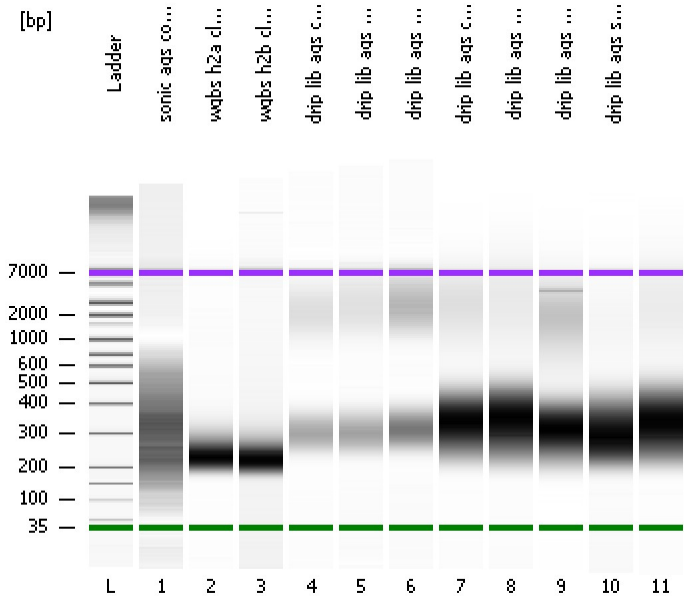


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-02\2013-07-02_006.xad

Created: 7/2/2013 4:06:47 PM
Modified: 7/2/2013 4:47:18 PM

Electrophoresis File Run Summary



Instrument Information:

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

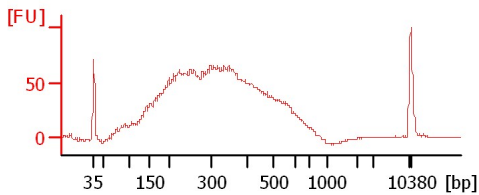
Assay Information:

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

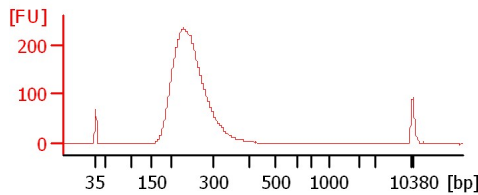
Chip Information:

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

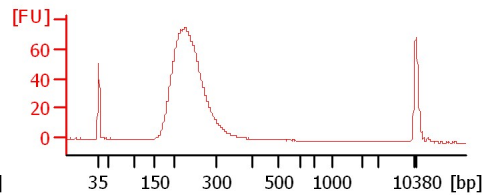
sonic ags control 13c



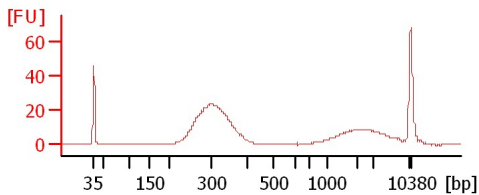
wgbs h2a clean



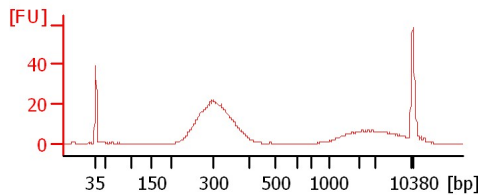
wgbs h2b clean



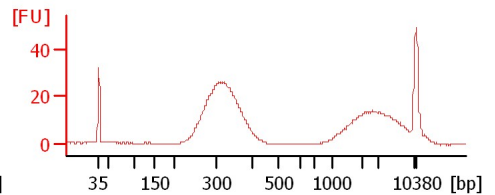
drip lib ags control clean



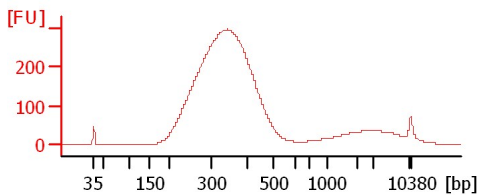
drip lib ags h2a clean



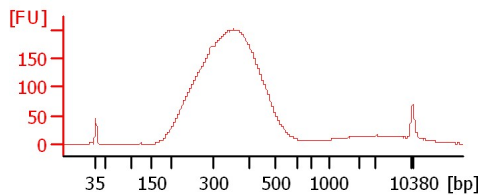
drip lib ags h2b clean



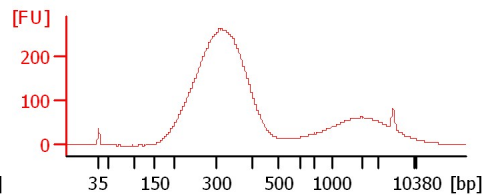
drip lib ags control 1/4



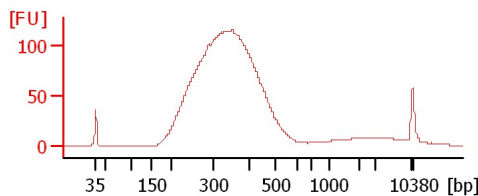
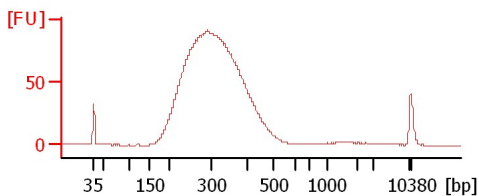
drip lib ags h2a 1/4



drip lib ags h2b 1/4



drip lib ags shd1 1/4



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-02\2013-07-02_006.xad

Created: 7/2/2013 4:06:47 PM
Modified: 7/2/2013 4:47:18 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
sonic ags control 13c		<input type="checkbox"/>	✓			
wgbs h2a clean		<input type="checkbox"/>	✓			
wgbs h2b clean		<input type="checkbox"/>	✓			
drip lib ags control clean		<input type="checkbox"/>	✓			
drip lib ags h2a clean		<input type="checkbox"/>	✓			
drip lib ags h2b clean		<input type="checkbox"/>	✓			
drip lib ags control 1/4		<input type="checkbox"/>	✓			
drip lib ags h2a 1/4		<input type="checkbox"/>	✓			
drip lib ags h2b 1/4		<input type="checkbox"/>	✓			
drip lib ags shd1 1/4		<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\2013-07-02\2013-07-02_006.xad

Created: 7/2/2013 4:06:47 PM
Modified: 7/2/2013 4:47:18 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

