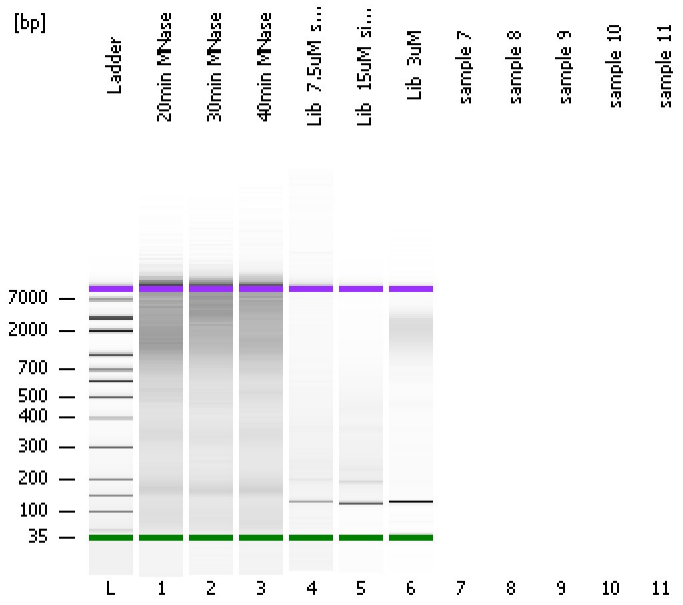
Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-05\2015-03-05_001.xad

Created: 3/5/2015 12:38:20 PM
Modified: 3/5/2015 1:28:07 PM

Electrophoresis File Run Summary



Instrument Information:

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

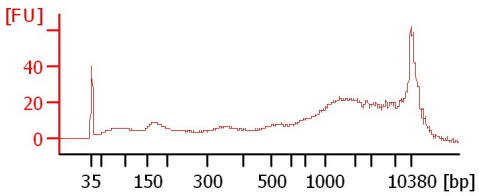
Assay Information:

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

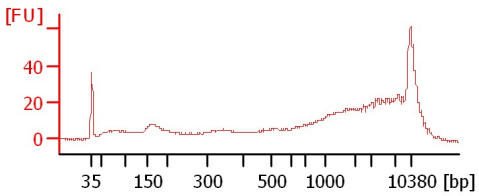
Chip Information:

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

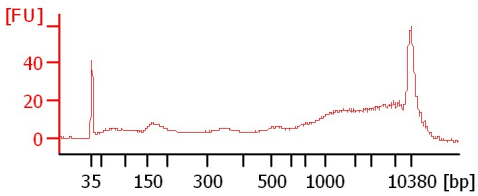
20min MNase



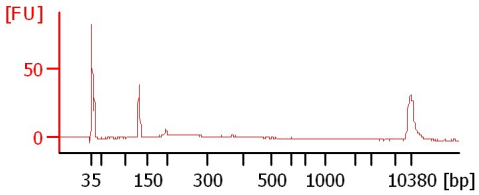
30min MNase



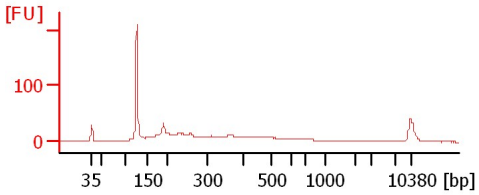
40min MNase



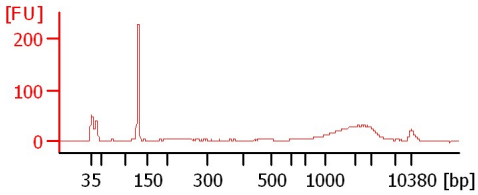
Lib_7.5uM_size_selected



Lib_15uM_size_selected



Lib_3uM



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-05\2015-03-05_001.xad

Created: 3/5/2015 12:38:20 PM
Modified: 3/5/2015 1:28:07 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
20min MNase		☐	✔			
30min MNase		☐	✔			
40min MNase		☐	✔			
Lib_7.5uM_size_selected		☐	✔			
Lib_15uM_size_selected		☐	✔			
Lib_3uM		☐	✔			
sample 7		☐				
sample 8		☐				
sample 9		☐				
sample 10		☐				
sample 11		☐				
Ladder		☐	✔			

Chip Lot # **Reagent Kit Lot #**

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-05\2015-03-05_001.xad

Created: 3/5/2015 12:38:20 PM
Modified: 3/5/2015 1:28:07 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

