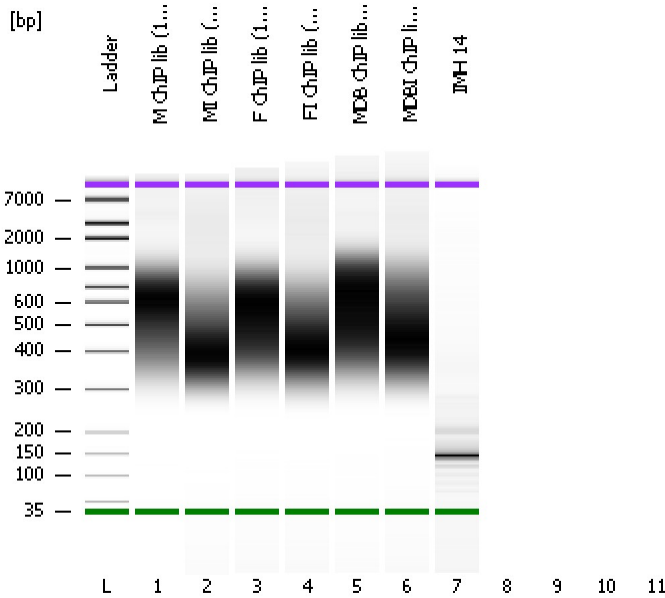


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-04-14\2014-04-14_001.xad

Created: 4/14/2014 9:37:15 AM
Modified: 4/14/2014 10:10:49 AM

Electrophoresis File Run Summary



Instrument Information:

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

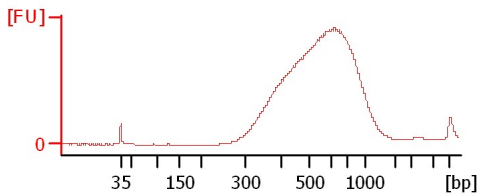
Assay Information:

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

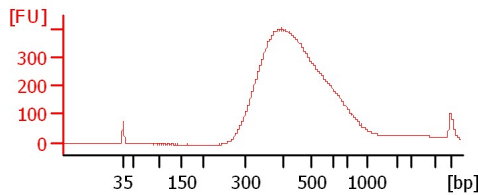
Chip Information:

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

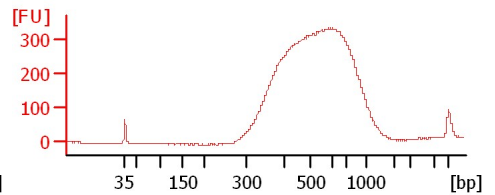
M ChIP lib (1:10)



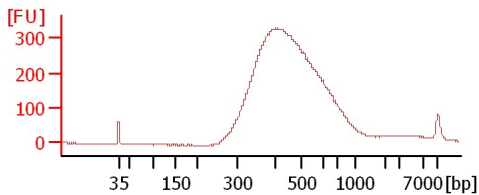
MI ChIP lib (1:10)



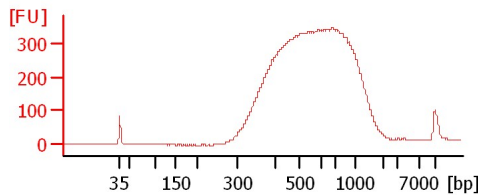
F ChIP lib (1:10)



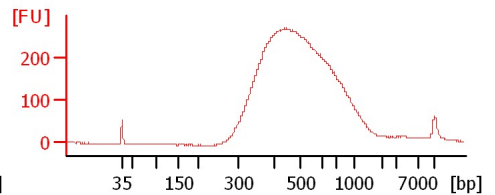
FI ChIP lib (1:10)



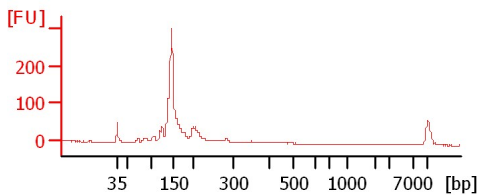
MDB ChIP lib (1:10)



MDBI ChIP lib (1:10)



IMH 14



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-04-14\2014-04-14_001.xad

Created: 4/14/2014 9:37:15 AM
 Modified: 4/14/2014 10:10:49 AM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
M ChIP lib (1:10)		<input type="checkbox"/>	✓			
MI ChIP lib (1:10)		<input type="checkbox"/>	✓			
F ChIP lib (1:10)		<input type="checkbox"/>	✓			
FI ChIP lib (1:10)		<input type="checkbox"/>	✓			
MDB ChIP lib (1:10)		<input type="checkbox"/>	✓			
MDBI ChIP lib (1:10)		<input type="checkbox"/>	✓			
IMH 14		<input type="checkbox"/>	✓			
		<input type="checkbox"/>				
		<input type="checkbox"/>				
		<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\2014-04-14\2014-04-14_001.xad

Created: 4/14/2014 9:37:15 AM
Modified: 4/14/2014 10:10:49 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