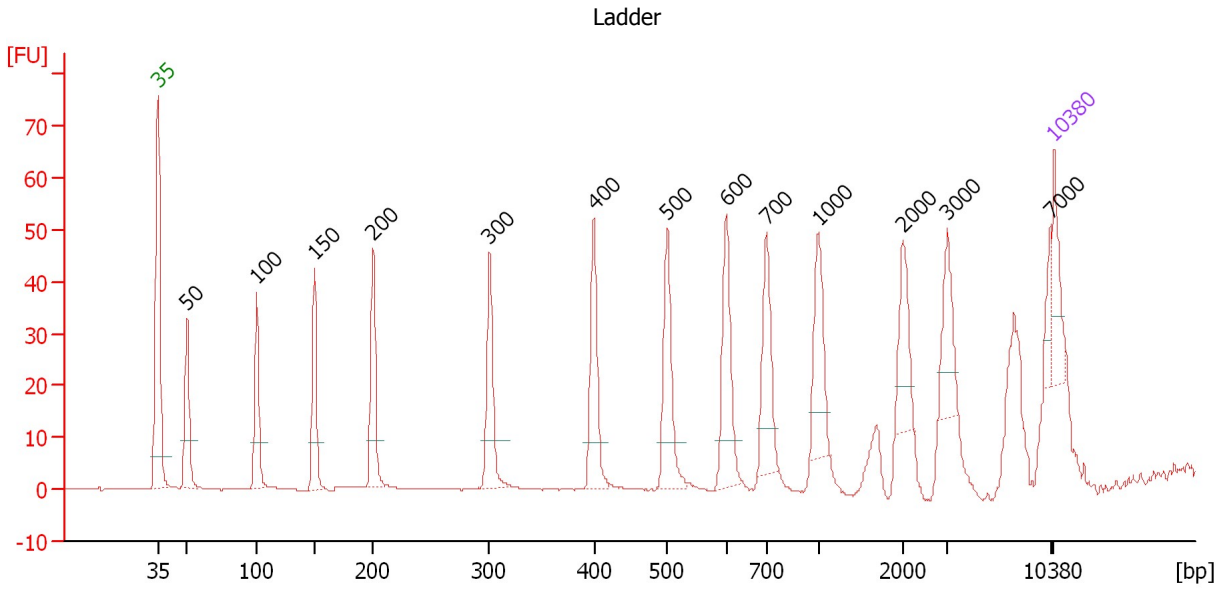
Ladder

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\2013-07-02\2013-07-02_006.xad

Created: 7/2/2013 4:06:47 PM
 Modified: 7/2/2013 4:47:18 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

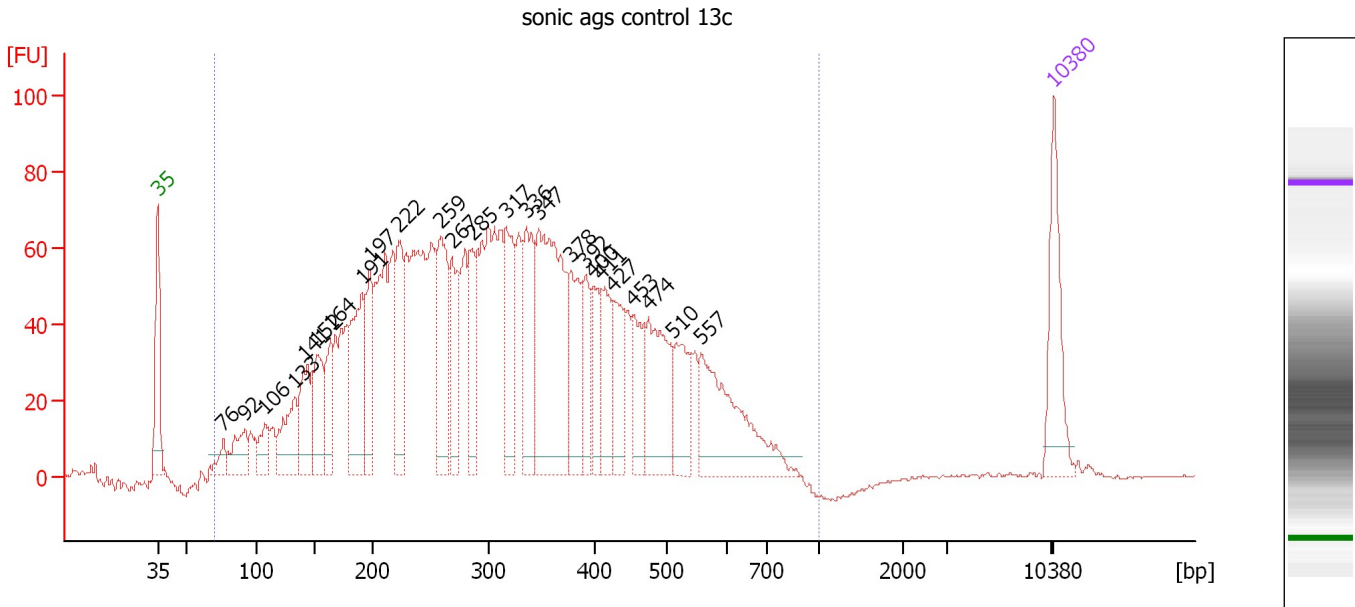
Peak table for Ladder

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\2013-07-02\2013-07-02_006.xad

Created: 7/2/2013 4:06:47 PM
 Modified: 7/2/2013 4:47:18 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : sonic ags control 13c

Number of peaks found: 25 Corr. Area 1: 2,622.0
 Noise: 0.2


Peak table for sample 1 : sonic ags control 13c

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	76	23.25	464.9	
3	92	51.99	858.9	
4	106	36.91	525.1	
5	133	83.88	955.8	
6	141	88.97	954.5	
7	152	86.67	865.8	
8	164	66.21	613.4	
9	191	156.51	1,244.5	
10	197	86.05	661.7	
11	222	117.34	802.4	
12	259	141.33	827.8	
13	267	90.37	512.0	
14	285	86.47	459.9	
15	317	110.77	530.1	
16	336	111.77	504.7	
17	347	287.02	1,252.8	
18	378	87.99	352.5	
19	392	62.77	242.5	
20	400	55.40	210.1	
21	411	72.73	268.4	
22	427	64.06	227.3	
23	453	59.57	199.2	
24	474	125.15	400.3	
25	510	74.22	220.4	
26	557	159.79	434.8	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-02\2013-07-02_006.xad

Created: 7/2/2013 4:06:47 PM
Modified: 7/2/2013 4:47:18 PM

Electropherogram Summary Continued ...**... Peak table for sample 1 : sonic ags control 13c**

Peak	Size [bp]	Conc. [pg/ μ l]	Molarity [pmol/l]	Observations
27	 10,380	75.00	10.9	Upper Marker