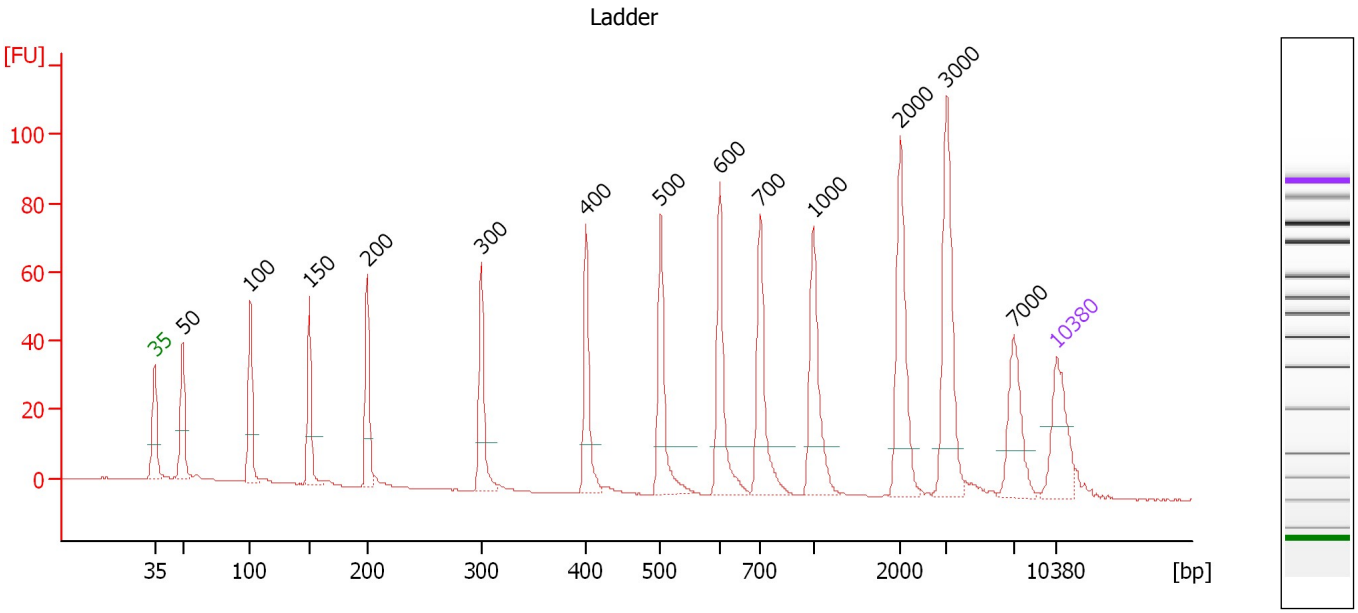
Ladder

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\2015-03-05\2015-03-05_001.xad

Created: 3/5/2015 12:38:20 PM
Modified: 3/5/2015 1:28:07 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