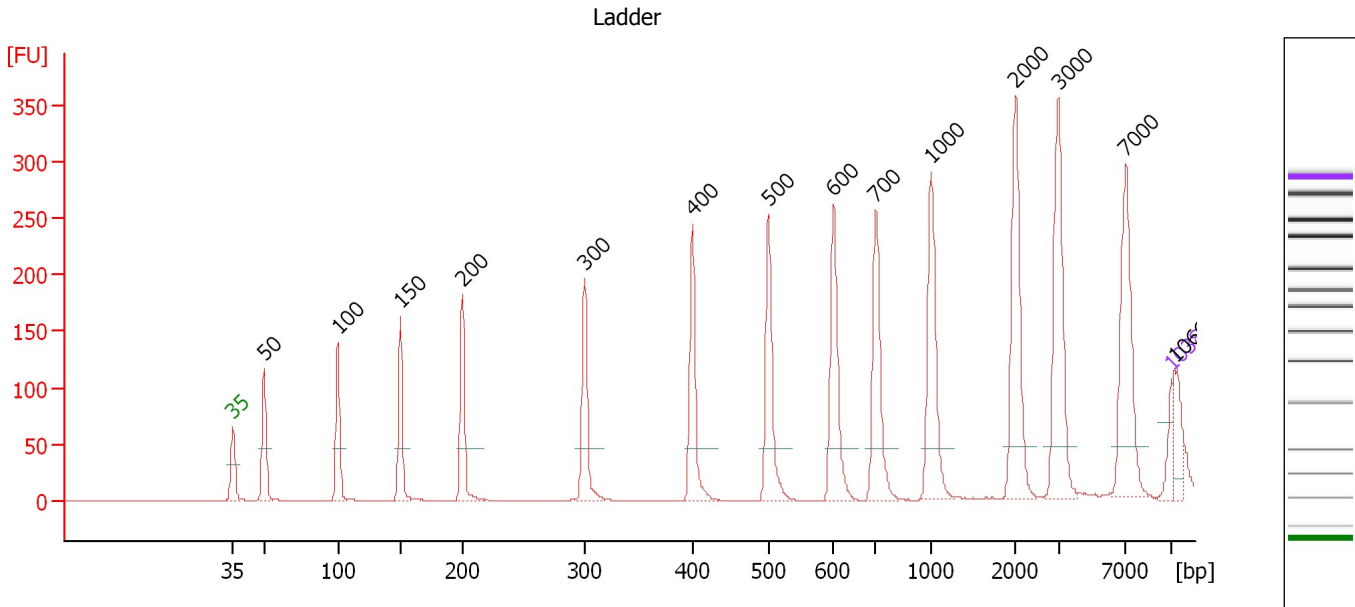
Ladder

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:\...ents and Settings\Bioanalyzer\2014-04-14\2014-04-14_001.xad

Created: 4/14/2014 9:37:15 AM
 Modified: 4/14/2014 10:10:49 AM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

