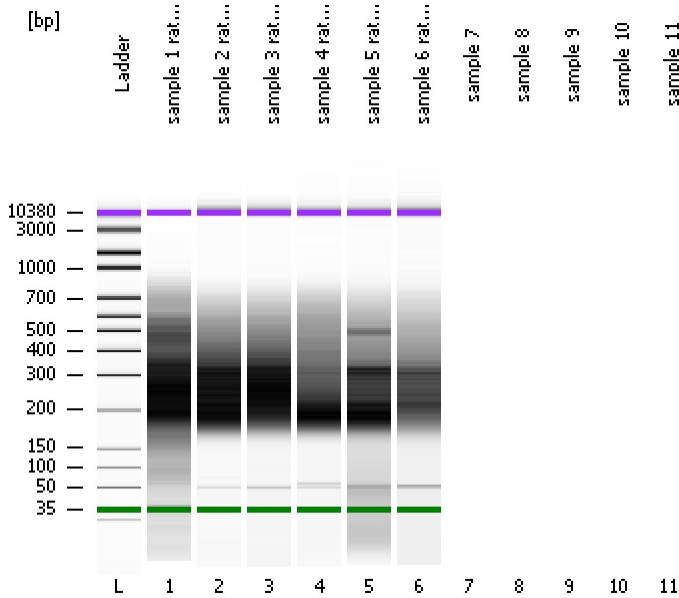


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-02\2014-10-02_003.xad

Created: 10/2/2014 2:30:13 PM
Modified: 10/2/2014 2:57:19 PM

Electrophoresis File Run Summary



Instrument Information:

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

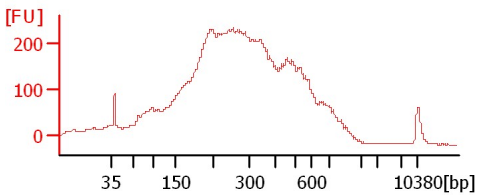
Assay Information:

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

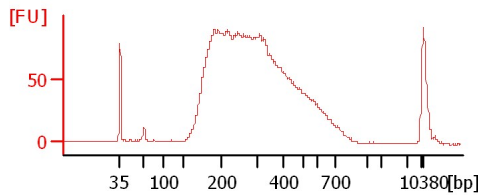
Chip Information:

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

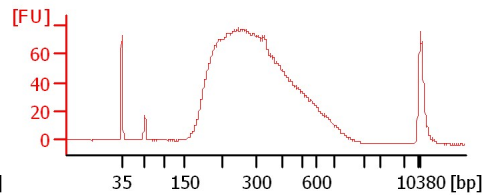
sample 1 rat p9hypo H1M library



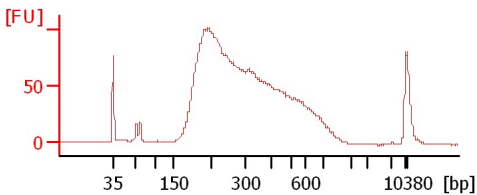
sample 2 rat p9hypo H5M library



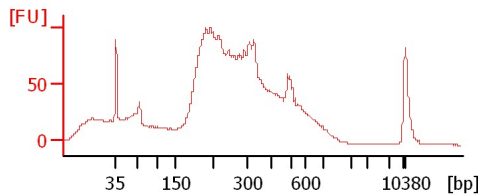
sample 3 rat p9hypo H7M library



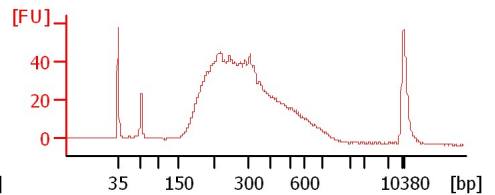
sample 4 rat p9hypo NH3M library



sample 5 rat p9hypo NH4M library



sample 6 rat p9hypo NH6M library



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-02\2014-10-02_003.xad

Created: 10/2/2014 2:30:13 PM
Modified: 10/2/2014 2:57:19 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
sample 1 rat p9hypo H1M library		<input type="checkbox"/>	✓			
sample 2 rat p9hypo H5M library		<input type="checkbox"/>	✓			
sample 3 rat p9hypo H7M library		<input type="checkbox"/>	✓			
sample 4 rat p9hypo NH3M library		<input type="checkbox"/>	✓			
sample 5 rat p9hypo NH4M library		<input type="checkbox"/>	✓			
sample 6 rat p9hypo NH6M library		<input type="checkbox"/>	✓			
sample 7		<input type="checkbox"/>				
sample 8		<input type="checkbox"/>				
sample 9		<input type="checkbox"/>				
sample 10		<input type="checkbox"/>				
sample 11		<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\2014-10-02\2014-10-02_003.xad

Created: 10/2/2014 2:30:13 PM
Modified: 10/2/2014 2:57:19 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