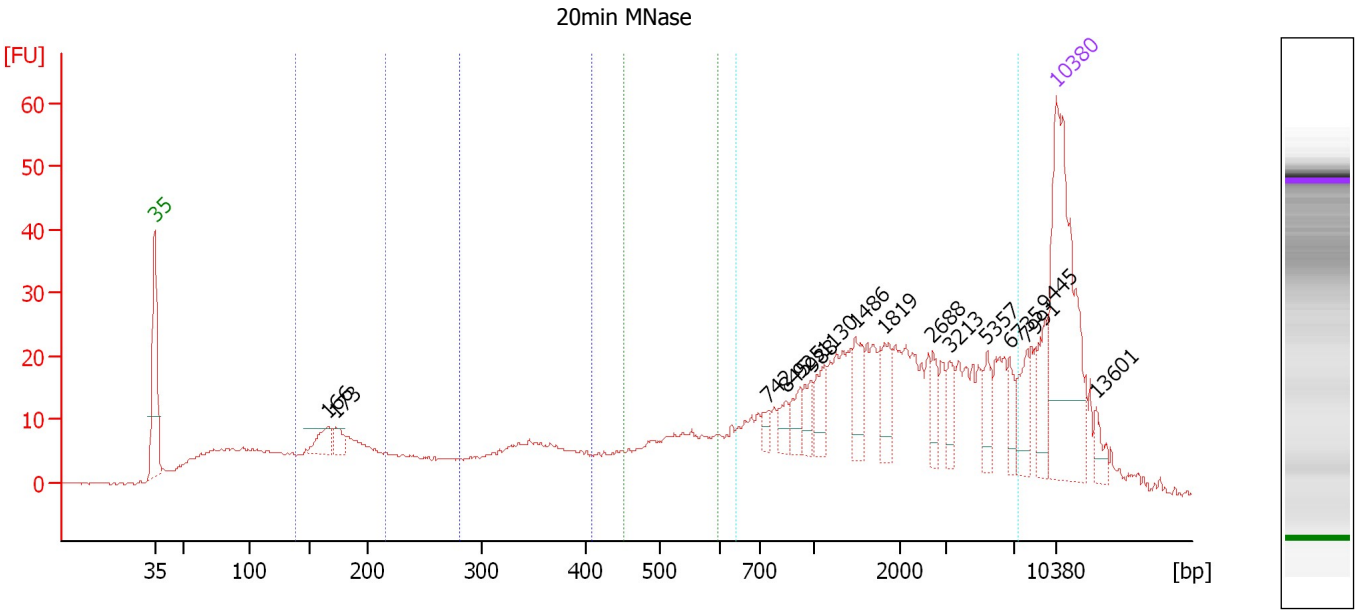
Peak table for Ladder

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	45.17
3		100	150.00	2,272.7	Ladder Peak	50.41
4		150	150.00	1,515.2	Ladder Peak	55.00
5		200	150.00	1,136.4	Ladder Peak	59.50
6		300	150.00	757.6	Ladder Peak	68.34
7		400	150.00	568.2	Ladder Peak	76.49
8		500	150.00	454.5	Ladder Peak	82.27
9		600	150.00	378.8	Ladder Peak	86.87
10		700	150.00	324.7	Ladder Peak	90.03
11		1,000	150.00	227.3	Ladder Peak	94.13
12		2,000	150.00	113.6	Ladder Peak	100.90
13		3,000	150.00	75.8	Ladder Peak	104.50
14		7,000	150.00	32.5	Ladder Peak	109.74
15		10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-05\2015-03-05_001.xad

Created: 3/5/2015 12:38:20 PM
Modified: 3/5/2015 1:28:07 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 1 : 20min MNase

Height Threshold [FU] : 4

Overall Results for sample 1 : 20min MNase

Number of peaks found:	16	Corr. Area 2:	87.7
Noise:	0.2	Corr. Area 3:	72.1
Corr. Area 1:	88.1	Corr. Area 4:	421.8

Peak table for sample 1 : 20min MNase

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	166	12.89	117.4		56.48
3	173	7.87	69.1		57.03
4	742	4.25	8.7		90.60
5	845	6.43	11.5		92.01
6	925	8.35	13.7		93.11
7	988	8.61	13.2		93.96
8	1,130	11.05	14.8		95.01
9	1,486	14.23	14.5		97.42
10	1,819	13.41	11.2		99.67
11	2,688	8.02	4.5		103.38
12	3,213	8.27	3.9		104.78
13	5,357	8.55	2.4		107.59
14	6,735	7.79	1.8		109.39
15	7,991	12.07	2.3		110.70
16	9,445	13.32	2.1		112.10
17	10,380	75.00	10.9	Upper Marker	113.00
18	13,601	0.00	0.0		116.11

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-05\2015-03-05_001.xad

Created: 3/5/2015 12:38:20 PM
Modified: 3/5/2015 1:28:07 PM

Electropherogram Summary Continued ...

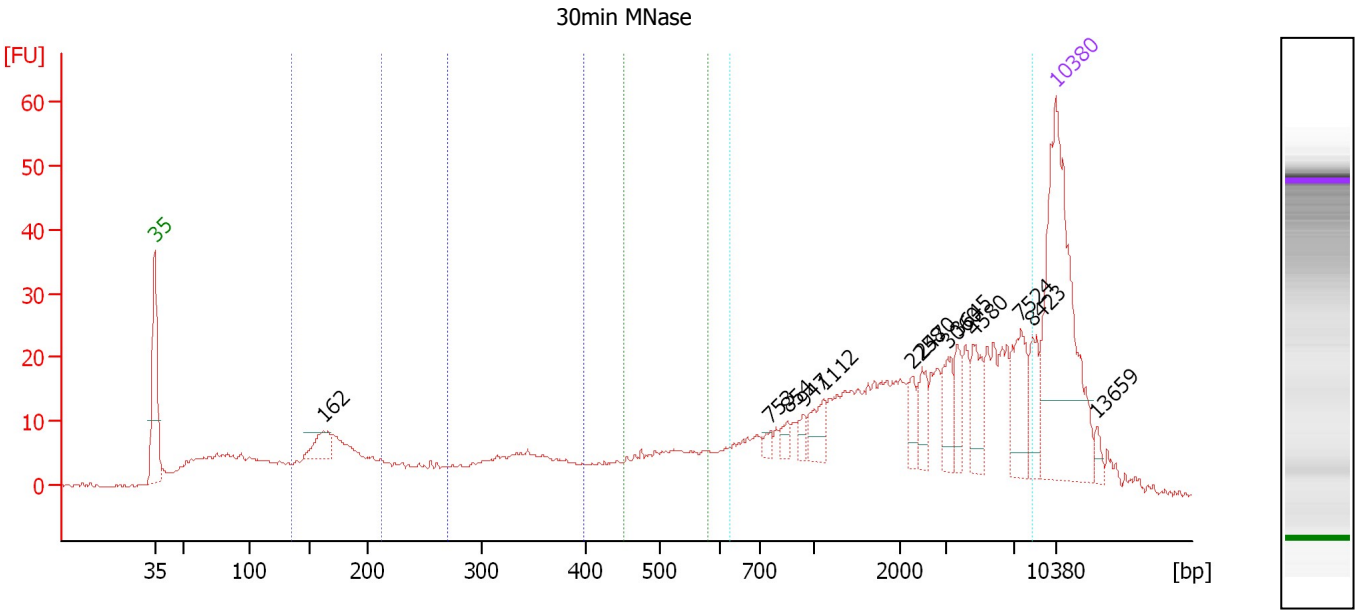
... Region table for sample 1 : 20min MNase