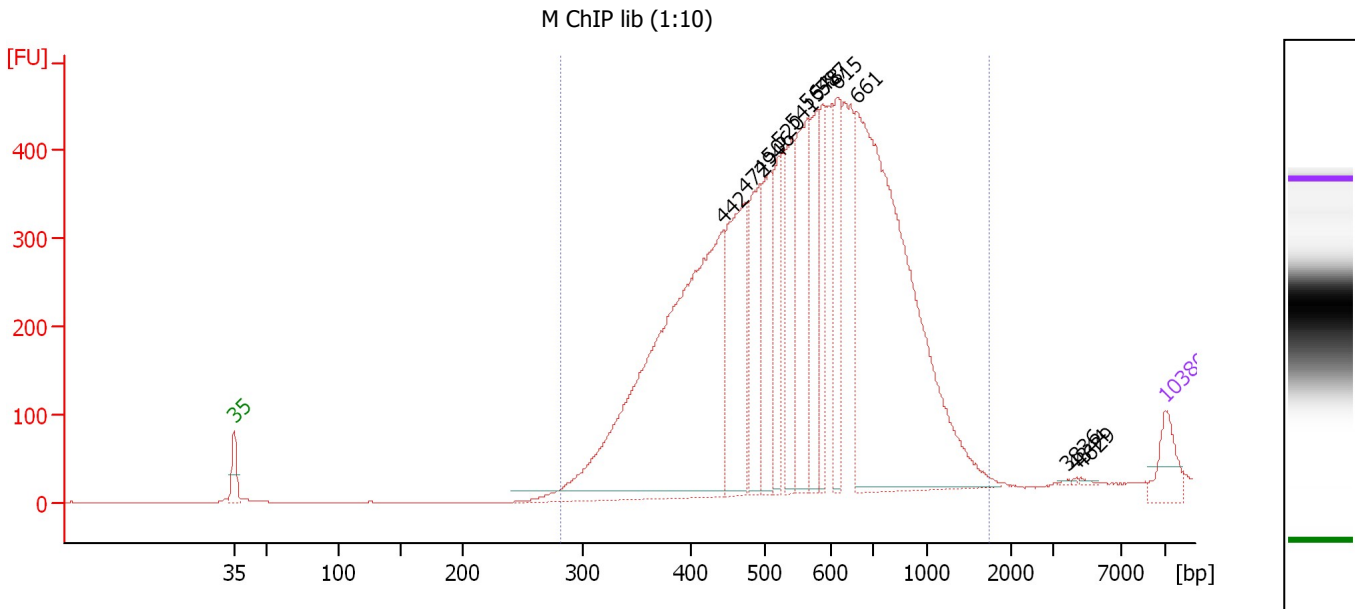
Peak table for Ladder

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	45.35	50	150.00	4,545.5	Ladder Peak
3	50.84	100	150.00	2,272.7	Ladder Peak
4	55.50	150	150.00	1,515.2	Ladder Peak
5	60.15	200	150.00	1,136.4	Ladder Peak
6	69.26	300	150.00	757.6	Ladder Peak
7	77.30	400	150.00	568.2	Ladder Peak
8	82.95	500	150.00	454.5	Ladder Peak
9	87.85	600	150.00	378.8	Ladder Peak
10	90.99	700	150.00	324.7	Ladder Peak
11	95.09	1,000	150.00	227.3	Ladder Peak
12	101.42	2,000	150.00	113.6	Ladder Peak
13	104.60	3,000	150.00	75.8	Ladder Peak
14	109.66	7,000	150.00	32.5	Ladder Peak
15	113.00	10,380	75.00	10.9	Upper Marker
16	113.28	10,662	0.00	0.0	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-04-14\2014-04-14_001.xad

Created: 4/14/2014 9:37:15 AM
 Modified: 4/14/2014 10:10:49 AM

Electropherogram Summary Continued ...



Overall Results for sample 1 : M ChIP lib (1:10)

Number of peaks found: 14 Corr. Area 1: 9,297.3
 Noise: 0.2

Peak table for sample 1 : M ChIP lib (1:10)

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	79.70	442	1,798.99	6,159.9	
3	81.39	472	519.35	1,666.0	
4	82.59	494	333.77	1,024.5	
5	83.23	506	252.19	755.6	
6	83.96	520	215.91	628.5	
7	84.96	541	221.52	620.4	
8	86.08	564	404.56	1,087.0	
9	86.77	578	240.59	630.8	
10	87.21	587	184.97	477.5	
11	88.33	615	226.58	558.0	
12	89.77	661	1,658.90	3,801.3	
13	105.66	3,836	2.50	1.0	
14	106.30	4,344	2.07	0.7	
15	106.66	4,629	3.21	1.0	
16	113.00	10,380	75.00	10.9	Upper Marker

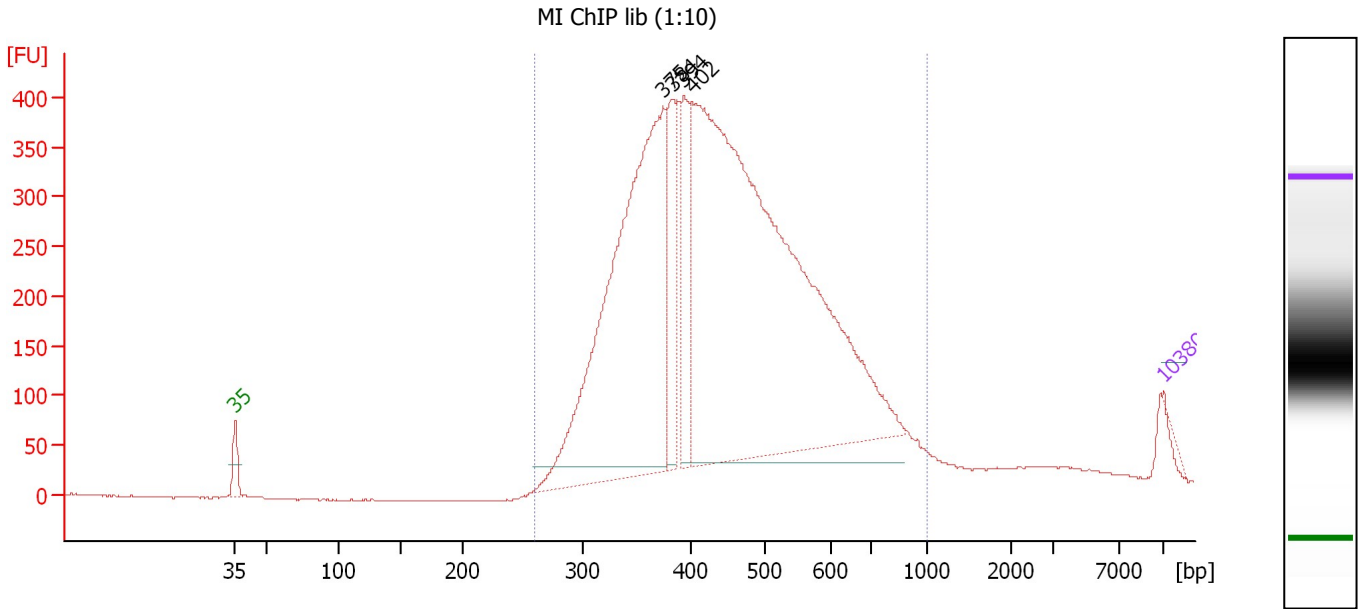
Region table for sample 1 : M ChIP lib (1:10)

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
280	1,743	590	18,913.1	6,497.71	9,297.3	100	33.6

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-04-14\2014-04-14_001.xad

Created: 4/14/2014 9:37:15 AM
 Modified: 4/14/2014 10:10:49 AM

Electropherogram Summary Continued ...