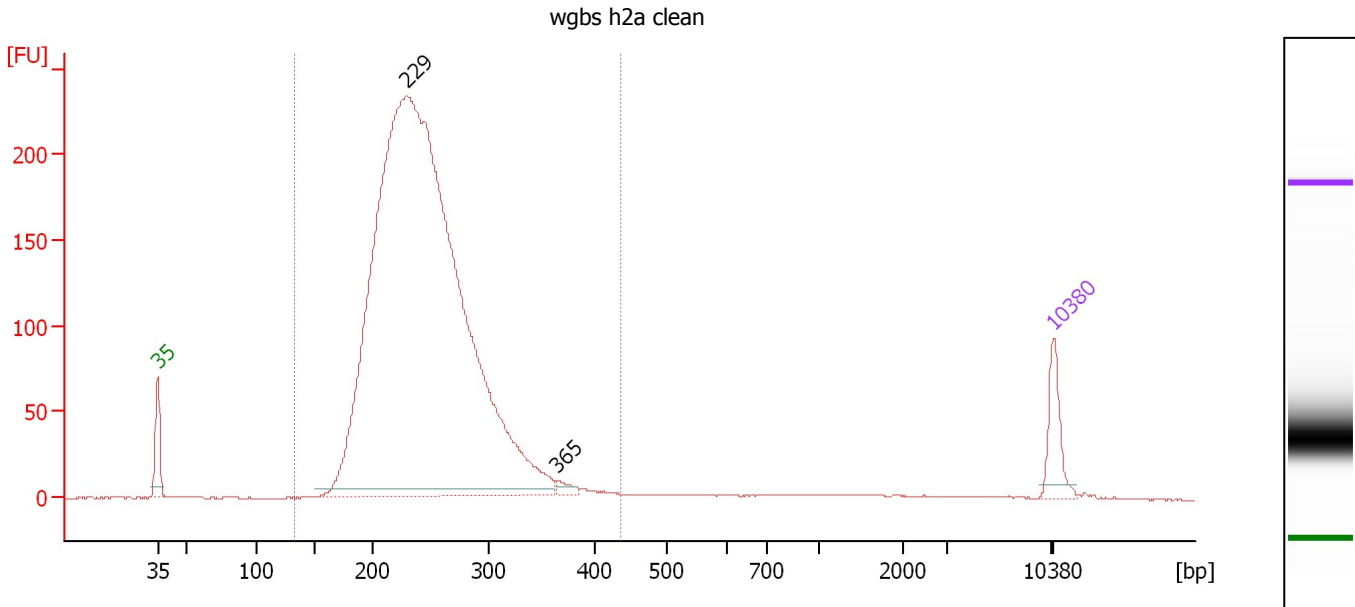
Region table for sample 1 : sonic ags control 13c

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/ μ l]	Corr. Area	% of Total	Size distribution in CV [%]	Color
70	1,000	327	23,682.9	3,778.76	2,622.0	98	41.2	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-02\2013-07-02_006.xad

Created: 7/2/2013 4:06:47 PM
 Modified: 7/2/2013 4:47:18 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : wgbs h2a clean

Number of peaks found: 2 Corr. Area 1: 2,985.8
 Noise: 0.2

Peak table for sample 2 : wgbs h2a clean

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	229	4,511.44	29,866.5	
3	365	18.54	77.0	
4	10,380	75.00	10.9	Upper Marker

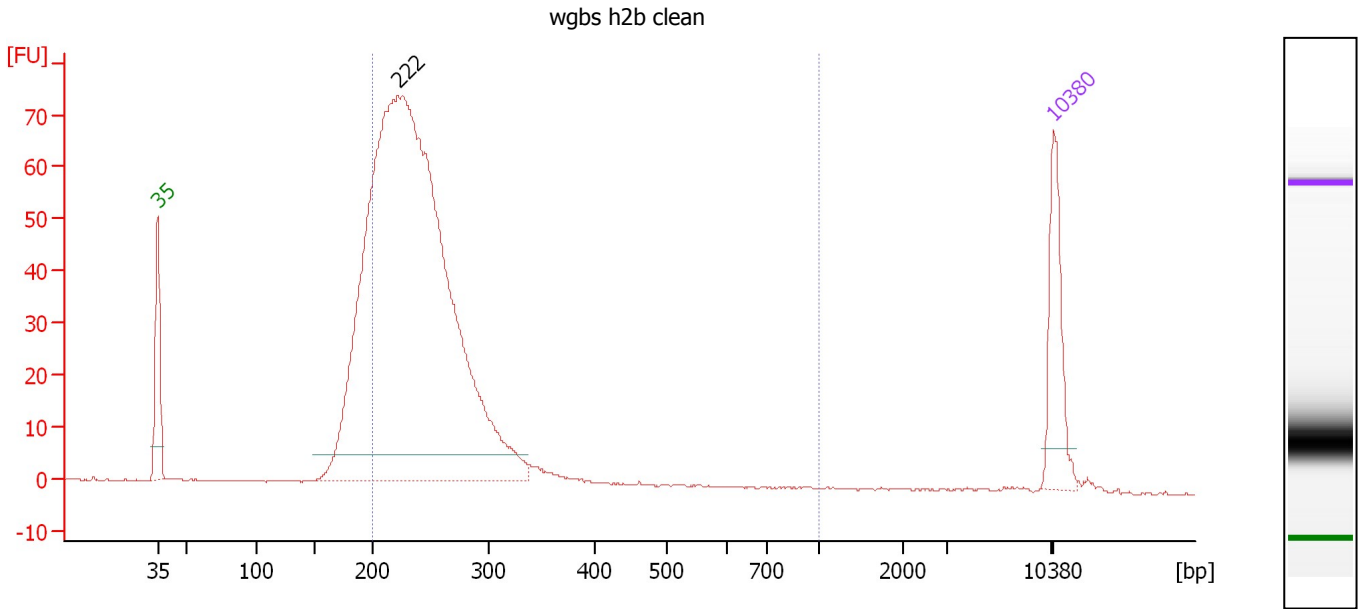
Region table for sample 2 : wgbs h2a clean

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
132	437	245	28,365.7	4,477.42	2,985.8	97	16.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-02\2013-07-02_006.xad

Created: 7/2/2013 4:06:47 PM
 Modified: 7/2/2013 4:47:18 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : wgbs h2b clean

Number of peaks found: 1 Corr. Area 1: 777.0
 Noise: 0.1

Peak table for sample 3 : wgbs h2b clean

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	222	1,767.87	12,084.2	
3	10,380	75.00	10.9	Upper Marker

