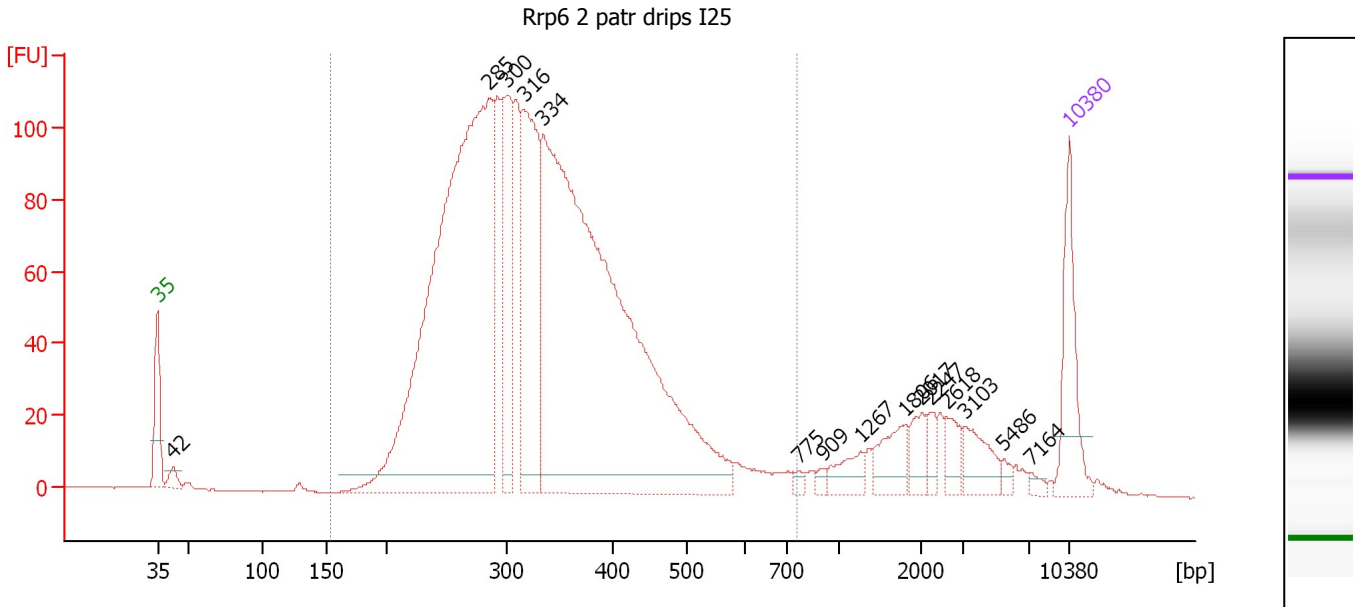
Region table for sample 6 : NC 2 patr drips I23

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
171	636	316	1,841.9	17,315.5	3,412.84	88	21.9

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-02-08\2017-02-08_001.xad

Created: 2/8/2017 10:32:50 AM
 Modified: 2/8/2017 11:15:31 AM

Electropherogram Summary Continued ...



Overall Results for sample 7 : Rrp6 2 patr drips I25

Number of peaks found: 15 Corr. Area 1: 2,228.9
 Noise: 0.2

Peak table for sample 7 : Rrp6 2 patr drips I25

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	42	17.46	623.6		44.18
3	285	1,095.92	5,836.5		68.42
4	300	174.36	879.8		69.88
5	316	284.22	1,361.5		71.17
6	334	1,230.31	5,574.1		72.62
7	775	6.99	13.7		92.28
8	909	6.32	10.5		94.07
9	1,267	26.73	32.0		96.98
10	1,806	39.40	33.1		100.40
11	2,017	23.91	18.0		101.69
12	2,247	15.19	10.2		102.42
13	2,618	22.49	13.0		103.59
14	3,103	36.11	17.6		104.94
15	5,486	6.86	1.9		107.96
16	7,164	5.82	1.2		110.03
17	10,380	75.00	10.9	Upper Marker	113.00