Overall Results for sample 2 : MI ChIP lib (1:10)

Number of peaks found: 4 Corr. Area 1: 8,387.3
 Noise: 0.4

Peak table for sample 2 : MI ChIP lib (1:10)

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	75.27	375	174,973.38	707,582.3	
3	76.03	384	25,043.78	98,771.8	
4	76.79	394	26,006.37	100,093.6	
5	77.44	402	298,254.13	1,123,098.8	
6	113.00	10,380	75.00	10.9	Upper Marker

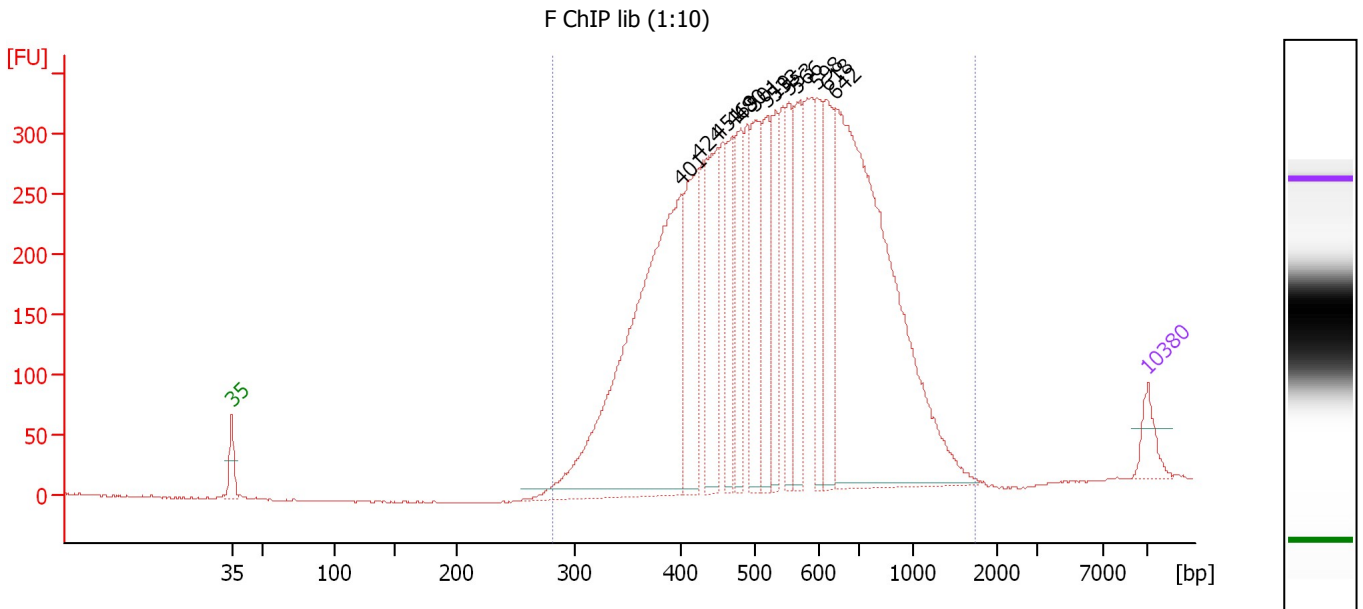
Region table for sample 2 : MI ChIP lib (1:10)

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. for Area	% of Total	Size distribution in CV [%]
259	1,000	458	2,111,836.8	587,931.75	8,387.3	96	26.8

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-04-14\2014-04-14_001.xad

Created: 4/14/2014 9:37:15 AM
 Modified: 4/14/2014 10:10:49 AM

Electropherogram Summary Continued ...



Overall Results for sample 3 : F ChIP lib (1:10)

Number of peaks found: 13 Corr. Area 1: 7,640.4
 Noise: 0.7

Peak table for sample 3 : F ChIP lib (1:10)

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	77.35	401	2,077.28	7,853.0	
3	78.65	424	526.42	1,881.8	
4	80.16	451	498.22	1,675.5	
5	81.22	469	294.32	950.2	
6	81.83	480	337.90	1,066.4	
7	83.01	501	460.72	1,392.9	
8	83.91	519	314.35	916.8	
9	84.56	533	291.80	829.8	
10	85.54	553	288.95	792.0	
11	86.19	566	379.58	1,015.9	
12	87.74	598	309.98	785.8	
13	88.43	618	359.90	881.7	
14	89.16	642	2,210.60	5,218.6	
15	113.00	10,380	75.00	10.9	Upper Marker