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/µl]	Molarity [pmol/l]	Color
138	176	216	88.1	10	11.8	116.59	1,018.3	
282	345	408	87.7	9	10.0	94.34	418.2	
449	523	598	72.1	8	8.2	70.16	204.7	
638	2,503	7,276	421.8	46	70.6	336.08	332.6	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-05\2015-03-05_001.xad

Created: 3/5/2015 12:38:20 PM
Modified: 3/5/2015 1:28:07 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 2 : 30min MNase

Height Threshold [FU] : 4

Overall Results for sample 2 : 30min MNase

Number of peaks found:	13	Corr. Area 2:	70.9
Noise:	0.3	Corr. Area 3:	48.1
Corr. Area 1:	75.8	Corr. Area 4:	383.6

Peak table for sample 2 : 30min MNase

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	162	13.92	129.9		56.11
3	753	2.57	5.2		90.76
4	854	3.68	6.5		92.13
5	947	3.60	5.8		93.41
6	1,112	9.91	13.5		94.89
7	2,258	6.74	4.5		101.83
8	2,470	8.04	4.9		102.59
9	3,060	9.77	4.8		104.58
10	3,645	7.76	3.2		105.35
11	4,580	12.01	4.0		106.57
12	7,524	17.59	3.5		110.24
13	8,423	10.17	1.8		111.11
14	10,380	75.00	10.9	Upper Marker	113.00
15	13,659	0.00	0.0		116.16

Region table for sample 2 : 30min MNase

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/µl]	Molarity [pmol/l]	Color
135	173	213	75.8	10	11.7	88.78	789.6	
271	335	398	70.9	9	10.5	67.85	310.0	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-05\2015-03-05_001.xad

Created: 3/5/2015 12:38:20 PM
Modified: 3/5/2015 1:28:07 PM

Electropherogram Summary Continued ...

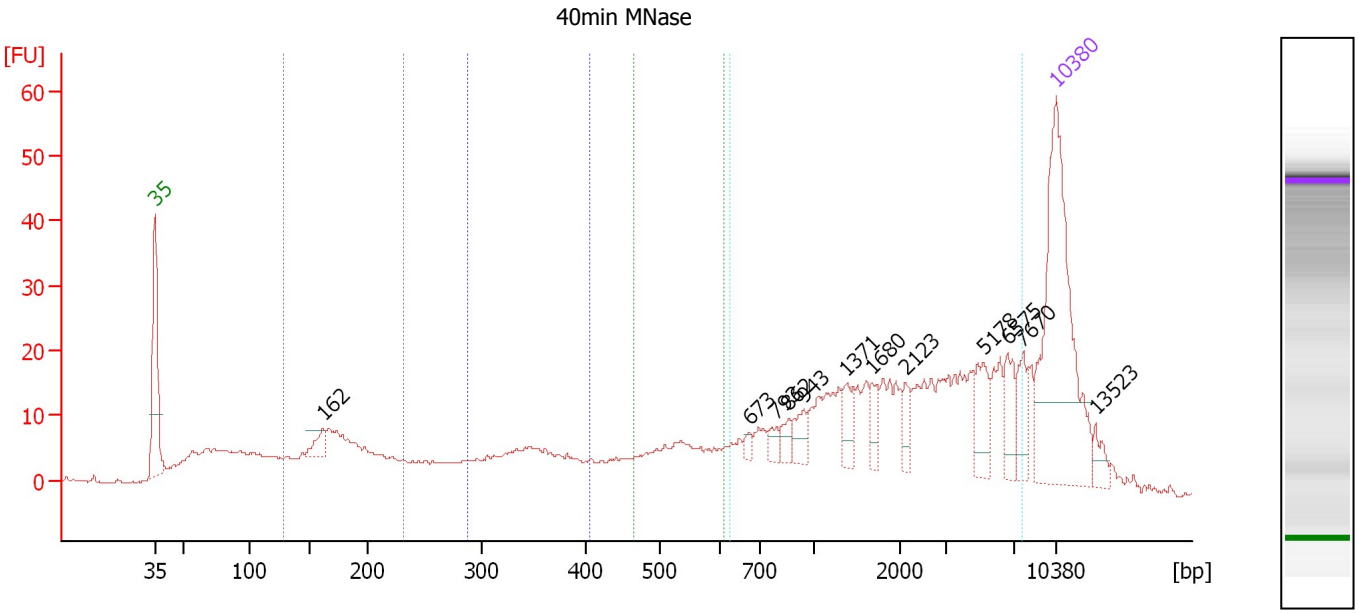
... Region table for sample 2 : 30min MNase