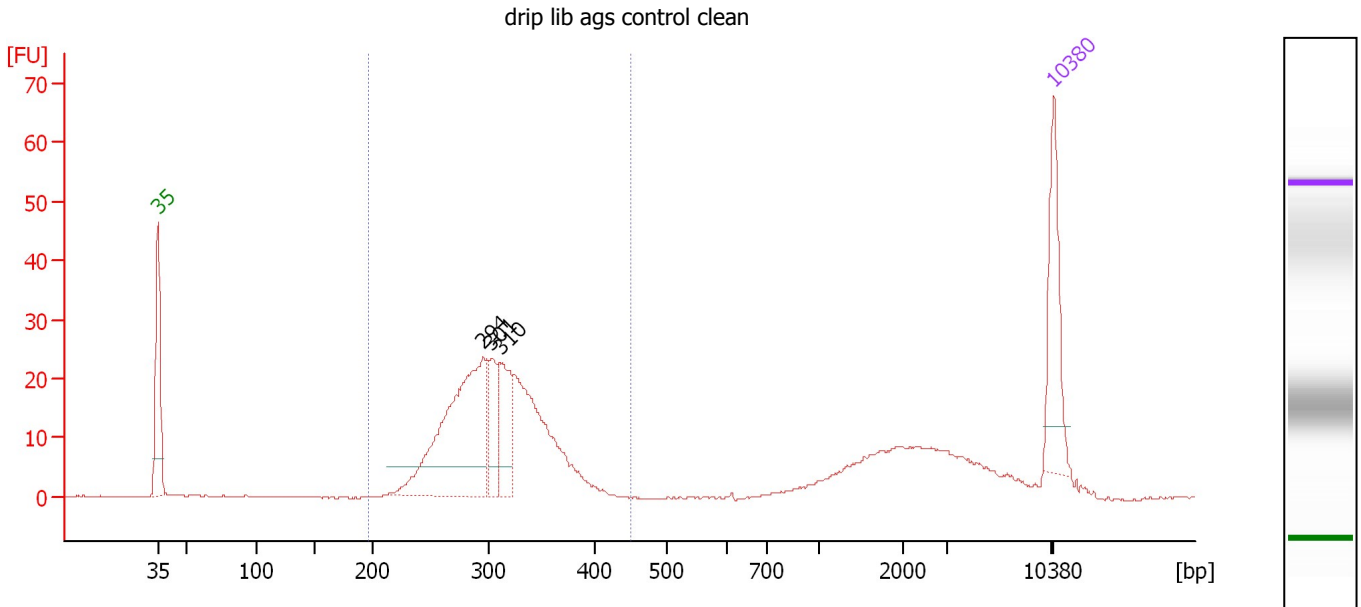
Region table for sample 3 : wgbs h2b clean

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	249	9,171.3	1,470.64	777.0	82	21.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-02\2013-07-02_006.xad

Created: 7/2/2013 4:06:47 PM
 Modified: 7/2/2013 4:47:18 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : drip lib ags control clean

Number of peaks found: 3 Corr. Area 1: 284.0
 Noise: 0.1

Peak table for sample 4 : drip lib ags control clean

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	294	290.93	1,496.9	
3	301	58.50	294.1	
4	310	72.31	353.2	
5	10,380	75.00	10.9	Upper Marker

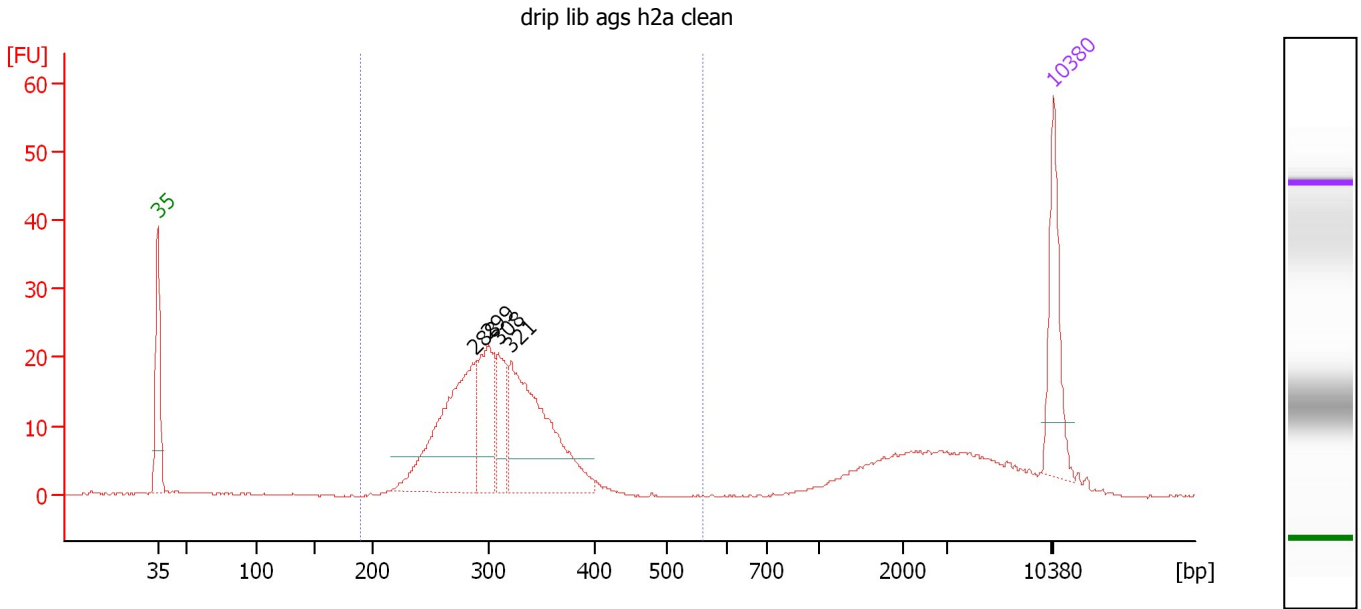
Region table for sample 4 : drip lib ags control clean

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
195	449	307	3,288.2	653.84	284.0	73	12.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-02\2013-07-02_006.xad

Created: 7/2/2013 4:06:47 PM
 Modified: 7/2/2013 4:47:18 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : drip lib ags h2a clean

Number of peaks found: 4 Corr. Area 1: 251.8
 Noise: 0.1

Peak table for sample 5 : drip lib ags h2a clean

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	288	240.49	1,267.1	
3	299	110.45	559.7	
4	308	57.37	281.8	
5	321	247.21	1,168.4	
6	10,380	75.00	10.9	Upper Marker