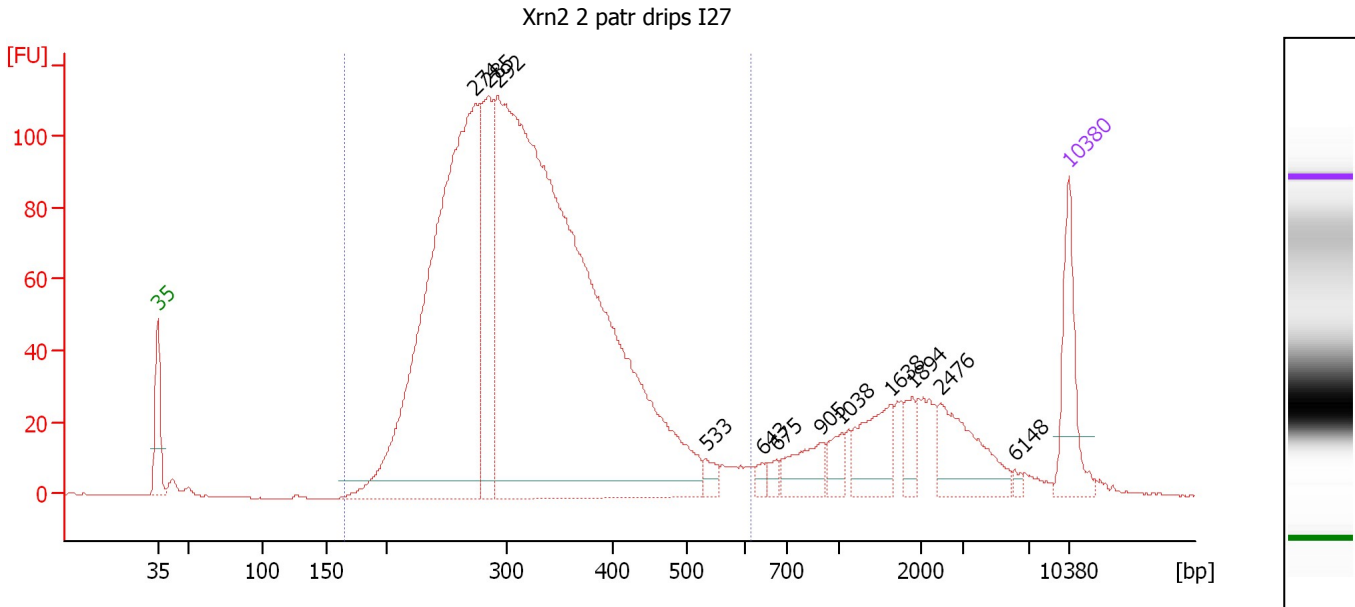
Region table for sample 7 : Rrp6 2 patr drips I25

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
154	764	335	2,228.9	14,510.1	2,980.72	90	25.1

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-02-08\2017-02-08_001.xad

Created: 2/8/2017 10:32:50 AM
 Modified: 2/8/2017 11:15:31 AM

Electropherogram Summary Continued ...



Overall Results for sample 8 : Xrn2 2 patr drips I27

Number of peaks found: 12 Corr. Area 1: 2,125.5
 Noise: 0.2

Peak table for sample 8 : Xrn2 2 patr drips I27

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	274	1,035.23	5,732.8		67.42
3	285	243.62	1,297.4		68.42
4	292	1,905.25	9,873.6		69.15
5	533	16.15	45.9		85.11
6	643	11.15	26.3		89.48
7	675	10.67	24.0		90.49
8	905	50.79	85.0		94.02
9	1,038	25.05	36.6		95.53
10	1,638	66.70	61.7		99.34
11	1,894	25.07	20.1		100.96
12	2,476	84.94	52.0		103.14
13	6,148	4.18	1.0		108.80
14	10,380	75.00	10.9	Upper Marker	113.00