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/µl]	Molarity [pmol/l]	Color
450	514	581	48.1	6	7.4	41.49	123.2	
626	3,158	8,467	383.6	51	70.9	266.78	234.2	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-05\2015-03-05_001.xad

Created: 3/5/2015 12:38:20 PM
Modified: 3/5/2015 1:28:07 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 3 : 40min MNase

Height Threshold [FU] : 4

Overall Results for sample 3 : 40min MNase

Number of peaks found:	12	Corr. Area 2:	66.0
Noise:	0.2	Corr. Area 3:	51.8
Corr. Area 1:	92.1	Corr. Area 4:	339.8

Peak table for sample 3 : 40min MNase

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	162	8.28	77.5		56.07
3	673	2.42	5.5		89.16
4	793	3.80	7.3		91.30
5	862	4.69	8.2		92.25
6	943	7.13	11.5		93.34
7	1,371	8.16	9.0		96.64
8	1,680	6.19	5.6		98.73
9	2,123	5.85	4.2		101.34
10	5,178	13.32	3.9		107.35
11	6,575	10.49	2.4		109.18
12	7,670	9.33	1.8		110.39
13	10,380	75.00	10.9	Upper Marker	113.00
14	13,523	0.00	0.0		116.03

Region table for sample 3 : 40min MNase

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/µl]	Molarity [pmol/l]	Color
128	178	232	92.1	13	15.1	109.65	960.1	
289	346	406	66.0	9	9.2	63.80	280.7	
463	533	608	51.8	7	7.6	45.21	129.5	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-05\2015-03-05_001.xad

Created: 3/5/2015 12:38:20 PM
Modified: 3/5/2015 1:28:07 PM

Electropherogram Summary Continued ...

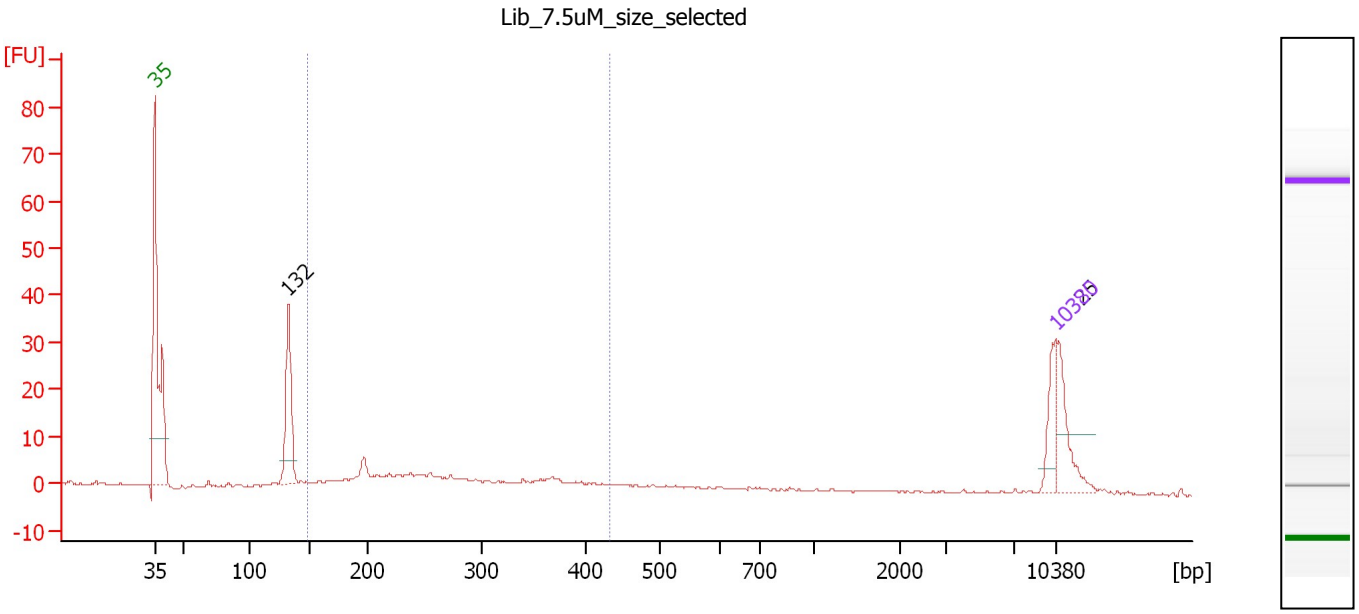
... Region table for sample 3 : 40min MNase