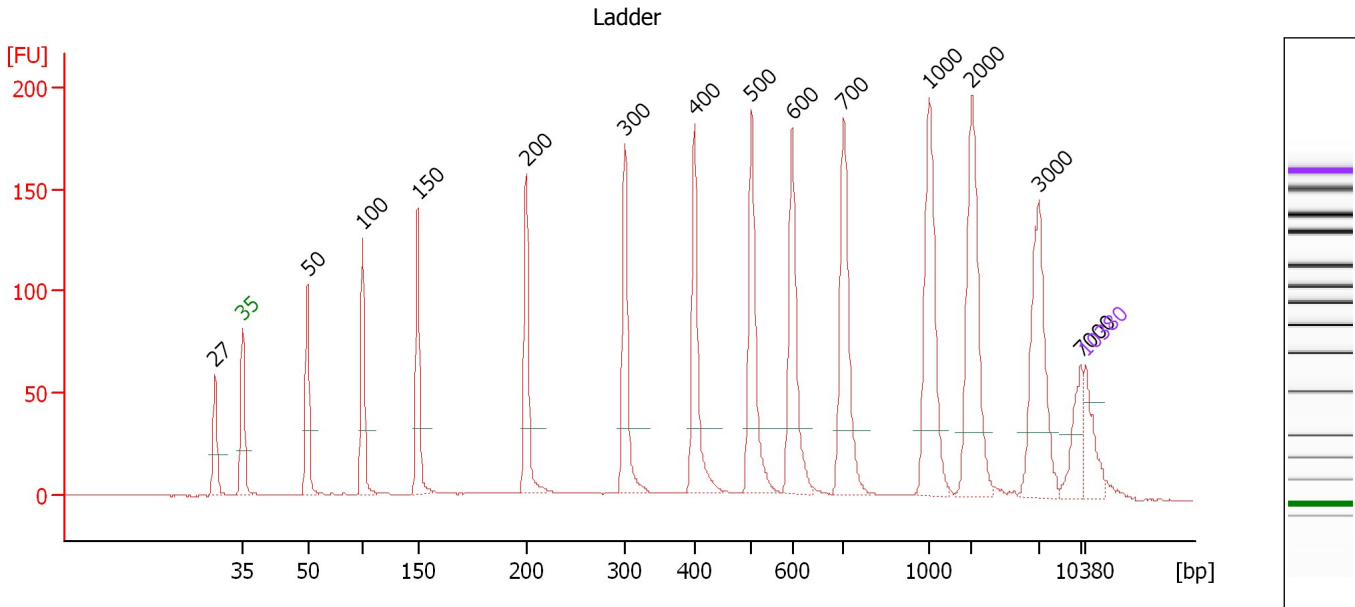
Ladder

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\2014-10-02\2014-10-02_003.xad

Created: 10/2/2014 2:30:13 PM
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Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

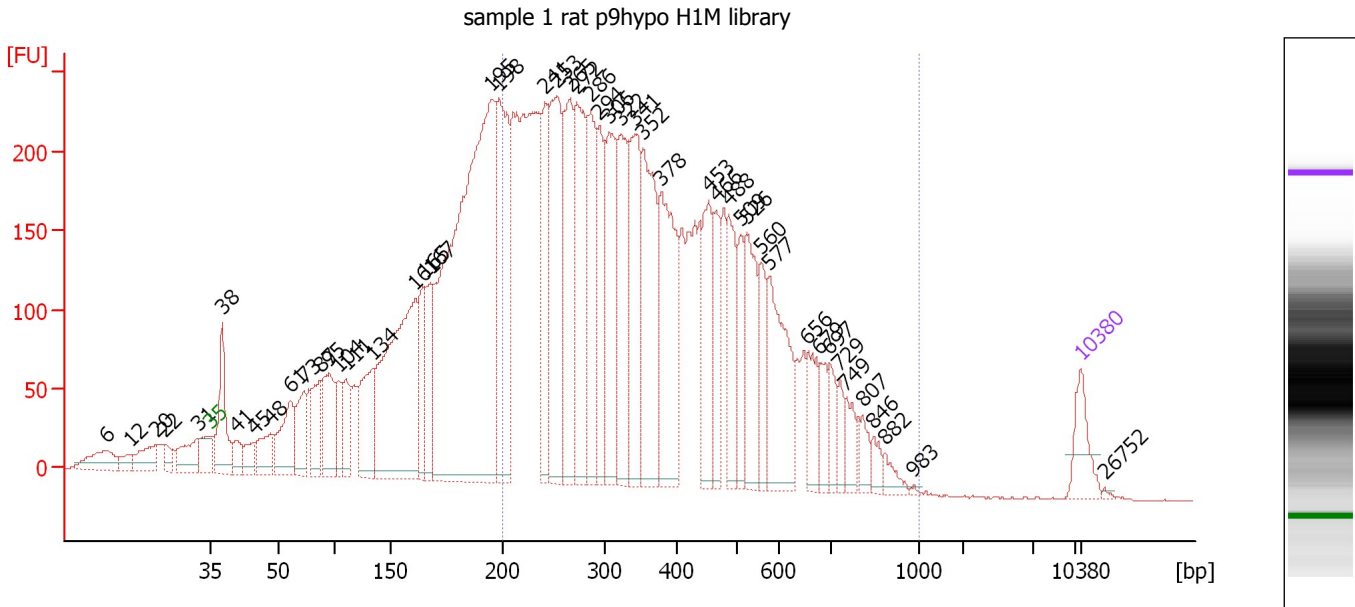
Peak table for Ladder

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	27	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	50	150.00	4,545.5	Ladder Peak
4	100	150.00	2,272.7	Ladder Peak
5	150	150.00	1,515.2	Ladder Peak
6	200	150.00	1,136.4	Ladder Peak
7	300	150.00	757.6	Ladder Peak
8	400	150.00	568.2	Ladder Peak
9	500	150.00	454.5	Ladder Peak
10	600	150.00	378.8	Ladder Peak
11	700	150.00	324.7	Ladder Peak
12	1,000	150.00	227.3	Ladder Peak
13	2,000	150.00	113.6	Ladder Peak
14	3,000	150.00	75.8	Ladder Peak
15	7,000	150.00	32.5	Ladder Peak
16	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-02\2014-10-02_003.xad

