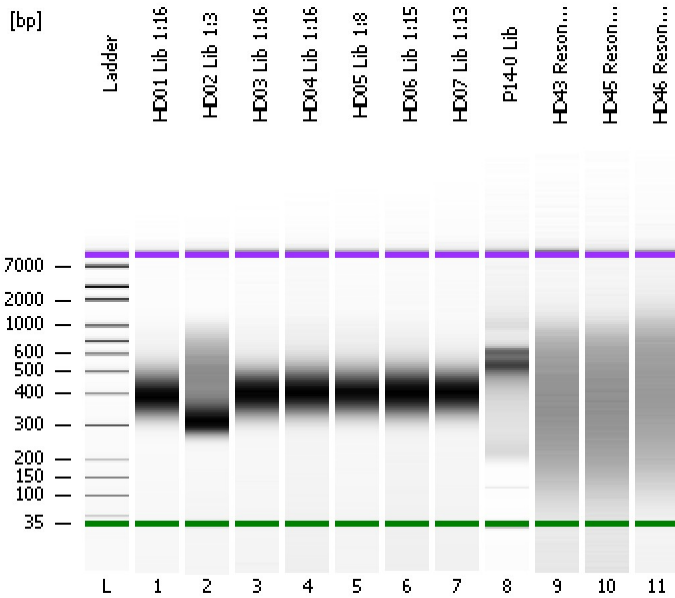


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-12-30\2013-12-30_001.xad

Created: 12/30/2013 12:14:08 PM
Modified: 12/30/2013 1:01:00 PM

Electrophoresis File Run Summary



Instrument Information:

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

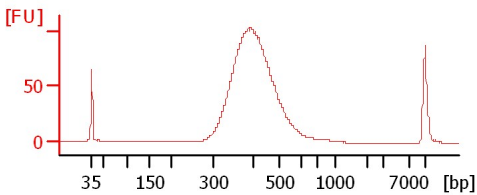
Assay Information:

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

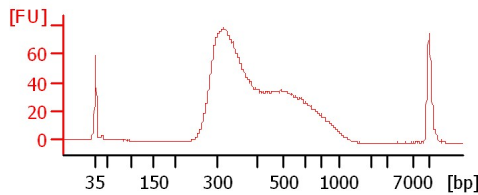
Chip Information:

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

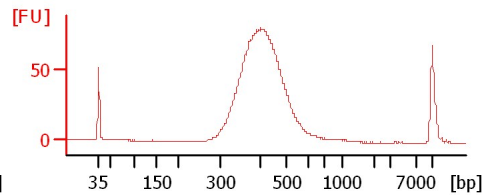
HD01 Lib 1:16



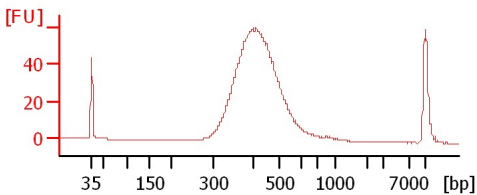
HD02 Lib 1:3



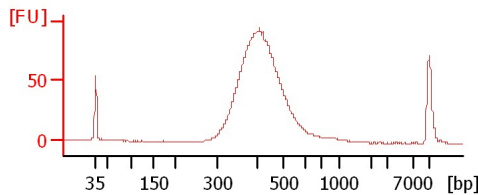
HD03 Lib 1:16



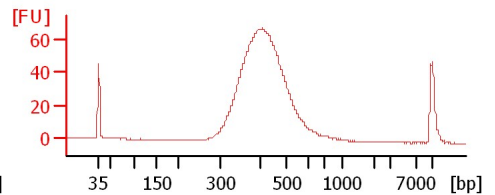
HD04 Lib 1:16



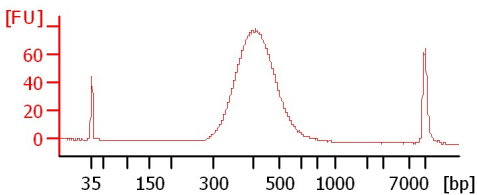
HD05 Lib 1:8



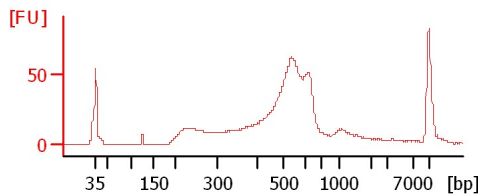
HD06 Lib 1:15



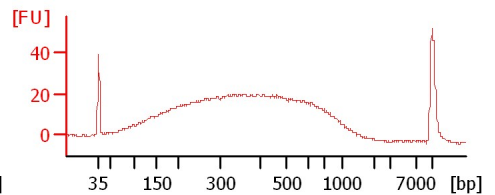
HD07 Lib 1:13



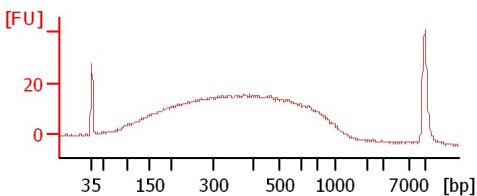
P14-0 Lib



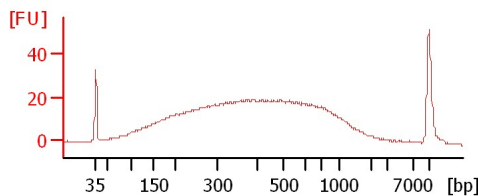
HD43 Resoni 1:7



HD45 Resoni 1:7



HD46 Resoni 1:7



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-12-30\2013-12-30_001.xad

Created: 12/30/2013 12:14:08 PM
 Modified: 12/30/2013 1:01:00 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
HD01 Lib 1:16		<input type="checkbox"/>	✓			
HD02 Lib 1:3		<input type="checkbox"/>	✓			
HD03 Lib 1:16		<input type="checkbox"/>	✓			
HD04 Lib 1:16		<input type="checkbox"/>	✓			
HD05 Lib 1:8		<input type="checkbox"/>	✓			
HD06 Lib 1:15		<input type="checkbox"/>	✓			
HD07 Lib 1:13		<input type="checkbox"/>	✓			
P14-0 Lib		<input type="checkbox"/>	✓			
HD43 Resoni 1:7		<input type="checkbox"/>	✓			
HD45 Resoni 1:7		<input type="checkbox"/>	✓			
HD46 Resoni 1:7		<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\2013-12-30\2013-12-30_001.xad