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/µl]	Molarity [pmol/l]	Color
627	2,781	7,682	339.8	47	71.0	243.44	231.3	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-05\2015-03-05_001.xad

Created: 3/5/2015 12:38:20 PM
Modified: 3/5/2015 1:28:07 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : Lib_7.5uM_size_selected

Number of peaks found:	2	Corr. Area 1:	67.7
Noise:	0.2		

Peak table for sample 4 : Lib_7.5uM_size_selected

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	132	174.53	1,996.1		53.39
3	10,325	48.42	7.1		112.95
4	10,380	75.00	10.9	Upper Marker	113.00

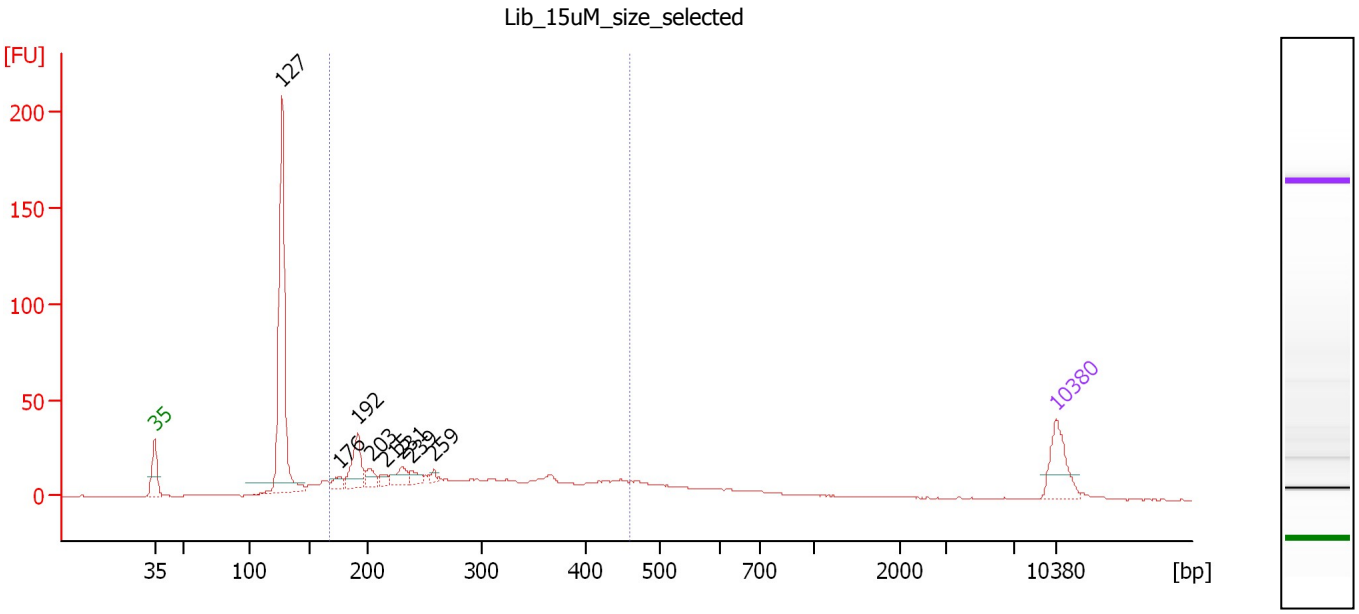
Region table for sample 4 : Lib_7.5uM_size_selected

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/µl]	Molarity [pmol/l]	Color
148	273	433	67.7	46	26.6	294.33	1,806.1	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-05\2015-03-05_001.xad

Created: 3/5/2015 12:38:20 PM
Modified: 3/5/2015 1:28:07 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : Lib_15uM_size_selected