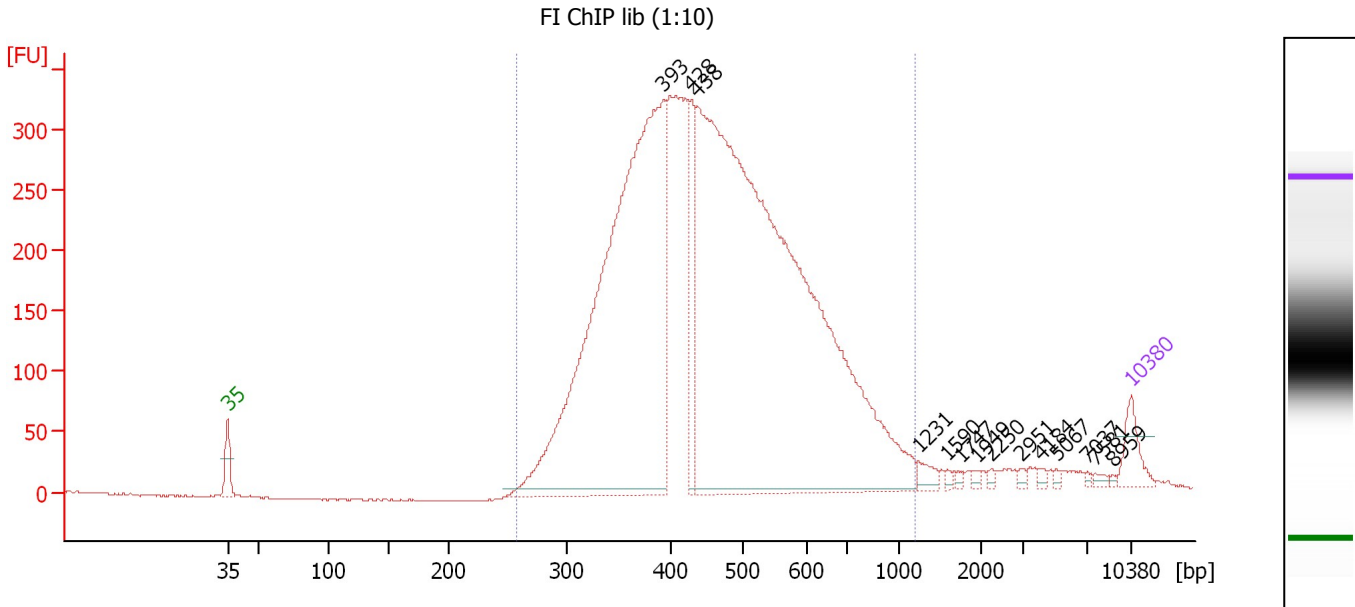
Region table for sample 3 : F ChIP lib (1:10)

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
280	1,749	565	28,339.7	9,374.02	7,640.4	100	33.4

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-04-14\2014-04-14_001.xad

Created: 4/14/2014 9:37:15 AM
 Modified: 4/14/2014 10:10:49 AM

Electropherogram Summary Continued ...



Overall Results for sample 4 : FI ChIP lib (1:10)

Number of peaks found: 14 Corr. Area 1: 7,129.7
 Noise: 0.5

Peak table for sample 4 : FI ChIP lib (1:10)

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	76.76	393	3,095.82	11,928.1	
3	78.91	428	279.88	989.8	
4	79.45	438	4,678.84	16,188.3	
5	96.55	1,231	35.40	43.6	
6	98.83	1,590	10.69	10.2	
7	99.82	1,747	10.54	9.1	
8	101.10	1,949	11.15	8.7	
9	102.21	2,250	8.85	6.0	
10	104.45	2,951	9.41	4.8	
11	106.10	4,184	10.35	3.7	
12	107.21	5,067	7.00	2.1	
13	109.69	7,037	5.68	1.2	
14	110.23	7,581	11.48	2.3	
15	111.60	8,959	4.13	0.7	
16	113.00	10,380	75.00	10.9	Upper Marker

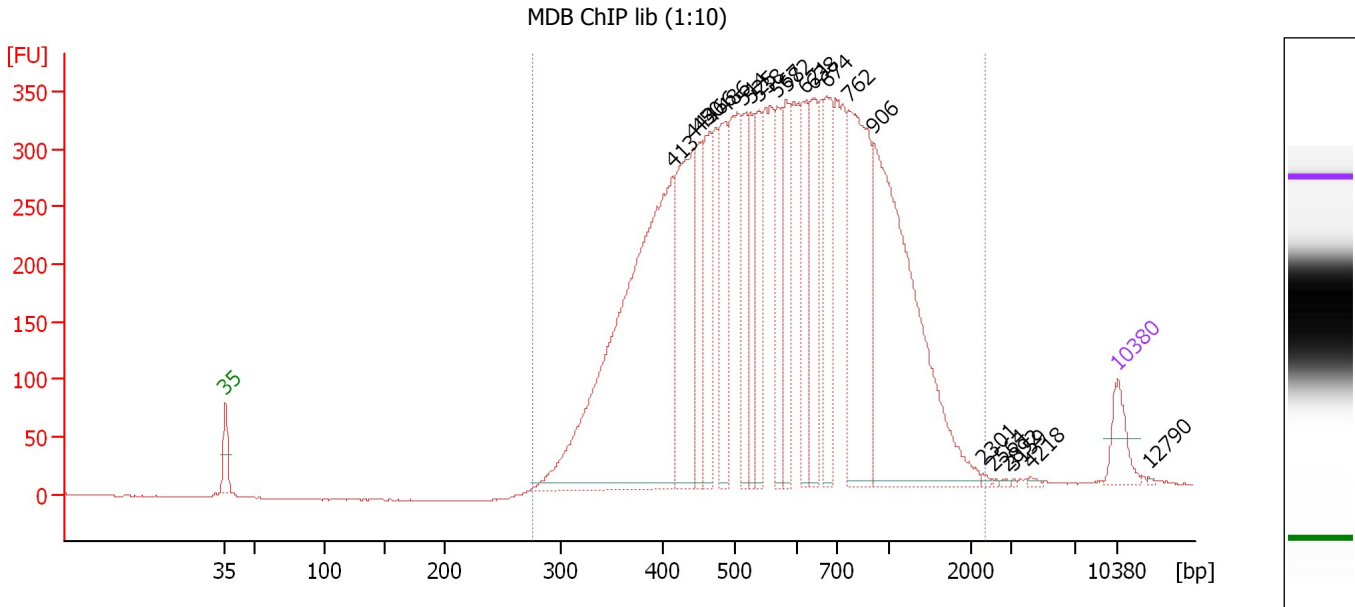
Region table for sample 4 : FI ChIP lib (1:10)