Created: 12/30/2013 12:14:08 PM
Modified: 12/30/2013 1:01:00 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

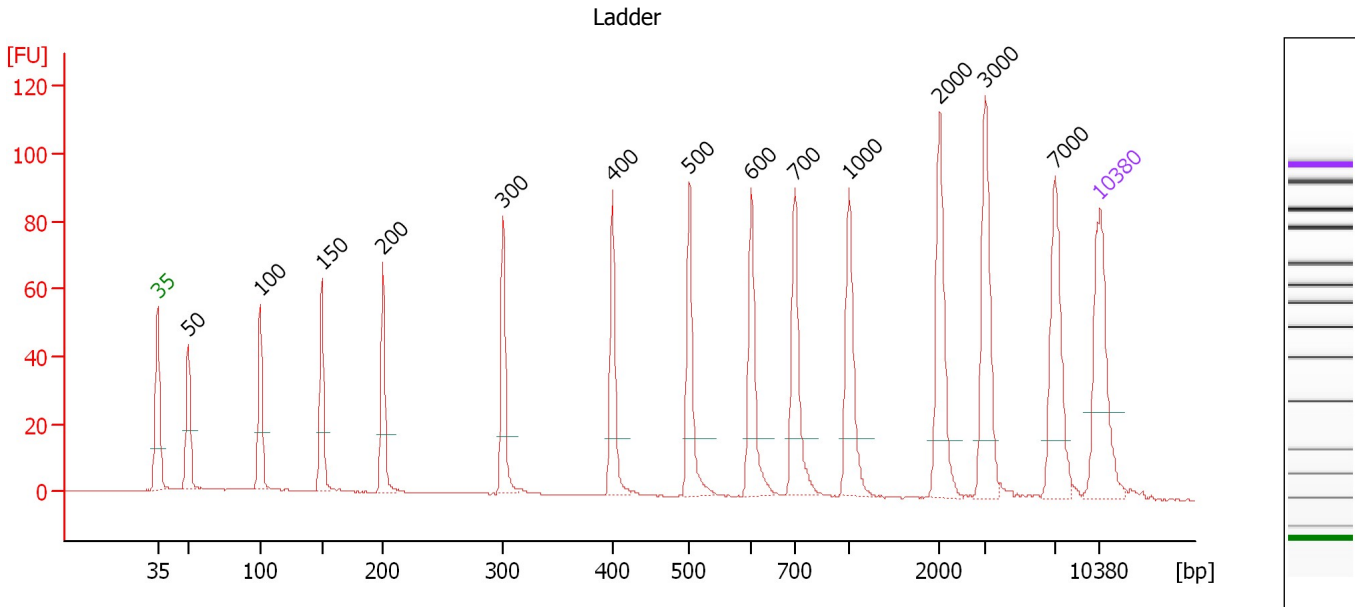
Ladder

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\2013-12-30\2013-12-30_001.xad

Created: 12/30/2013 12:14:08 PM
 Modified: 12/30/2013 1:01:00 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