Number of peaks found:	8	Corr. Area 1:	359.9
Noise:	0.1		

Peak table for sample 5 : Lib_15uM_size_selected

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	127	593.01	7,074.9		52.89
3	176	26.18	225.0		57.37
4	192	100.29	793.4		58.74
5	203	32.73	244.2		59.78
6	215	16.15	113.5		60.87
7	231	39.57	259.6		62.23
8	239	21.47	136.2		62.95
9	259	11.04	64.6		64.69
10	10,380	75.00	10.9	Upper Marker	113.00

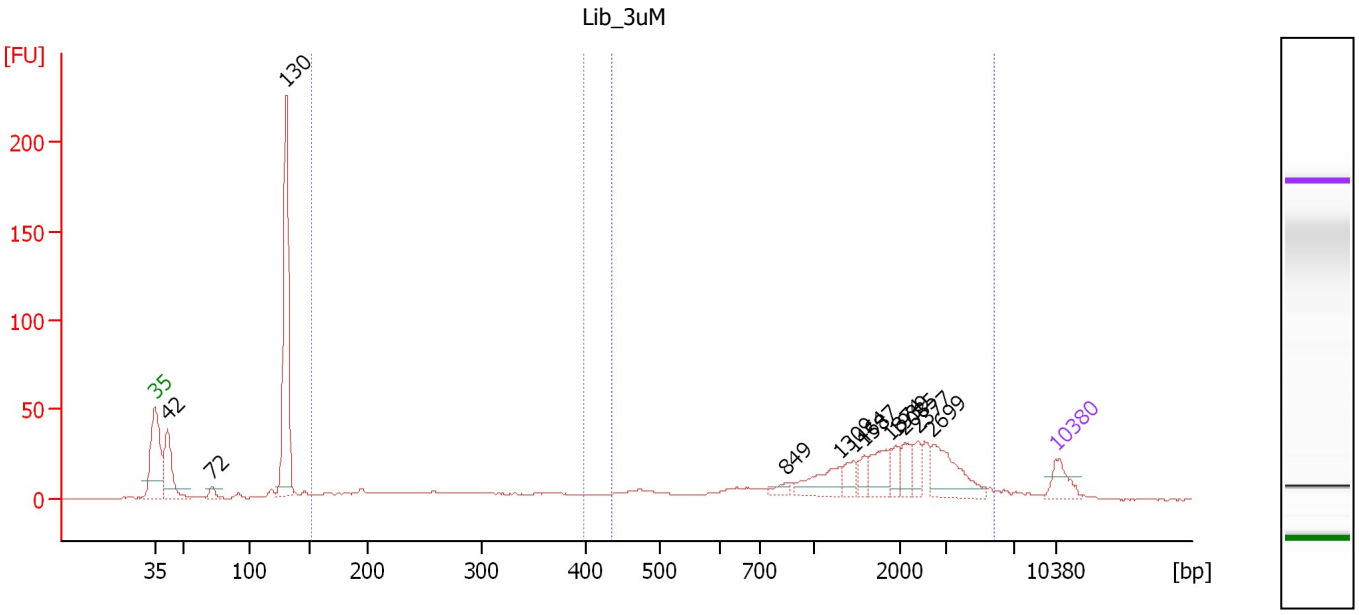
Region table for sample 5 : Lib_15uM_size_selected

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/µl]	Molarity [pmol/l]	Color
168	287	459	359.9	51	28.5	866.41	5,137.5	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-05\2015-03-05_001.xad

Created: 3/5/2015 12:38:20 PM
Modified: 3/5/2015 1:28:07 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : Lib_3uM

Number of peaks found:	12	Corr. Area 1:	102.6
Noise:	0.1	Corr. Area 2:	392.9

Peak table for sample 6 : Lib_3uM

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	325.44	11,774.3		44.00
3	72	36.85	780.3		47.43
4	130	957.63	11,139.5		53.19
5	849	33.02	58.9		92.07
6	1,309	129.86	150.3		96.22
7	1,464	62.44	64.6		97.27
8	1,587	49.95	47.7		98.10
9	1,874	114.59	92.7		100.04
10	1,939	53.35	41.7		100.48
11	2,085	72.20	52.5		101.20
12	2,377	60.90	38.8		102.26
13	2,699	191.16	107.3		103.42
14	10,380	75.00	10.9	Upper Marker	113.00