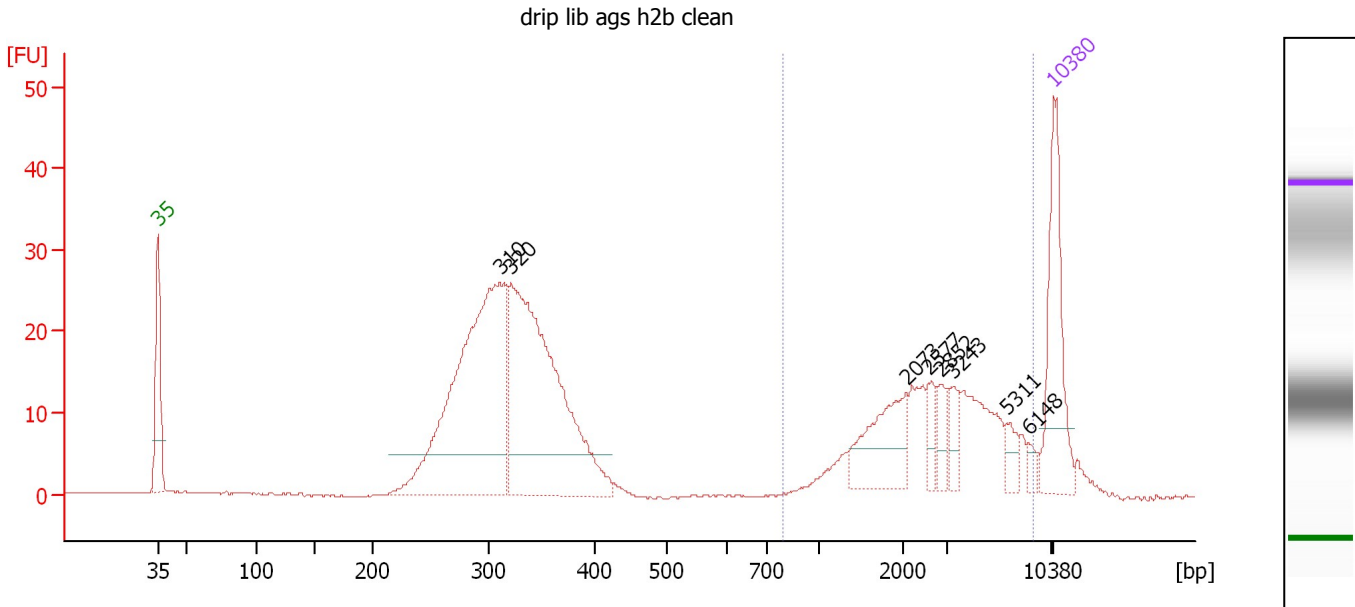
Region table for sample 5 : drip lib ags h2a clean

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
190	561	307	3,409.8	678.95	251.8	77	12.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-02\2013-07-02_006.xad

Created: 7/2/2013 4:06:47 PM
 Modified: 7/2/2013 4:47:18 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : drip lib ags h2b clean

Number of peaks found: 8 Corr. Area 1: 153.7
 Noise: 0.1

Peak table for sample 6 : drip lib ags h2b clean

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	310	377.85	1,845.1	
3	320	353.15	1,672.2	
4	2,073	58.22	42.5	
5	2,577	14.11	8.3	
6	2,852	13.76	7.3	
7	3,243	14.37	6.7	
8	5,311	11.14	3.2	
9	6,148	5.77	1.4	
10	10,380	75.00	10.9	Upper Marker

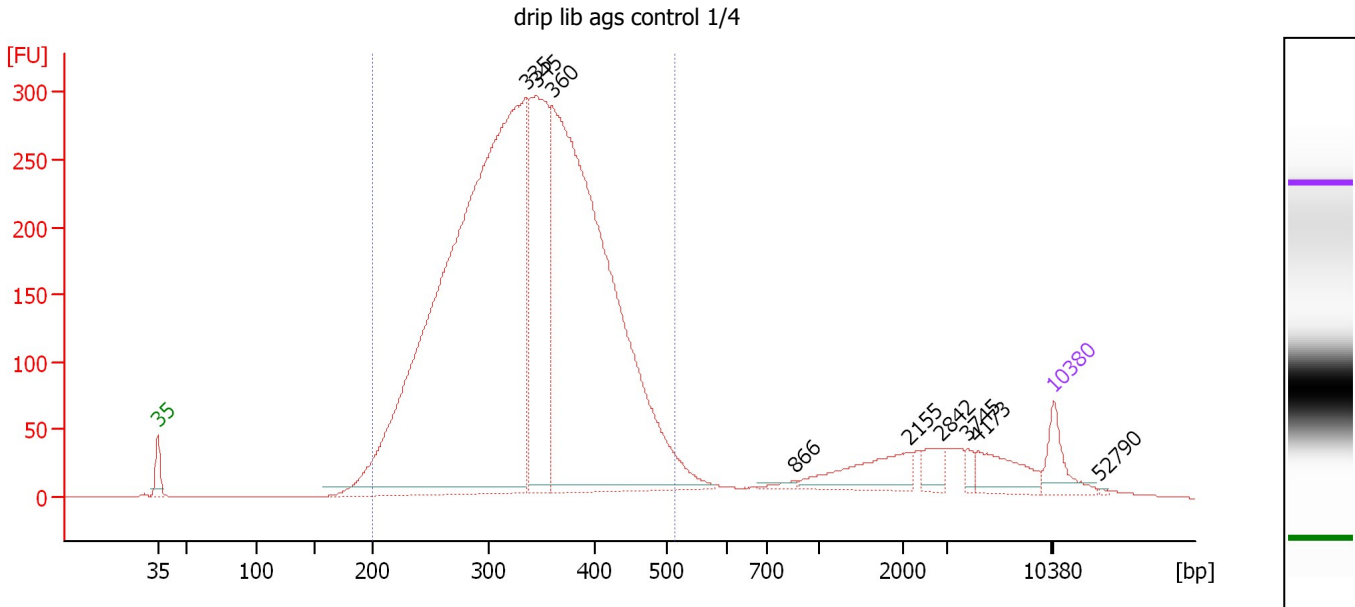
Region table for sample 6 : drip lib ags h2b clean

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
793	6,320	3,033	148.8	240.42	153.7	31	45.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-02\2013-07-02_006.xad

Created: 7/2/2013 4:06:47 PM
 Modified: 7/2/2013 4:47:18 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : drip lib ags control 1/4

Number of peaks found: 9 Corr. Area 1: 5,729.7
 Noise: 0.1

Peak table for sample 7 : drip lib ags control 1/4

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	335	3,615.85	16,363.8	
3	345	788.03	3,463.7	
4	360	2,520.30	10,609.8	
5	866	11.15	19.5	
6	2,155	134.30	94.4	
7	2,842	46.00	24.5	
8	3,745	19.13	7.7	
9	4,173	100.32	36.4	
10	10,380	75.00	10.9	Upper Marker
11	52,790	0.00	0.0	