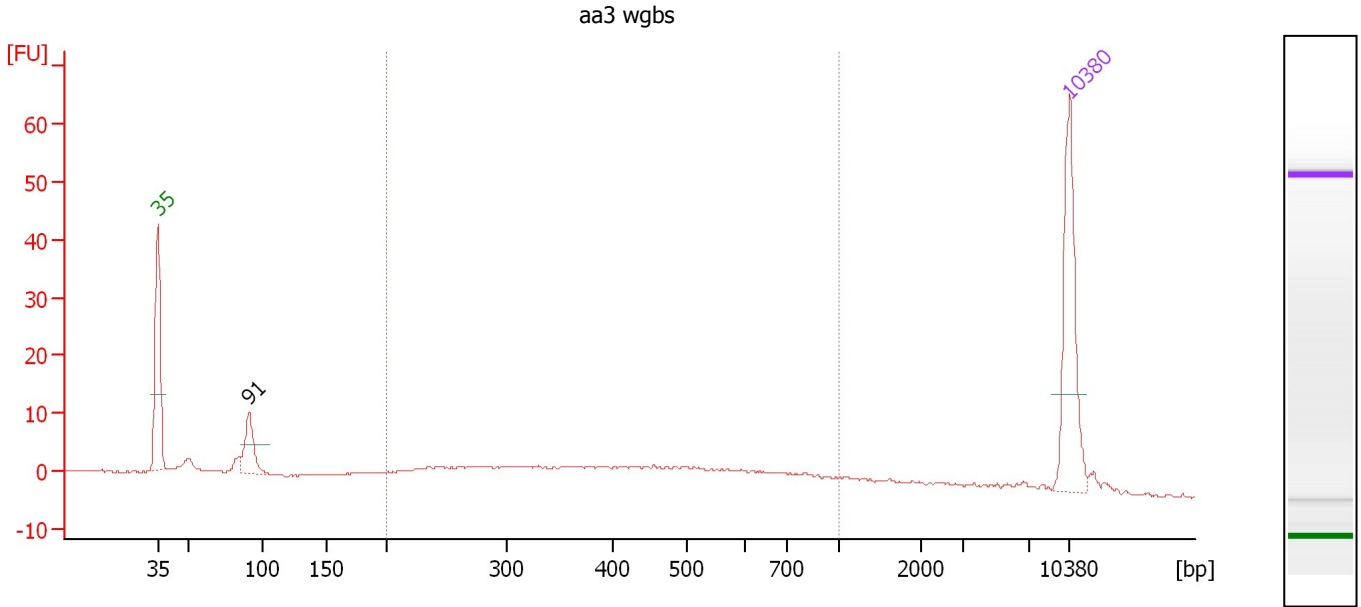
Region table for sample 8 : Xrn2 2 patr drips I27

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
165	615	322	2,125.5	15,157.3	3,021.04	84	23.2

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-02-08\2017-02-08_001.xad

Created: 2/8/2017 10:32:50 AM
 Modified: 2/8/2017 11:15:31 AM

Electropherogram Summary Continued ...



Overall Results for sample 9 : aa3 wgs

Number of peaks found: 1 Corr. Area 1: 82.5
 Noise: 0.1

Peak table for sample 9 : aa3 wgs

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	91	41.22	687.8		50.04
3	10,380	75.00	10.9	Upper Marker	113.00

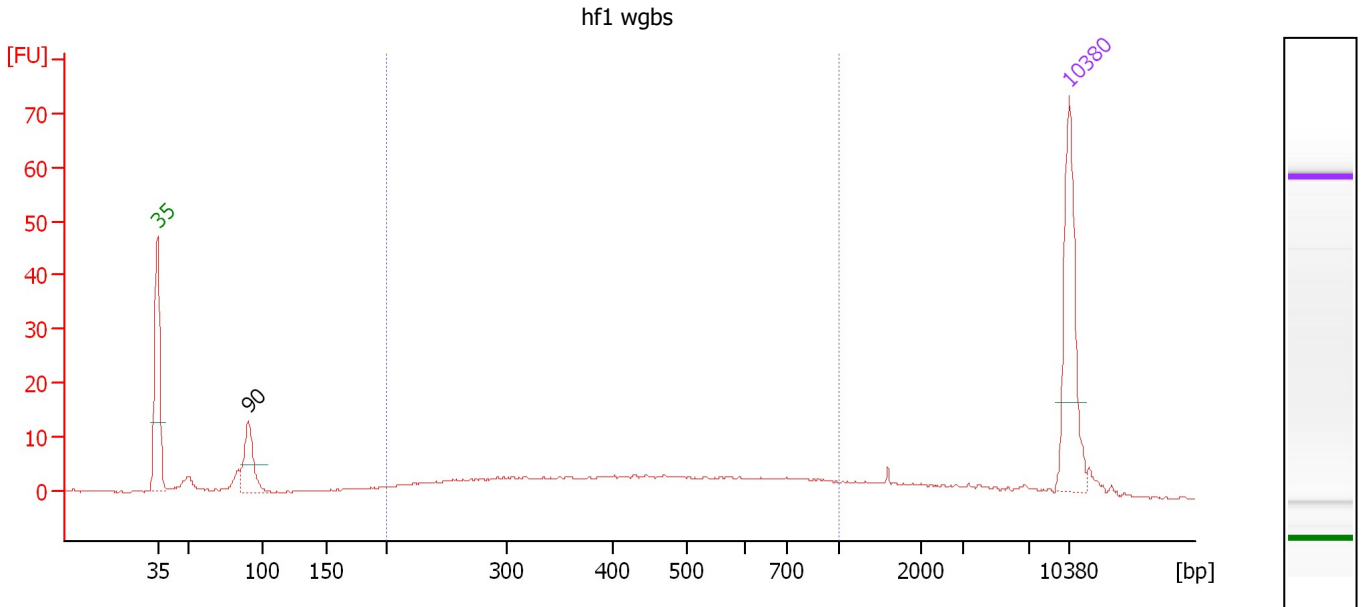
Region table for sample 9 : aa3 wgs

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	443	82.5	650.5	156.02	64	38.7

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-02-08\2017-02-08_001.xad

Created: 2/8/2017 10:32:50 AM
 Modified: 2/8/2017 11:15:31 AM

Electropherogram Summary Continued ...