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
257	1,181	474	30,135.3	8,610.91	7,129.7	97	28.3

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-04-14\2014-04-14_001.xad

Created: 4/14/2014 9:37:15 AM
 Modified: 4/14/2014 10:10:49 AM

Electropherogram Summary Continued ...



Overall Results for sample 5 : MDB ChIP lib (1:10)

Number of peaks found: 21 Corr. Area 1: 9,200.0
 Noise: 0.7


Peak table for sample 5 : MDB ChIP lib (1:10)

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	78.04	413	1,773.97	6,507.1	
3	79.71	443	575.31	1,969.2	
4	80.13	450	221.58	745.9	
5	81.01	466	287.86	936.8	
6	82.18	486	308.94	962.5	
7	83.65	514	226.57	667.7	
8	84.19	525	222.59	642.1	
9	84.82	538	203.88	574.1	
10	86.24	567	211.87	566.1	
11	86.99	582	254.42	661.8	
12	88.50	621	234.45	572.4	
13	89.04	638	250.93	596.1	
14	90.17	674	296.88	667.6	
15	91.84	762	645.62	1,283.6	
16	93.81	906	1,084.15	1,813.3	
17	102.38	2,301	4.29	2.8	
18	103.22	2,564	2.14	1.3	
19	104.26	2,892	3.10	1.6	
20	104.80	3,159	1.98	0.9	
21	106.14	4,218	4.63	1.7	
22	113.00	10,380	75.00	10.9	Upper Marker
23	115.38	12,790	0.00	0.0	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-04-14\2014-04-14_001.xad

Created: 4/14/2014 9:37:15 AM
Modified: 4/14/2014 10:10:49 AM

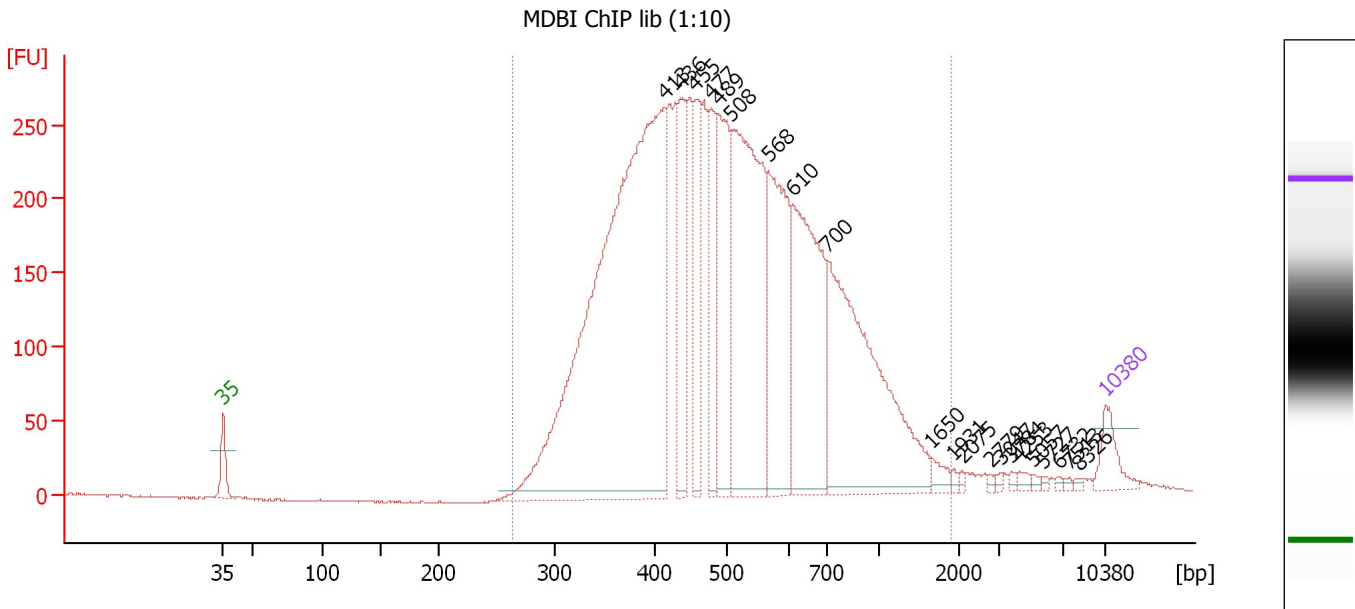
Electropherogram Summary Continued ...**... Region table for sample 5 : MDB ChIP lib (1:10)**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
276	2,371	646	24,302.6	8,508.57	 9,200.0	99	45.8

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-04-14\2014-04-14_001.xad

Created: 4/14/2014 9:37:15 AM
 Modified: 4/14/2014 10:10:49 AM

Electropherogram Summary Continued ...