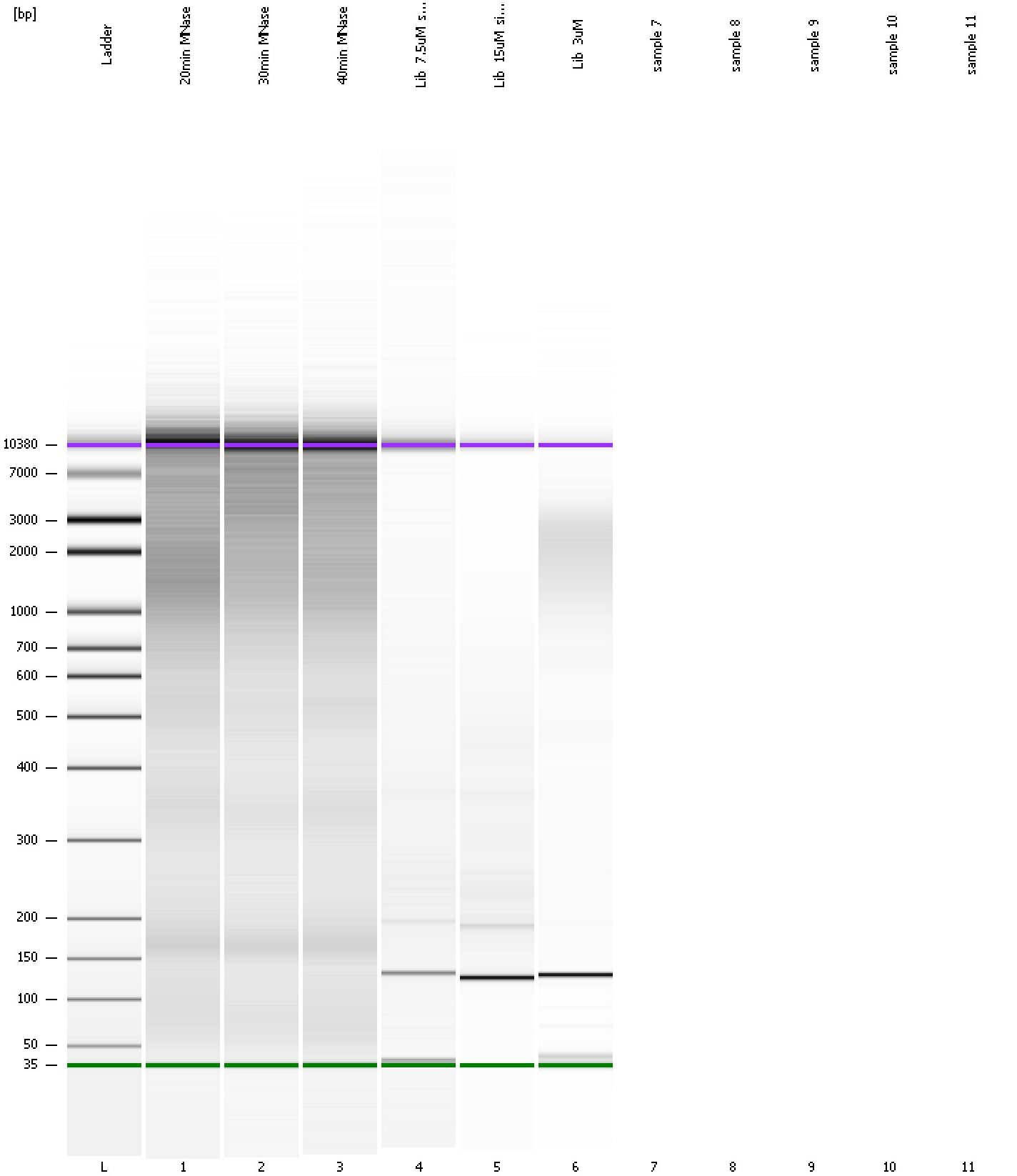
Region table for sample 6 : Lib_3uM

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/µl]	Molarity [pmol/l]	Color
152	270	398	102.6	13	25.4	439.92	2,718.4	
433	1,935	5,823	392.9	49	55.1	1,145.31	1,391.2	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-05\2015-03-05_001.xad

Created: 3/5/2015 12:38:20 PM
Modified: 3/5/2015 1:28:07 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-05\2015-03-05_001.xad

Created: 3/5/2015 12:38:20 PM
Modified: 3/5/2015 1:28:07 PM

Invalid Samples

Sample 7 has not been run, no results available.

Sample 8 has not been run, no results available.

Sample 9 has not been run, no results available.

Sample 10 has not been run, no results available.

Sample 11 has not been run, no results available.

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-05\2015-03-05_001.xad

Created: 3/5/2015 12:38:20 PM
Modified: 3/5/2015 1:28:07 PM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 7)		Instrument	Run		3/5/2015 1:05:21 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2015-03-05\2015-03-05_001.xad)		Instrument	Run		3/5/2015 12:38:26 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		3/5/2015 12:38:26 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		3/5/2015 12:38:26 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		3/5/2015 12:38:26 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		3/5/2015 12:38:26 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		3/5/2015 12:38:26 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		3/5/2015 12:38:26 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1