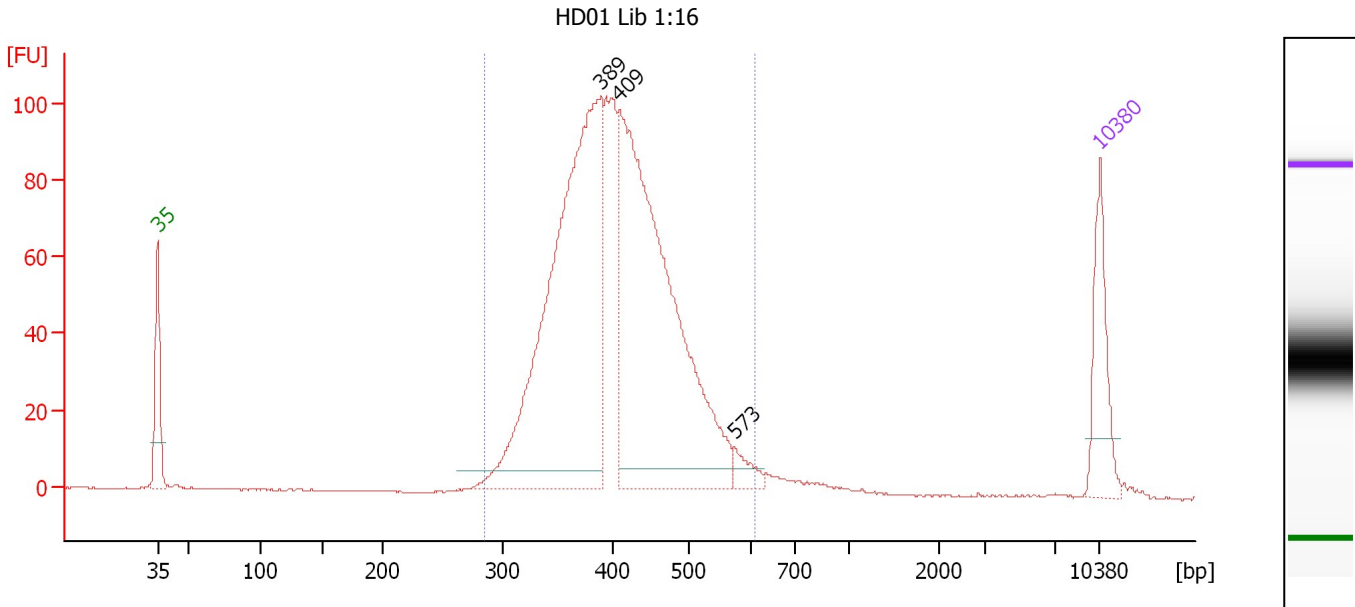
Peak table for Ladder

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	45.29	50	150.00	4,545.5	Ladder Peak
3	50.60	100	150.00	2,272.7	Ladder Peak
4	55.19	150	150.00	1,515.2	Ladder Peak
5	59.74	200	150.00	1,136.4	Ladder Peak
6	68.69	300	150.00	757.6	Ladder Peak
7	76.79	400	150.00	568.2	Ladder Peak
8	82.50	500	150.00	454.5	Ladder Peak
9	87.09	600	150.00	378.8	Ladder Peak
10	90.33	700	150.00	324.7	Ladder Peak
11	94.38	1,000	150.00	227.3	Ladder Peak
12	101.08	2,000	150.00	113.6	Ladder Peak
13	104.45	3,000	150.00	75.8	Ladder Peak
14	109.67	7,000	150.00	32.5	Ladder Peak
15	113.00	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-12-30\2013-12-30_001.xad

Created: 12/30/2013 12:14:08 PM
 Modified: 12/30/2013 1:01:00 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : HD01 Lib 1:16

Number of peaks found: 3 Corr. Area 1: 1,366.7
 Noise: 0.1

Peak table for sample 1 : HD01 Lib 1:16

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	75.89	389	763.15	2,972.8	
3	77.33	409	727.69	2,692.6	
4	85.85	573	21.69	57.4	
5	113.00	10,380	75.00	10.9	Upper Marker

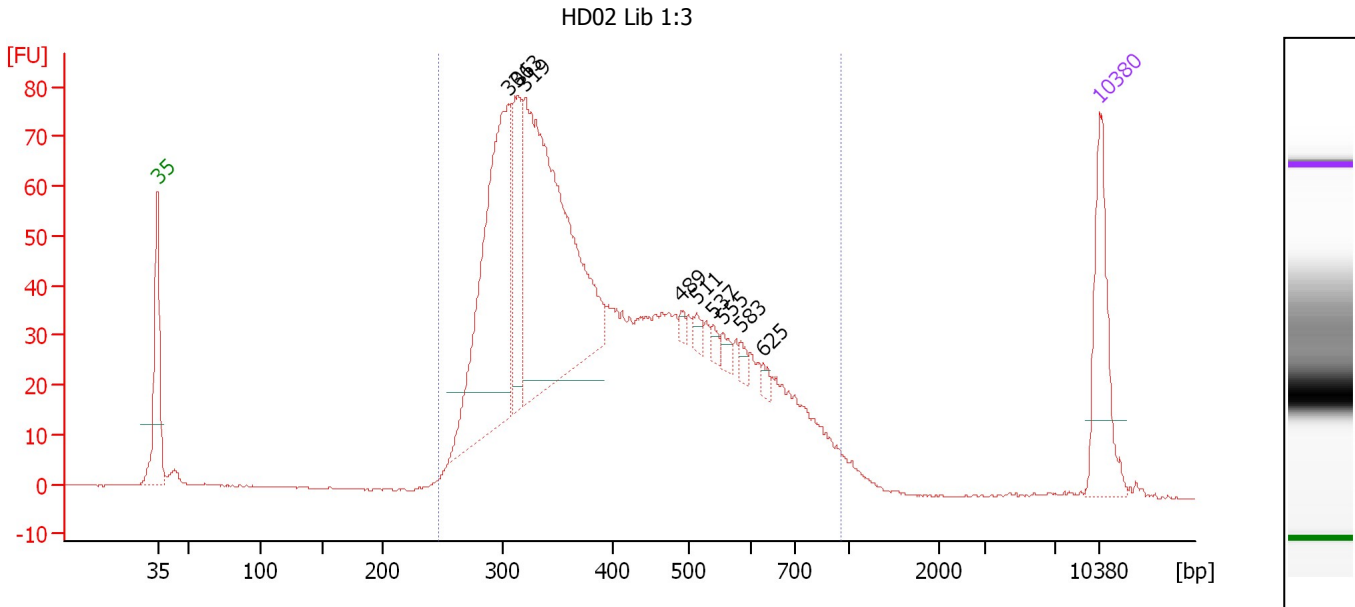
Region table for sample 1 : HD01 Lib 1:16

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
284	608	411	6,639.4	1,754.48	1,366.7	96	14.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-12-30\2013-12-30_001.xad

Created: 12/30/2013 12:14:08 PM
 Modified: 12/30/2013 1:01:00 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : HD02 Lib 1:3

Number of peaks found: 9 Corr. Area 1: 1,516.8
 Noise: 0.2

Peak table for sample 2 : HD02 Lib 1:3

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	69.14	306	343.63	1,703.6	
3	69.73	313	103.54	501.4	
4	70.22	319	449.01	2,132.8	
5	81.85	489	5.52	17.1	
6	82.98	511	9.05	26.8	
7	84.20	537	7.54	21.3	
8	85.01	555	8.69	23.7	
9	86.32	583	7.41	19.2	
10	87.89	625	6.38	15.5	
11	113.00	10,380	75.00	10.9	Upper Marker