Overall Results for sample 10 : hf1 wgbs

Number of peaks found: 1 Corr. Area 1: 111.5
 Noise: 0.2

Peak table for sample 10 : hf1 wgbs

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	90	49.53	829.6		50.00
3	10,380	75.00	10.9	Upper Marker	113.00

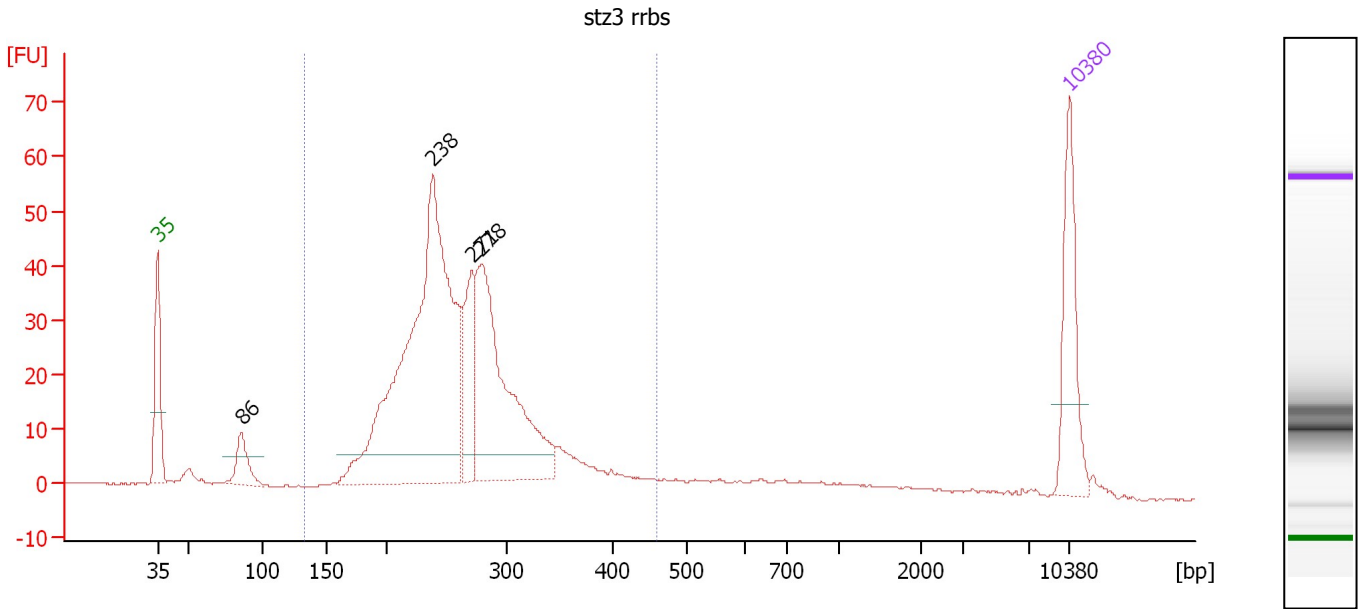
Region table for sample 10 : hf1 wgbs

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	466	111.5	789.6	196.19	62	39.9

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-02-08\2017-02-08_001.xad

Created: 2/8/2017 10:32:50 AM
 Modified: 2/8/2017 11:15:31 AM

Electropherogram Summary Continued ...