Created: 10/2/2014 2:30:13 PM
 Modified: 10/2/2014 2:57:19 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : sample 1 rat p9hypo H1M library

Number of peaks found: 49 Corr. Area 1: 6,685.4
 Noise: 0.4

Peak table for sample 1 : sample 1 rat p9hypo H1M library

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	6	0.00	0.0	
2	12	0.00	0.0	
3	20	0.00	0.0	
4	22	0.00	0.0	
5	31	0.00	0.0	
6	35	125.00	5,411.3	Lower Marker
7	38	274.82	11,068.3	
8	41	66.42	2,471.7	
9	45	73.52	2,488.4	
10	48	113.99	3,572.7	
11	61	218.46	5,398.3	
12	73	146.09	3,029.2	
13	87	159.43	2,770.8	
14	95	231.76	3,689.5	
15	104	108.77	1,583.5	
16	111	122.58	1,679.4	
17	134	254.89	2,884.7	
18	161	858.30	8,097.9	
19	165	188.17	1,731.6	
20	167	206.11	1,866.9	
21	195	2,100.93	16,348.3	
22	198	588.48	4,502.1	
23	241	287.96	1,812.2	
24	253	506.74	3,037.1	
25	265	428.25	2,445.1	
26	272	456.10	2,539.0	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-02\2014-10-02_003.xad

Created: 10/2/2014 2:30:13 PM
 Modified: 10/2/2014 2:57:19 PM

Electropherogram Summary Continued ...

... Peak table for sample 1 : sample 1 rat p9hypo H1M library

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
27	286	342.27	1,811.2	
28	294	237.93	1,225.5	
29	306	361.59	1,791.5	
30	322	332.48	1,564.0	
31	341	364.92	1,619.9	
32	352	431.65	1,859.8	
33	378	425.27	1,706.7	
34	453	219.81	735.1	
35	466	154.28	501.9	
36	488	173.52	538.3	
37	509	126.88	377.6	
38	526	220.52	635.5	
39	560	119.62	323.6	
40	577	300.87	790.4	
41	656	106.92	247.1	
42	679	69.05	154.2	
43	697	64.75	140.8	
44	729	43.00	89.4	
45	749	59.03	119.5	
46	807	42.89	80.5	
47	846	31.45	56.4	
48	882	30.91	53.1	
49	983	3.84	5.9	
50	▶ 10,380	75.00	10.9	Upper Marker
51	26,752	0.00	0.0	

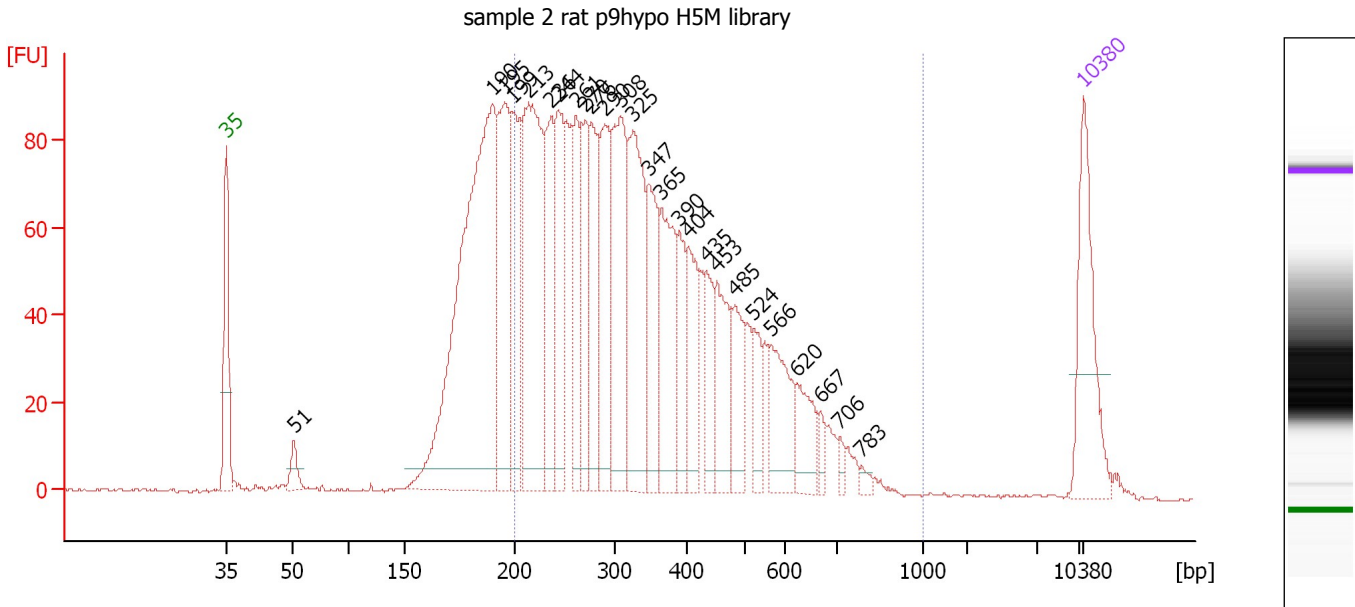
Region table for sample 1 : sample 1 rat p9hypo H1M library