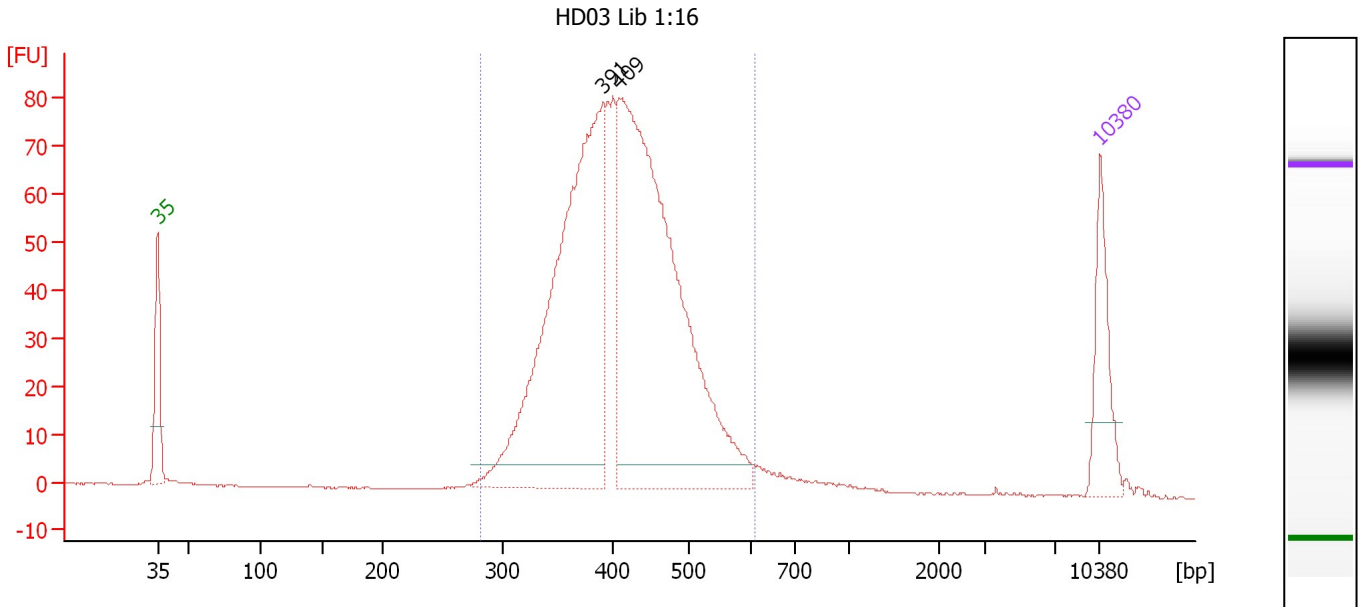
Region table for sample 2 : HD02 Lib 1:3

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
246	956	422	8,421.3	2,081.67	1,516.8	97	32.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-12-30\2013-12-30_001.xad

Created: 12/30/2013 12:14:08 PM
 Modified: 12/30/2013 1:01:00 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : HD03 Lib 1:16

Number of peaks found: 2 Corr. Area 1: 1,101.9
 Noise: 0.1

Peak table for sample 3 : HD03 Lib 1:16

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	76.09	391	713.93	2,763.4	
3	77.29	409	827.88	3,068.5	
4	113.00	10,380	75.00	10.9	Upper Marker

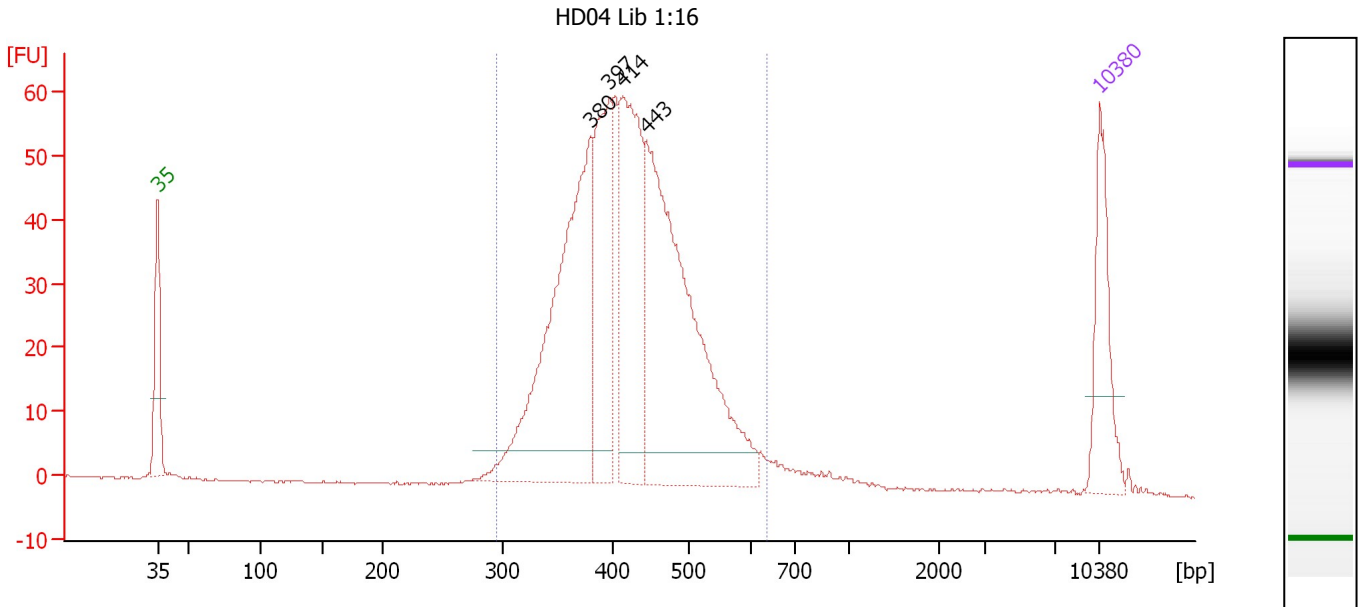
Region table for sample 3 : HD03 Lib 1:16