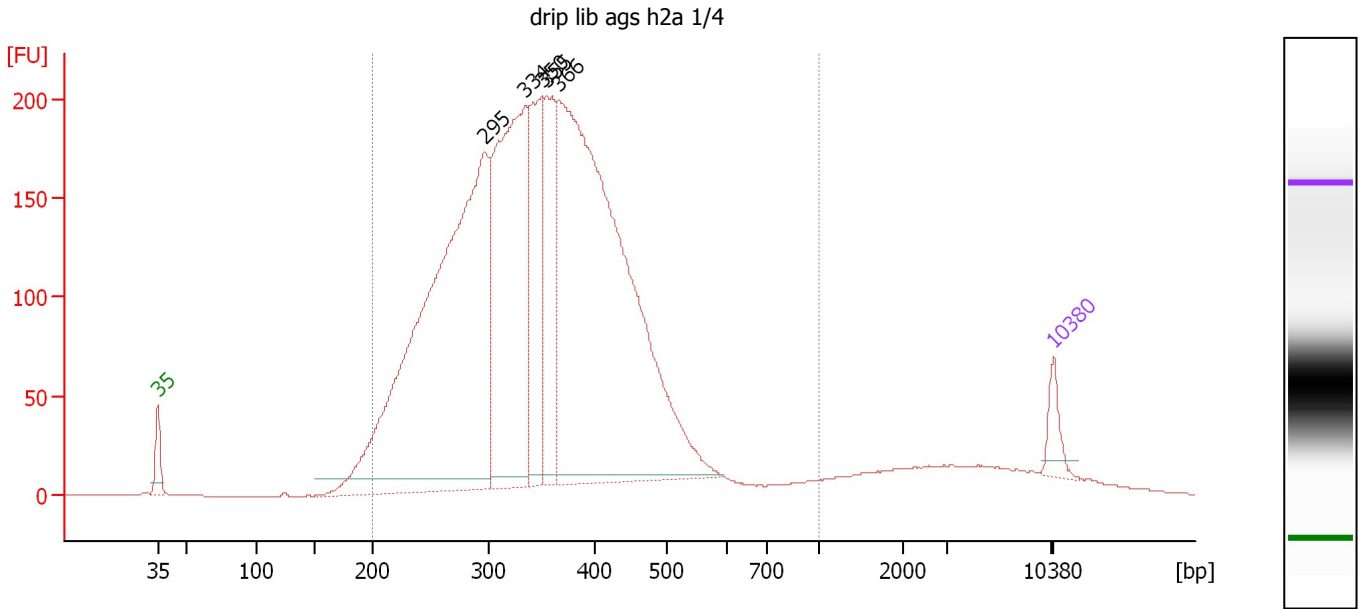
Region table for sample 7 : drip lib ags control 1/4

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	514	338	34,583.9	7,333.32	5,729.7	89	19.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-02\2013-07-02_006.xad

Created: 7/2/2013 4:06:47 PM
 Modified: 7/2/2013 4:47:18 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : drip lib ags h2a 1/4

Number of peaks found: 5 Corr. Area 1: 4,419.7
 Noise: 0.1

Peak table for sample 8 : drip lib ags h2a 1/4

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	295	3,093.68	15,865.7	
3	334	1,606.18	7,296.3	
4	350	591.43	2,558.9	
5	355	560.75	2,394.3	
6	366	3,251.10	13,452.3	
7	10,380	75.00	10.9	Upper Marker

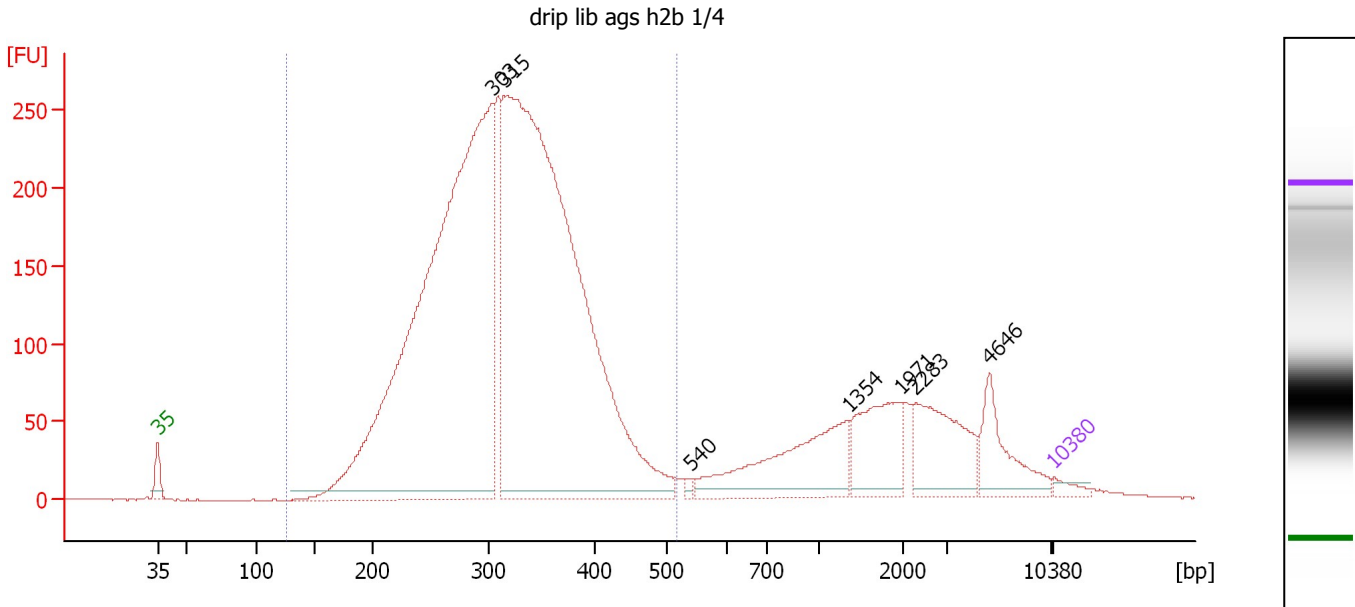
Region table for sample 8 : drip lib ags h2a 1/4

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	356	44,386.9	9,608.01	4,419.7	92	26.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-02\2013-07-02_006.xad

Created: 7/2/2013 4:06:47 PM
 Modified: 7/2/2013 4:47:18 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : drip lib ags h2b 1/4

Number of peaks found: 7 Corr. Area 1: 5,003.0
 Noise: 0.1

Peak table for sample 9 : drip lib ags h2b 1/4

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	303	13,153.91	65,835.0	
3	315	14,405.91	69,387.4	
4	540	54.96	154.1	
5	1,354	1,428.94	1,599.3	
6	1,971	916.36	704.4	
7	2,283	981.04	651.2	
8	4,646	635.98	207.4	
9	10,380	75.00	10.9	Upper Marker