Overall Results for sample 6 : MDBI ChIP lib (1:10)

Number of peaks found: 21 Corr. Area 1: 6,618.1
 Noise: 0.5


Peak table for sample 6 : MDBI ChIP lib (1:10)

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	78.04	413	3,043.22	11,162.5	
3	79.31	436	349.46	1,215.7	
4	80.41	455	343.50	1,143.8	
5	81.68	477	290.06	920.4	
6	82.32	489	448.11	1,389.3	
7	83.33	508	1,135.37	3,388.2	
8	86.30	568	629.04	1,677.3	
9	88.16	610	741.63	1,842.7	
10	90.99	700	1,077.24	2,331.7	
11	99.20	1,650	33.29	30.6	
12	100.98	1,931	8.27	6.5	
13	101.66	2,075	8.18	6.0	
14	103.90	2,779	6.34	3.5	
15	104.66	3,047	7.64	3.8	
16	105.59	3,784	8.09	3.2	
17	106.19	4,253	13.56	4.8	
18	107.20	5,057	7.99	2.4	
19	108.05	5,727	6.23	1.6	
20	109.32	6,732	5.44	1.2	
21	110.16	7,513	6.25	1.3	
22	110.97	8,326	5.14	0.9	
23	113.00	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-04-14\2014-04-14_001.xad

Created: 4/14/2014 9:37:15 AM
Modified: 4/14/2014 10:10:49 AM

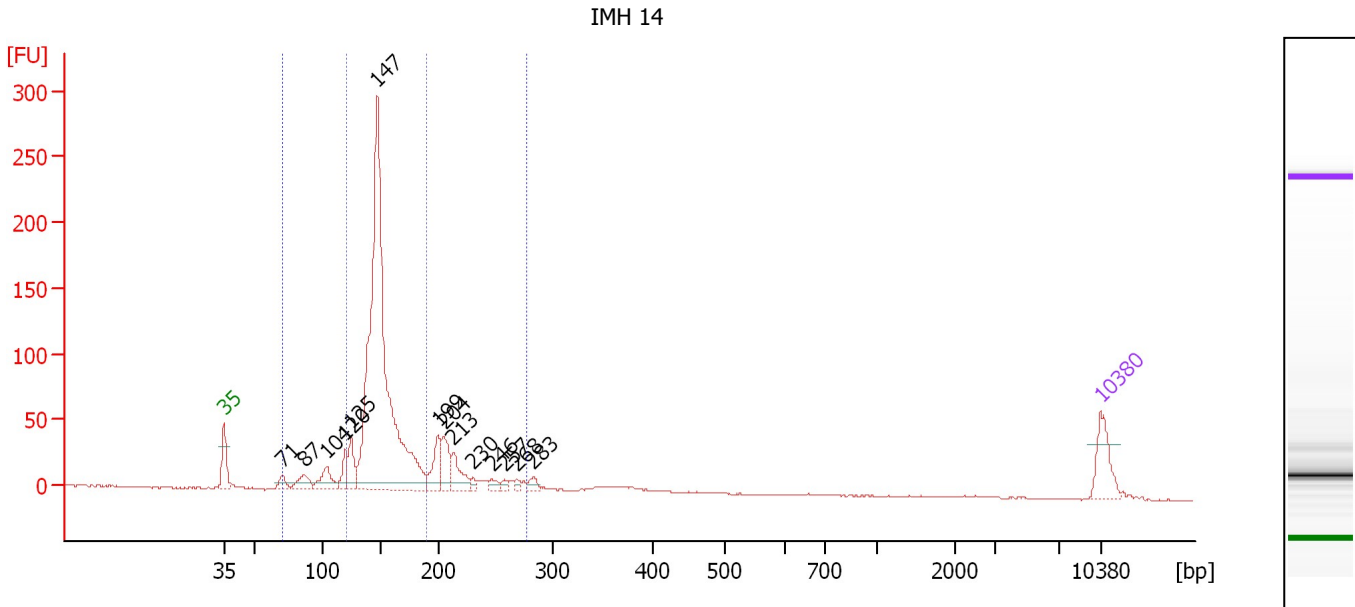
Electropherogram Summary Continued ...**... Region table for sample 6 : MDBI ChIP lib (1:10)**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
264	1,907	542	28,947.8	8,921.93	 6,618.1	98	41.5

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-04-14\2014-04-14_001.xad

Created: 4/14/2014 9:37:15 AM
 Modified: 4/14/2014 10:10:49 AM

Electropherogram Summary Continued ...