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/µl]	Molarity [pmol/l]	Color
200	388	1,000	6,685.4	62	40.2	8,038.02	37,977.2	■

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-02\2014-10-02_003.xad

Created: 10/2/2014 2:30:13 PM
 Modified: 10/2/2014 2:57:19 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : sample 2 rat p9hypo H5M library

Number of peaks found: 26 Corr. Area 1: 2,133.7
 Noise: 0.3

Peak table for sample 2 : sample 2 rat p9hypo H5M library

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	51	20.44	607.8	
3	190	548.57	4,377.2	
4	195	186.29	1,445.9	
5	199	126.66	966.3	
6	213	270.69	1,926.5	
7	236	107.59	691.4	
8	244	119.74	744.4	
9	261	73.69	427.3	
10	270	88.52	496.1	
11	276	96.88	531.5	
12	290	114.77	599.6	
13	308	152.24	749.7	
14	325	159.69	744.6	
15	347	91.02	396.9	
16	365	109.89	455.6	
17	390	53.57	208.4	
18	404	64.98	243.9	
19	435	43.51	151.6	
20	453	65.65	219.4	
21	485	52.95	165.5	
22	524	29.98	86.7	
23	566	62.68	167.7	
24	620	39.23	95.8	
25	667	10.23	23.2	
26	706	6.47	13.9	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-02\2014-10-02_003.xad

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 Modified: 10/2/2014 2:57:19 PM

Electropherogram Summary Continued ...

... Peak table for sample 2 : sample 2 rat p9hypo H5M library

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	783	4.89	9.5	
28	▶ 10,380	75.00	10.9	Upper Marker

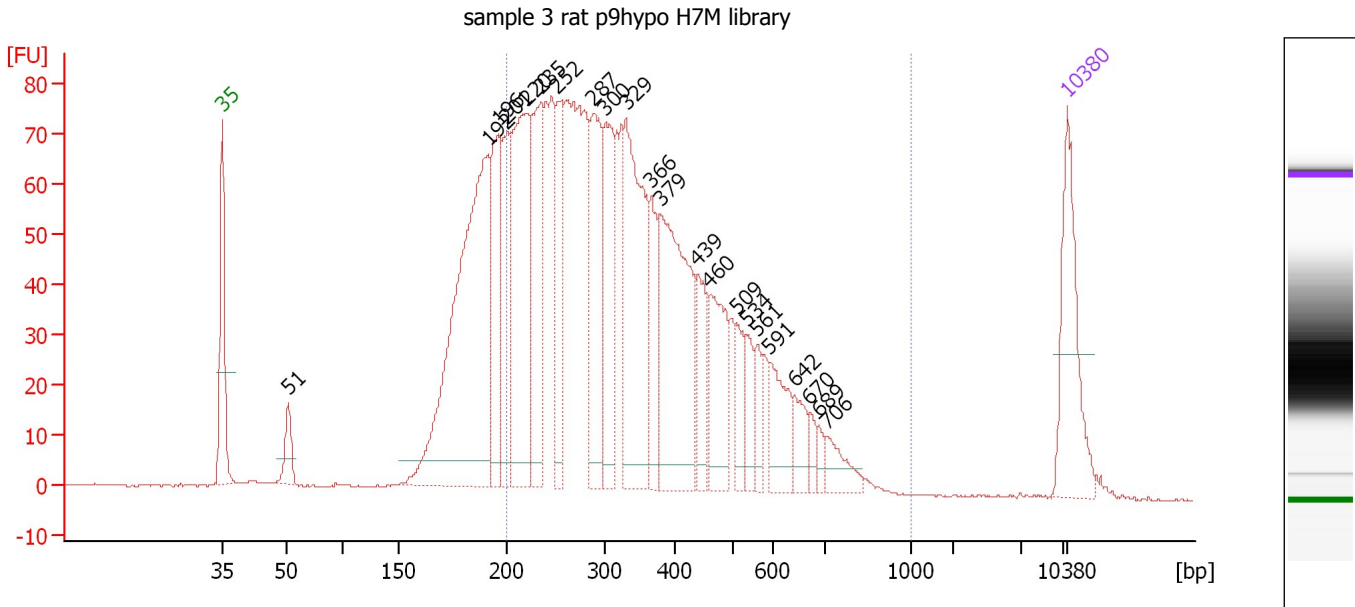
Region table for sample 2 : sample 2 rat p9hypo H5M library

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	359	1,000	2,133.7	74	37.8	2,141.74	10,564.9	■

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-02\2014-10-02_003.xad

Created: 10/2/2014 2:30:13 PM
 Modified: 10/2/2014 2:57:19 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : sample 3 rat p9hyppo H7M library

Number of peaks found: 22 Corr. Area 1: 1,863.7
 Noise: 0.2

Peak table for sample 3 : sample 3 rat p9hyppo H7M library


Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	51	32.14	958.3	
3	192	455.65	3,603.9	
4	196	132.10	1,020.0	
5	201	100.78	760.1	
6	220	226.25	1,556.1	
7	235	137.88	889.5	
8	252	85.94	517.6	
9	287	130.39	688.0	
10	300	113.67	573.8	
11	329	204.14	939.9	
12	366	60.12	249.2	
13	379	210.60	842.9	
14	439	49.99	172.5	
15	460	82.44	271.8	
16	509	31.67	94.3	
17	534	25.31	71.9	
18	561	20.25	54.7	
19	591	46.90	120.2	
20	642	24.93	58.9	
21	670	10.57	23.9	
22	689	8.36	18.4	
23	706	24.55	52.7	
24	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-02\2014-10-02_003.xad

Created: 10/2/2014 2:30:13 PM
Modified: 10/2/2014 2:57:19 PM

Electropherogram Summary Continued ...