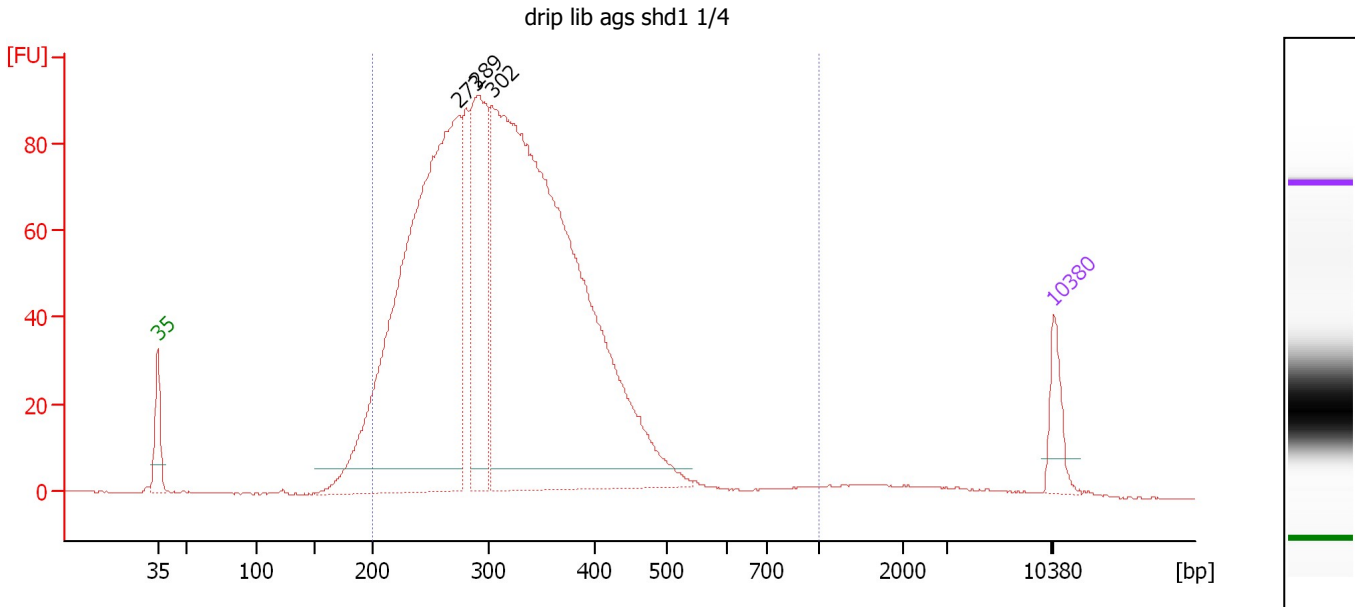
Region table for sample 9 : drip lib ags h2b 1/4

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
126	516	315	148,175.6	29,076.35	5,003.0	81	19.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-02\2013-07-02_006.xad

Created: 7/2/2013 4:06:47 PM
 Modified: 7/2/2013 4:47:18 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : drip lib ags shd1 1/4

Number of peaks found: 3 Corr. Area 1: 1,859.9
 Noise: 0.2

Peak table for sample 10 : drip lib ags shd1 1/4

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	273	2,172.68	12,076.1	
3	289	594.63	3,113.7	
4	302	3,042.71	15,258.3	
5	10,380	75.00	10.9	Upper Marker

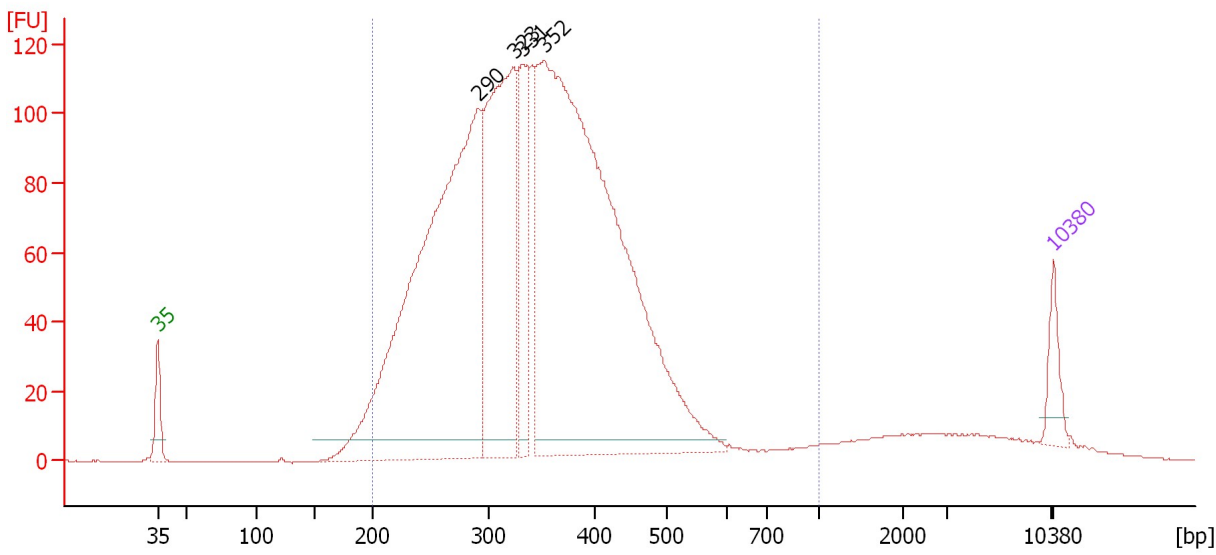
Region table for sample 10 : drip lib ags shd1 1/4

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	319	29,686.7	5,860.37	1,859.9	95	25.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-02\2013-07-02_006.xad

Created: 7/2/2013 4:06:47 PM
 Modified: 7/2/2013 4:47:18 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 :

Number of peaks found: 4
 Noise: 0.1
 Corr. Area 1: 2,517.0

Peak table for sample 11 :

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	290	2,277.24	11,901.6	
3	323	1,087.10	5,093.0	
4	331	336.54	1,538.6	
5	352	2,924.88	12,586.4	
6	10,380	75.00	10.9	Upper Marker