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
281	608	415	6,438.7	1,717.95	1,101.9	96	14.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-12-30\2013-12-30_001.xad

Created: 12/30/2013 12:14:08 PM
 Modified: 12/30/2013 1:01:00 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : HD04 Lib 1:16

Number of peaks found: 4 Corr. Area 1: 823.4
 Noise: 0.2

Peak table for sample 4 : HD04 Lib 1:16

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	75.18	380	417.39	1,663.2	
3	76.55	397	183.06	698.6	
4	77.58	414	241.19	883.0	
5	79.27	443	471.62	1,611.5	
6	113.00	10,380	75.00	10.9	Upper Marker

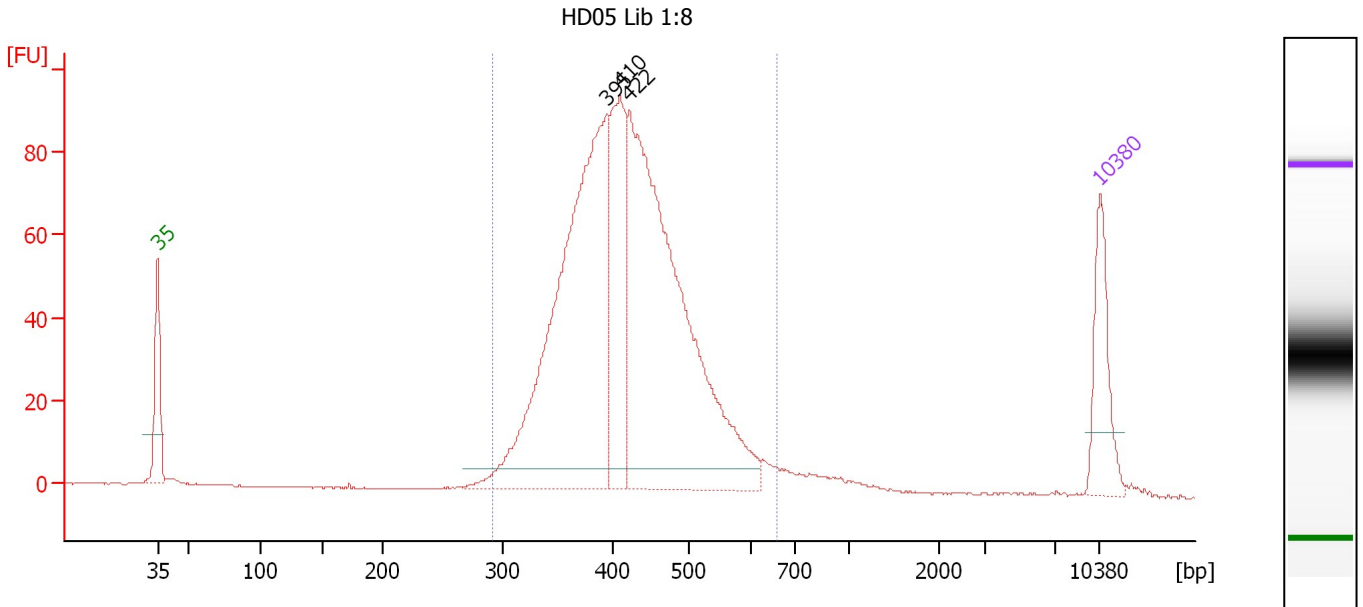
Region table for sample 4 : HD04 Lib 1:16

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
295	635	424	5,179.2	1,409.96	823.4	95	15.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-12-30\2013-12-30_001.xad

Created: 12/30/2013 12:14:08 PM
 Modified: 12/30/2013 1:01:00 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : HD05 Lib 1:8

Number of peaks found: 3 Corr. Area 1: 1,216.4
 Noise: 0.2

Peak table for sample 5 : HD05 Lib 1:8

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	76.35	395	680.38	2,612.3	
3	77.35	410	210.32	777.3	
4	78.02	422	736.98	2,648.1	
5	113.00	10,380	75.00	10.9	Upper Marker