Overall Results for sample 11 : stz3 rrbs

Number of peaks found: 4 Corr. Area 1: 580.3
 Noise: 0.2

Peak table for sample 11 : stz3 rrbs

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	86	41.50	733.8		49.46
3	238	594.25	3,776.0		64.16
4	271	87.71	491.1		67.14
5	278	287.11	1,562.1		67.87
6	10,380	75.00	10.9	Upper Marker	113.00

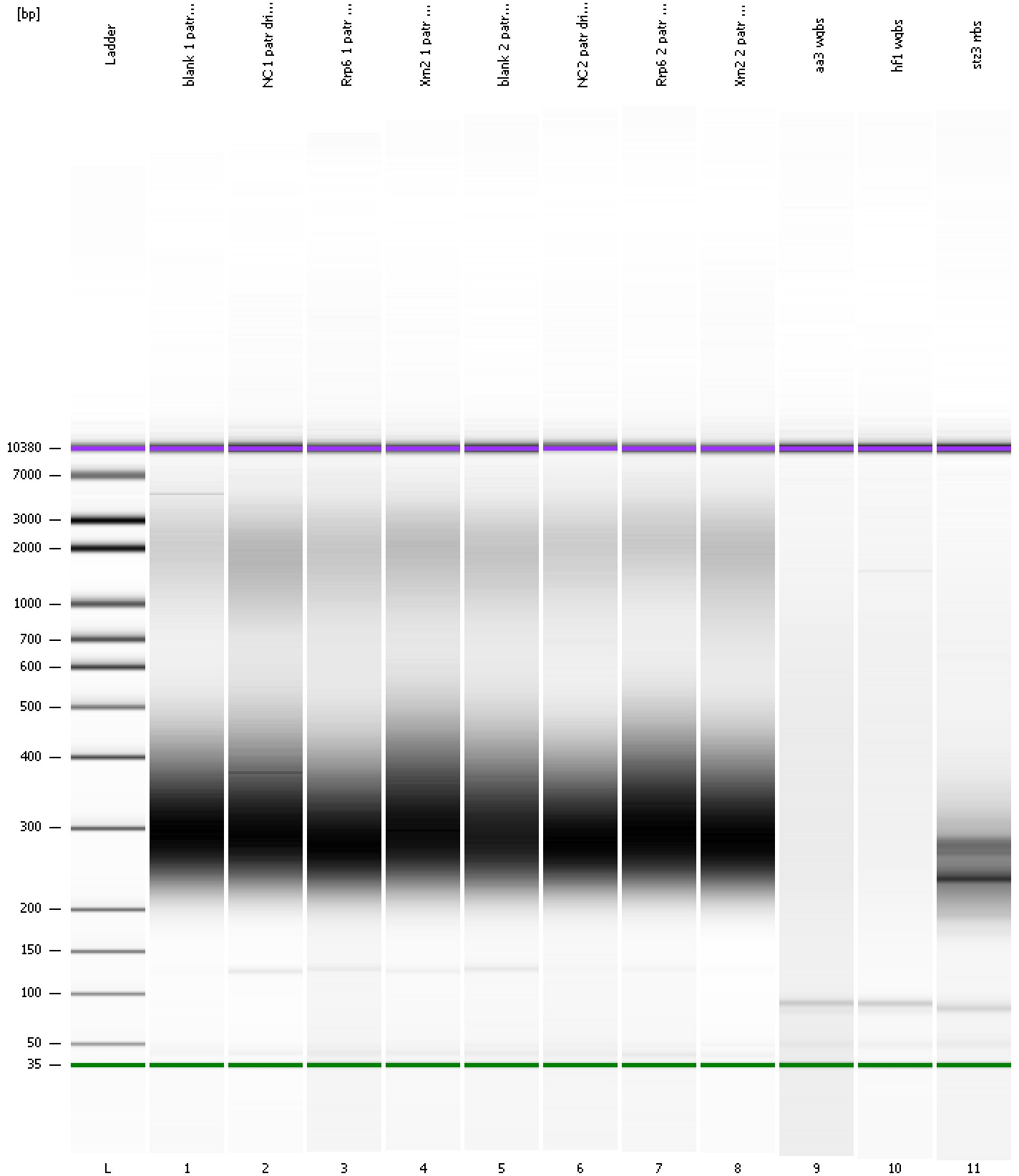
Region table for sample 11 : stz3 rrbs

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
133	460	263	580.3	6,329.5	1,060.03	93	18.4

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2017-02-08\2017-02-08_001.xad

Created: 2/8/2017 10:32:50 AM
Modified: 2/8/2017 11:15:31 AM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-02-08\2017-02-08_001.xad

Created: 2/8/2017 10:32:50 AM
 Modified: 2/8/2017 11:15:31 AM

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		2/8/2017 11:14:10 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\data\2017-02-08\2017-02-08_001.xad)		Instrument	Run		2/8/2017 10:32:55 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		2/8/2017 10:32:55 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		2/8/2017 10:32:55 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		2/8/2017 10:32:55 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		2/8/2017 10:32:55 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		2/8/2017 10:32:55 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		2/8/2017 10:32:55 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1