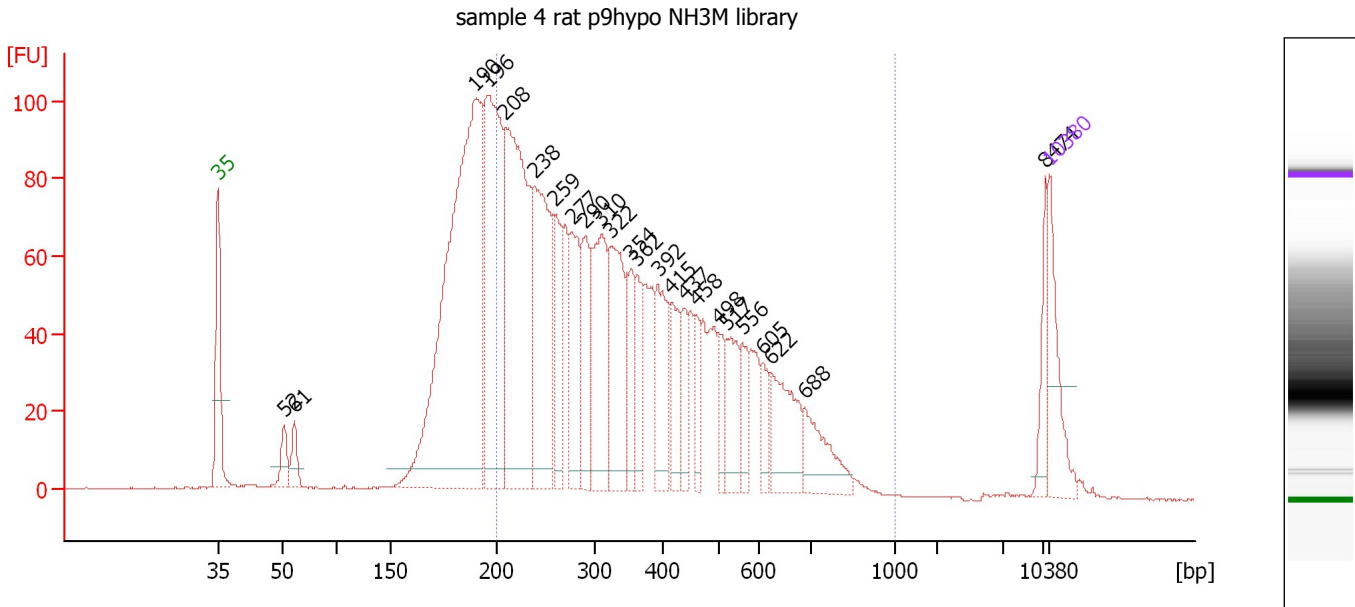
... Region table for sample 3 : sample 3 rat p9hypo H7M library

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/ μ l]	Molarity [pmol/l]	Color
200	357	1,000	1,863.7	77	37.6	2,158.93	10,672.3	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-02\2014-10-02_003.xad

Created: 10/2/2014 2:30:13 PM
 Modified: 10/2/2014 2:57:19 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : sample 4 rat p9hypo NH3M library

Number of peaks found: 24 Corr. Area 1: 1,969.2
 Noise: 0.2

Peak table for sample 4 : sample 4 rat p9hypo NH3M library


Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	52	42.27	1,235.1	
3	61	40.15	993.7	
4	190	985.13	7,868.8	
5	196	457.98	3,541.5	
6	208	545.90	3,974.9	
7	238	321.52	2,049.4	
8	259	120.18	704.3	
9	277	142.05	776.5	
10	290	135.27	707.2	
11	310	191.52	937.2	
12	322	194.36	914.5	
13	354	74.61	319.5	
14	362	66.50	278.7	
15	392	104.56	404.4	
16	415	76.23	278.6	
17	437	48.08	166.6	
18	458	45.66	151.0	
19	498	39.97	121.6	
20	517	78.26	229.3	
21	556	42.41	115.6	
22	605	36.49	91.4	
23	622	106.36	259.1	
24	688	80.22	176.7	
25	8,474	40.37	7.2	
26	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-02\2014-10-02_003.xad

Created: 10/2/2014 2:30:13 PM
Modified: 10/2/2014 2:57:19 PM

Electropherogram Summary Continued ...