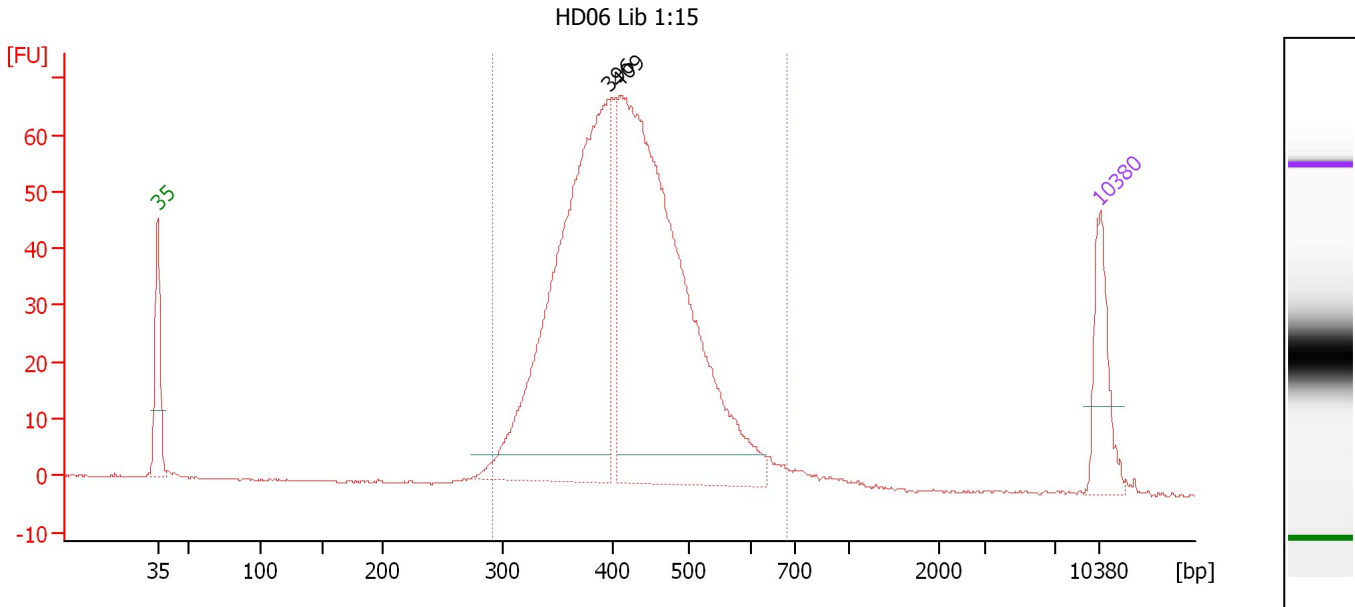
Region table for sample 5 : HD05 Lib 1:8

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
291	661	423	6,152.5	1,669.07	1,216.4	95	15.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-12-30\2013-12-30_001.xad

Created: 12/30/2013 12:14:08 PM
 Modified: 12/30/2013 1:01:00 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : HD06 Lib 1:15

Number of peaks found: 2 Corr. Area 1: 961.3
 Noise: 0.1

Peak table for sample 6 : HD06 Lib 1:15

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	76.44	396	814.99	3,120.1	
3	77.32	409	980.07	3,627.8	
4	113.00	10,380	75.00	10.9	Upper Marker

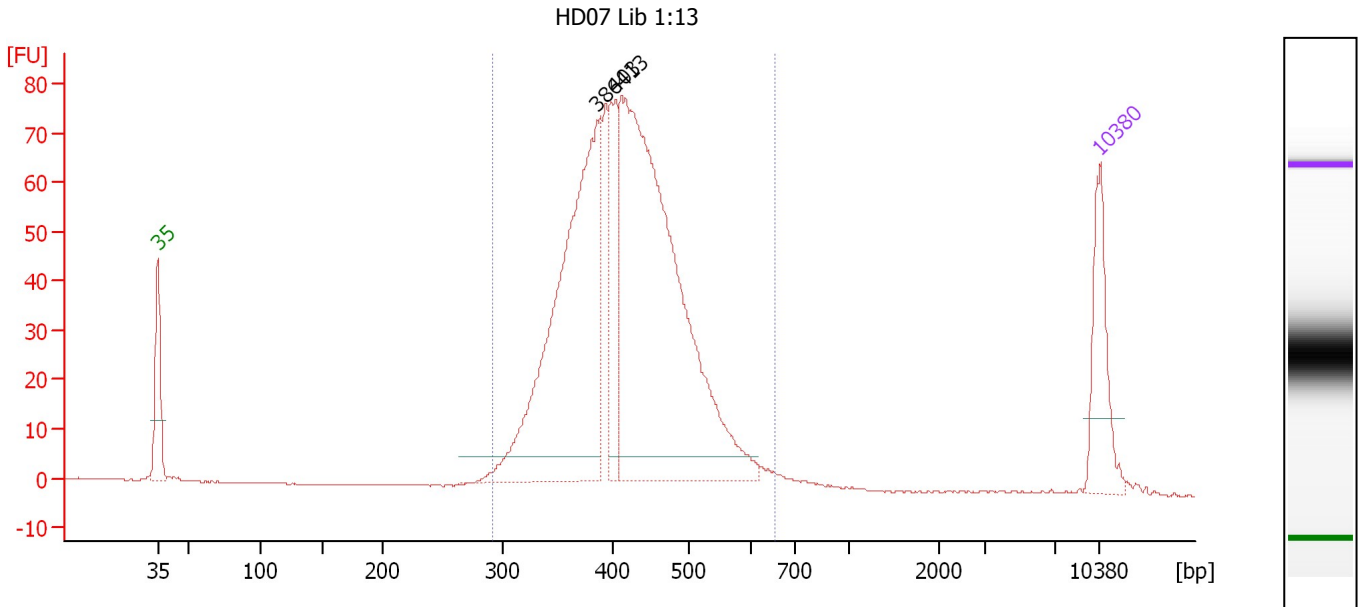
Region table for sample 6 : HD06 Lib 1:15

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
291	680	423	7,092.0	1,919.12	961.3	95	16.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-12-30\2013-12-30_001.xad

Created: 12/30/2013 12:14:08 PM
 Modified: 12/30/2013 1:01:00 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : HD07 Lib 1:13

Number of peaks found: 3 Corr. Area 1: 1,001.6
 Noise: 0.1

Peak table for sample 7 : HD07 Lib 1:13

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	75.67	386	536.01	2,102.7	
3	76.96	403	104.33	392.2	
4	77.50	413	748.73	2,749.6	
5	113.00	10,380	75.00	10.9	Upper Marker