Overall Results for sample 7 : IMH 14

Number of peaks found: 14 Corr. Area 1: 856.0
 Noise: 0.6 Corr. Area 2: 1,155.0

Peak table for sample 7 : IMH 14

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	47.64	71	31.85	680.5	
3	49.39	87	56.00	977.4	
4	51.18	104	81.76	1,195.1	
5	52.67	120	56.48	715.2	
6	53.14	125	88.00	1,069.2	
7	55.23	147	1,699.01	17,497.6	
8	60.04	199	101.65	774.6	
9	60.55	204	89.15	660.9	
10	61.32	213	78.96	562.2	
11	62.85	230	14.69	97.0	
12	64.39	246	19.08	117.3	
13	65.37	257	12.68	74.7	
14	66.39	268	12.66	71.5	
15	67.71	283	22.50	120.5	
16	113.00	10,380	75.00	10.9	Upper Marker

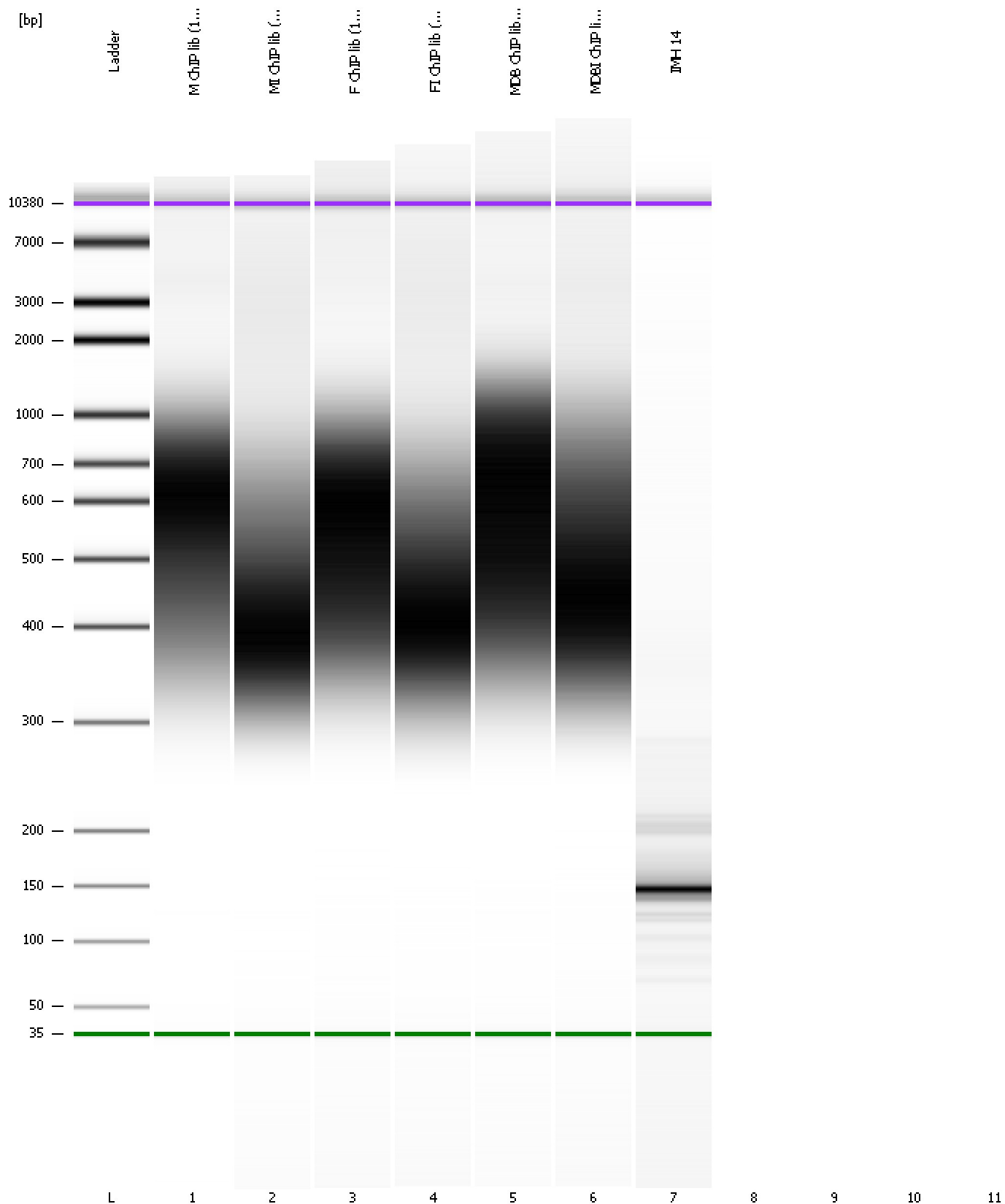
Region table for sample 7 : IMH 14

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
71	277	160	23,864.6	2,358.87	1,155.0	93	22.4
121	189	150	18,054.8	1,772.77	856.0	69	8.6

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-04-14\2014-04-14_001.xad

Created: 4/14/2014 9:37:15 AM
Modified: 4/14/2014 10:10:49 AM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-04-14\2014-04-14_001.xad

Created: 4/14/2014 9:37:15 AM
Modified: 4/14/2014 10:10:49 AM

Invalid Samples

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\2014-04-14\2014-04-14_001.xad

Created: 4/14/2014 9:37:15 AM
 Modified: 4/14/2014 10:10:49 AM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 8)		Instrument	Run		4/14/2014 10:07:08 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2014-04-14\2014-04-14_001.xad)		Instrument	Run		4/14/2014 9:37:20 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		4/14/2014 9:37:20 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		4/14/2014 9:37:20 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		4/14/2014 9:37:20 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		4/14/2014 9:37:20 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		4/14/2014 9:37:20 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		4/14/2014 9:37:20 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1