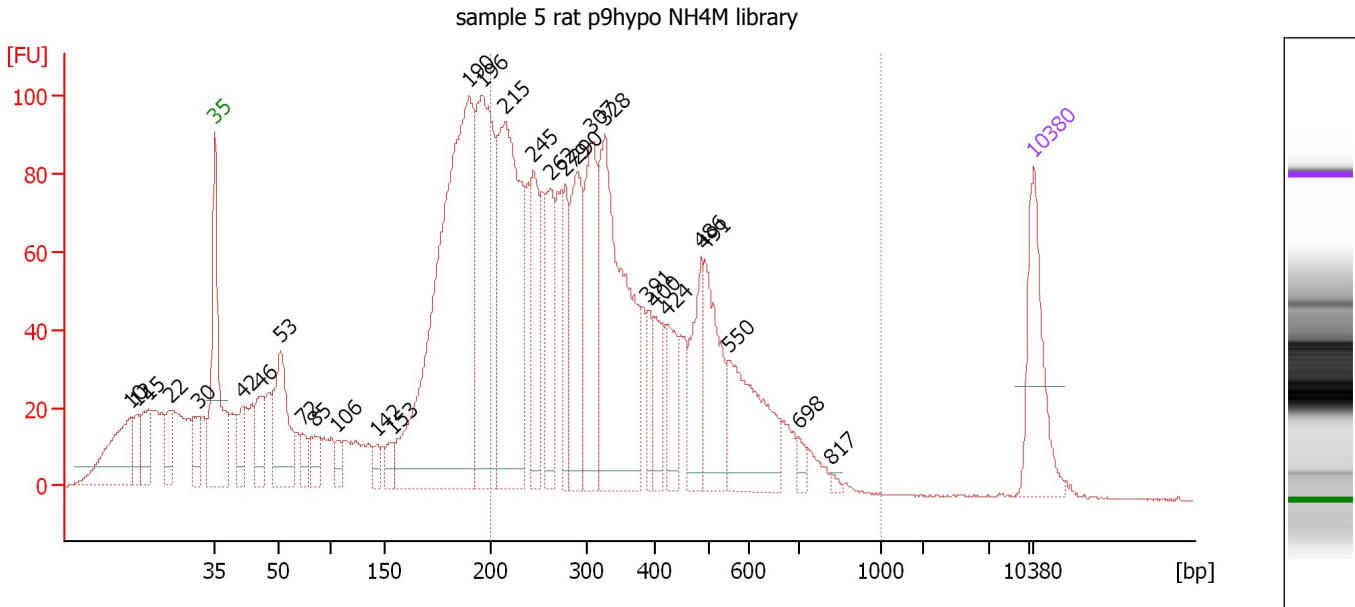
... Region table for sample 4 : sample 4 rat p9hypo NH3M library

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/ μ l]	Molarity [pmol/l]	Color
200	374	1,000	1,969.2	69	40.4	3,084.17	15,068.9	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-02\2014-10-02_003.xad

Created: 10/2/2014 2:30:13 PM
 Modified: 10/2/2014 2:57:19 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : sample 5 rat p9hypo NH4M library

Number of peaks found: 30 Corr. Area 1: 1,994.1
 Noise: 0.3

Peak table for sample 5 : sample 5 rat p9hypo NH4M library

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	10	0.00	0.0	
2	12	0.00	0.0	
3	15	0.00	0.0	
4	22	0.00	0.0	
5	30	0.00	0.0	
6	35	125.00	5,411.3	Lower Marker
7	42	42.83	1,560.6	
8	46	59.58	1,978.3	
9	53	137.02	3,936.8	
10	72	23.18	486.3	
11	85	34.87	623.7	
12	106	18.20	261.0	
13	142	14.93	159.6	
14	153	19.59	193.9	
15	190	706.18	5,634.5	
16	196	315.51	2,436.1	
17	215	363.89	2,563.2	
18	245	104.80	647.7	
19	262	97.36	562.2	
20	279	67.73	368.4	
21	290	135.85	709.2	
22	307	147.78	730.3	
23	328	311.64	1,440.4	
24	391	32.40	125.6	
25	400	46.89	177.6	
26	424	50.34	179.8	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-02\2014-10-02_003.xad


Created: 10/2/2014 2:30:13 PM
 Modified: 10/2/2014 2:57:19 PM

Electropherogram Summary Continued ...

... Peak table for sample 5 : sample 5 rat p9hypo NH4M library

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	486	72.17	225.1	
28	491	96.77	298.9	
29	550	125.09	344.4	
30	698	10.27	22.3	
31	817	3.30	6.1	
32	10,380	75.00	10.9	Upper Marker