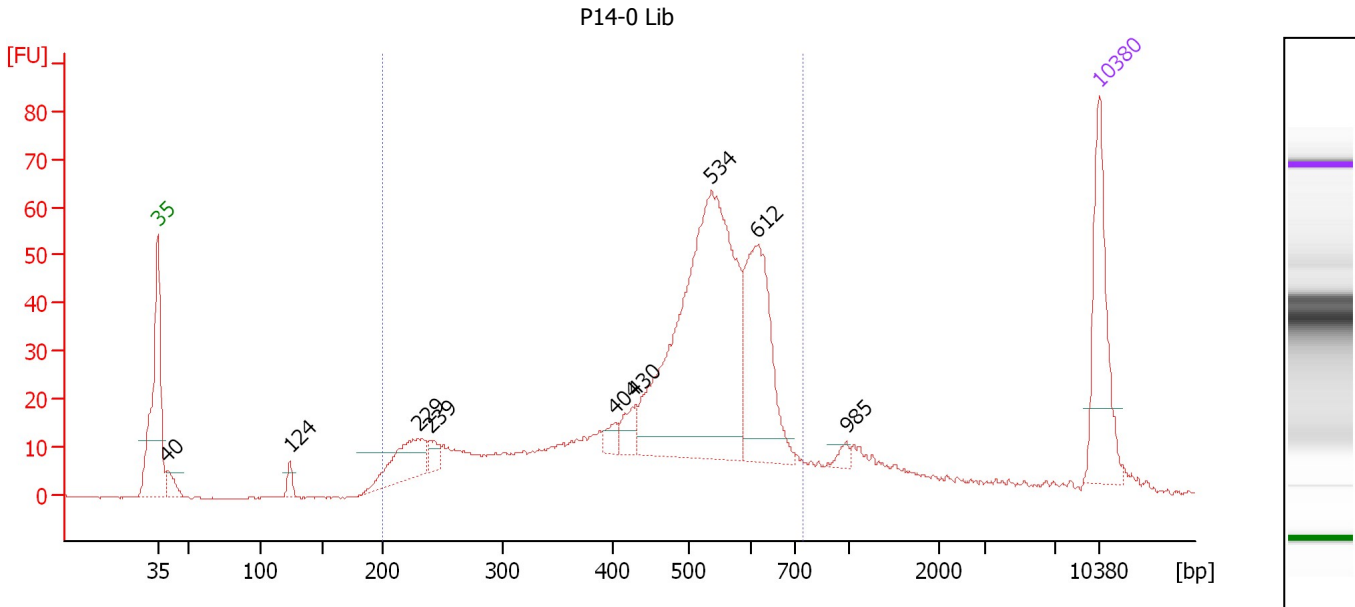
Region table for sample 7 : HD07 Lib 1:13

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
290	654	421	5,679.1	1,537.37	1,001.6	97	14.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-12-30\2013-12-30_001.xad

Created: 12/30/2013 12:14:08 PM
 Modified: 12/30/2013 1:01:00 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : P14-0 Lib

Number of peaks found: 9 Corr. Area 1: 840.4
 Noise: 0.1

Peak table for sample 8 : P14-0 Lib

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	43.70	40	19.38	741.6	
3	52.84	124	11.00	134.0	
4	62.33	229	61.08	404.1	
5	63.24	239	13.47	85.4	
6	77.00	404	11.21	42.1	
7	78.50	430	18.03	63.5	
8	84.08	534	401.21	1,137.6	
9	87.49	612	138.94	343.7	
10	94.17	985	5.91	9.1	
11	113.00	10,380	75.00	10.9	Upper Marker

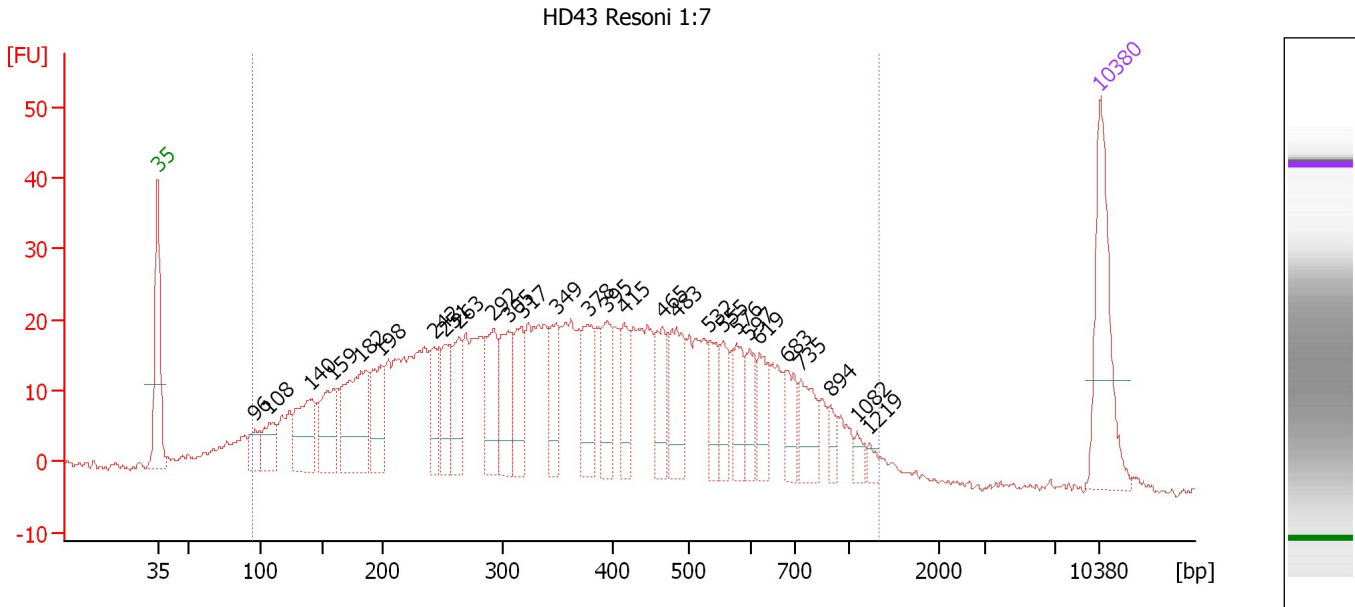
Region table for sample 8 : P14-0 Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	747	480	4,077.4	1,111.43	840.4	86	25.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-12-30\2013-12-30_001.xad