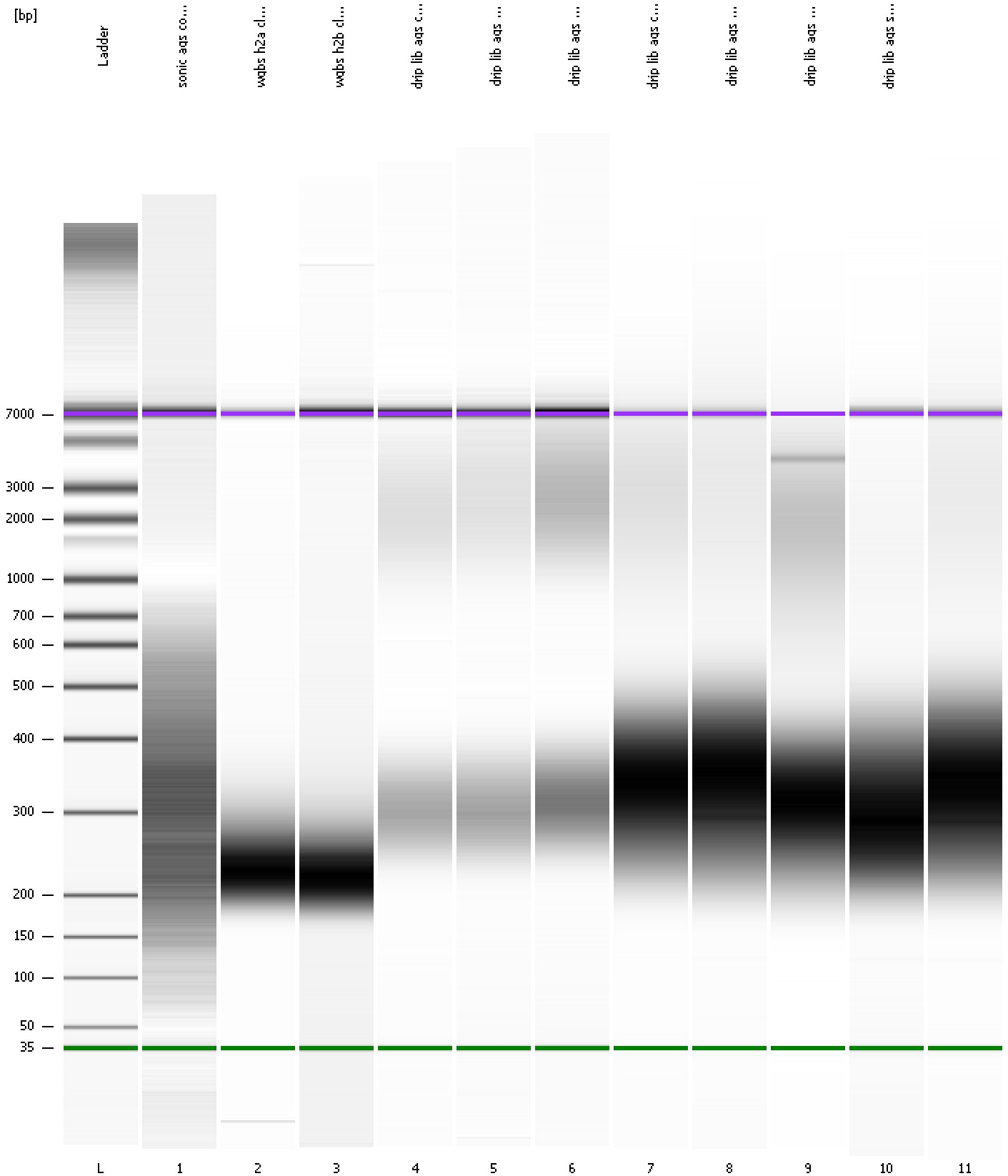
Region table for sample 11 :

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	350	32,849.0	6,989.58	2,517.0	93	26.9	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-02\2013-07-02_006.xad

Created: 7/2/2013 4:06:47 PM
Modified: 7/2/2013 4:47:18 PM

Gel Image

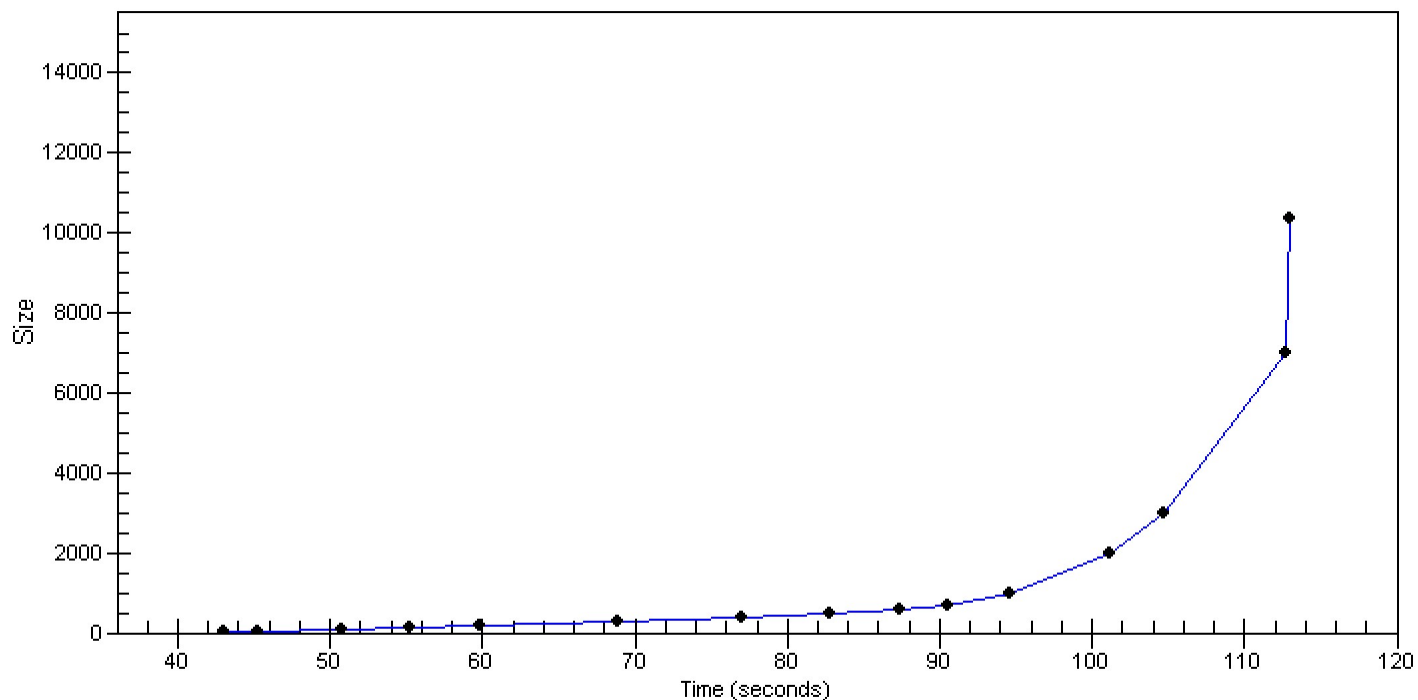


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-02\2013-07-02_006.xad

Created: 7/2/2013 4:06:47 PM
Modified: 7/2/2013 4:47:18 PM

Curves

Standard Curve



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-02\2013-07-02_006.xad

Created: 7/2/2013 4:06:47 PM
 Modified: 7/2/2013 4:47:18 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		7/2/2013 4:47:14 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-07-02\2013-07-02_006.xad)		Instrument	Run		7/2/2013 4:06:53 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		7/2/2013 4:06:53 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		7/2/2013 4:06:53 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		7/2/2013 4:06:53 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		7/2/2013 4:06:53 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		7/2/2013 4:06:53 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		7/2/2013 4:06:53 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1