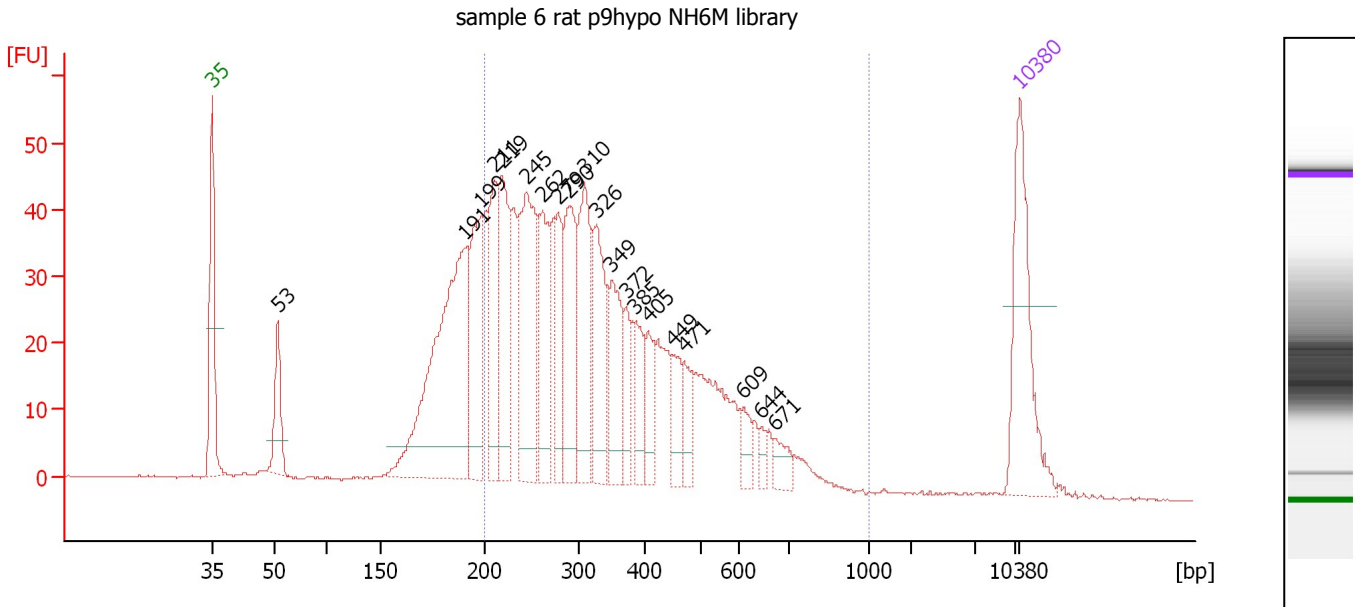
Region table for sample 5 : sample 5 rat p9hypo NH4M library

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	360	1,000	1,994.1	54	38.7	2,064.17	10,222.9	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-02\2014-10-02_003.xad

Created: 10/2/2014 2:30:13 PM
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Electropherogram Summary Continued ...



Overall Results for sample 6 : sample 6 rat p9hypo NH6M library

Number of peaks found: 20 Corr. Area 1: 967.1
 Noise: 0.2

Peak table for sample 6 : sample 6 rat p9hypo NH6M library

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	53	51.34	1,465.2	
3	191	292.28	2,324.2	
4	199	100.16	764.5	
5	211	92.08	660.0	
6	219	104.51	722.1	
7	245	146.17	903.1	
8	262	78.59	454.2	
9	279	47.09	256.1	
10	290	89.74	469.2	
11	310	98.68	483.1	
12	326	80.95	376.0	
13	349	61.11	265.1	
14	372	27.27	111.2	
15	385	34.72	136.6	
16	405	28.55	106.7	
17	449	26.74	90.2	
18	471	22.06	71.0	
19	609	14.69	36.6	
20	644	6.90	16.2	
21	671	14.27	32.2	
22	10,380	75.00	10.9	Upper Marker

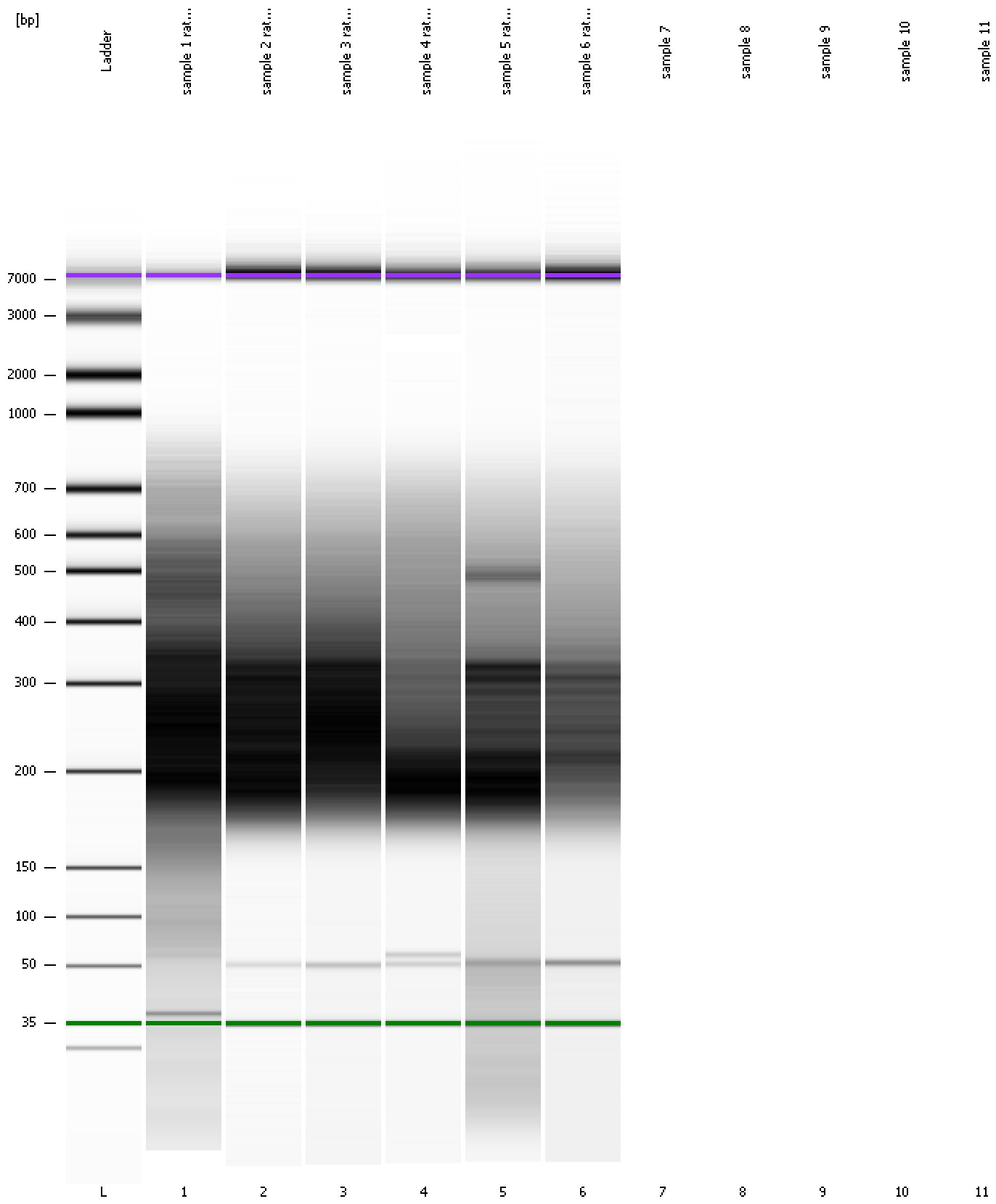
Region table for sample 6 : sample 6 rat p9hypo NH6M library

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	352	1,000	967.1	74	38.3	1,327.01	6,655.8	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-02\2014-10-02_003.xad

Created: 10/2/2014 2:30:13 PM
Modified: 10/2/2014 2:57:19 PM

Gel Image

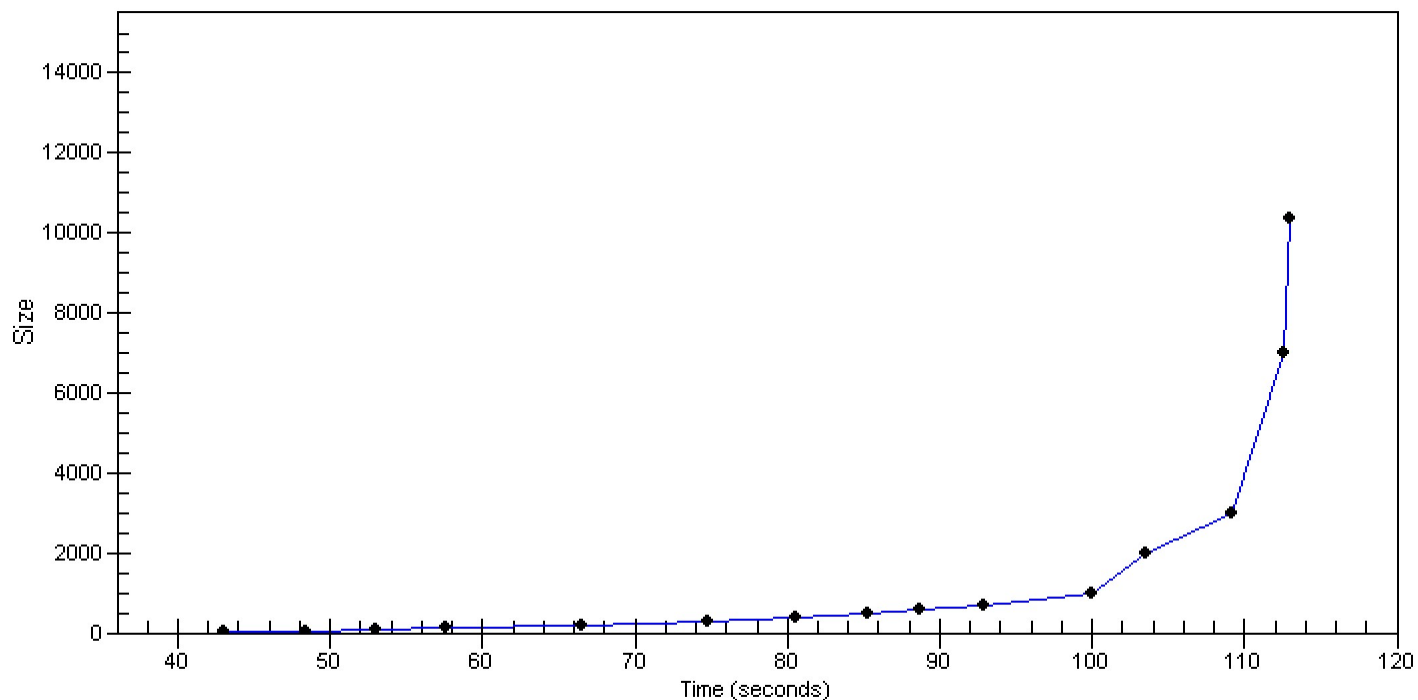


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-02\2014-10-02_003.xad

Created: 10/2/2014 2:30:13 PM
Modified: 10/2/2014 2:57:19 PM

Curves

Standard Curve



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-02\2014-10-02_003.xad

Created: 10/2/2014 2:30:13 PM
Modified: 10/2/2014 2:57:19 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\2014-10-02\2014-10-02_003.xad

Created: 10/2/2014 2:30:13 PM
 Modified: 10/2/2014 2:57:19 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		10/2/2014 2:57:13 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2014-10-02\2014-10-02_003.xad)		Instrument	Run		10/2/2014 2:30:18 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		10/2/2014 2:30:18 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		10/2/2014 2:30:18 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		10/2/2014 2:30:18 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		10/2/2014 2:30:18 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		10/2/2014 2:30:18 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		10/2/2014 2:30:18 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1