Created: 12/30/2013 12:14:08 PM
 Modified: 12/30/2013 1:01:00 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : HD43 Resoni 1:7

Number of peaks found: 28 Corr. Area 1: 1,002.8
 Noise: 0.5

Peak table for sample 9 : HD43 Resoni 1:7

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	50.23	96	20.88	327.9	
3	51.30	108	37.84	533.0	
4	54.30	140	70.46	760.9	
5	56.03	159	64.24	611.2	
6	58.12	182	112.93	939.0	
7	59.60	198	55.30	422.2	
8	63.52	242	38.72	242.2	
9	64.33	251	38.73	233.5	
10	65.35	263	47.97	276.6	
11	67.95	292	56.52	293.6	
12	69.07	305	55.20	274.5	
13	70.08	317	49.18	234.9	
14	72.63	349	36.11	156.9	
15	74.97	378	54.37	218.2	
16	76.40	395	40.78	156.3	
17	77.67	415	34.20	124.7	
18	80.52	465	41.47	135.0	
19	81.54	483	56.24	176.4	
20	83.98	532	29.76	84.7	
21	85.00	555	26.43	72.2	
22	85.97	576	34.04	89.6	
23	86.93	597	23.66	60.1	
24	87.70	619	28.93	70.8	
25	89.79	683	25.23	56.0	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-12-30\2013-12-30_001.xad


Created: 12/30/2013 12:14:08 PM
 Modified: 12/30/2013 1:01:00 PM

Electropherogram Summary Continued ...

... Peak table for sample 9 : HD43 Resoni 1:7

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
26	90.80	735	35.17	72.5	
27	92.94	894	10.99	18.6	
28	94.93	1,082	8.19	11.5	
29	95.84	1,219	6.99	8.7	
30	113.00	10,380	75.00	10.9	Upper Marker

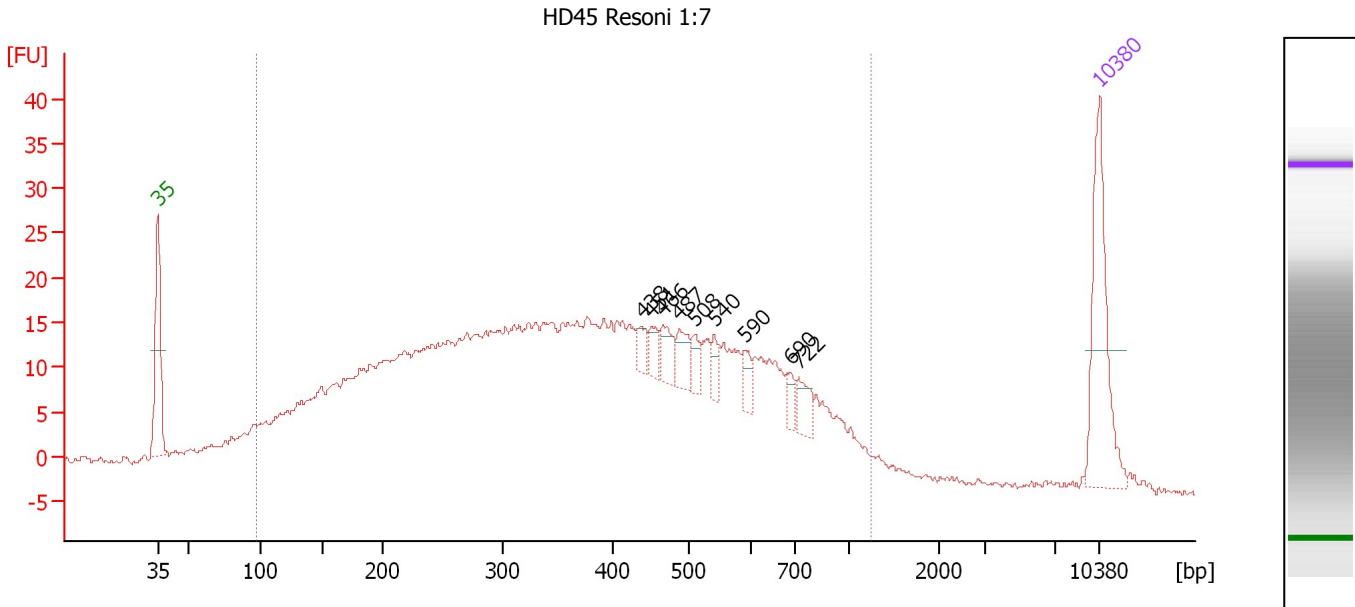
Region table for sample 9 : HD43 Resoni 1:7

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
95	1,325	408	10,857.2	1,979.53	1,002.8	96	50.7	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-12-30\2013-12-30_001.xad

Created: 12/30/2013 12:14:08 PM
 Modified: 12/30/2013 1:01:00 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : HD45 Resoni 1:7

Number of peaks found: 9 Corr. Area 1: 796.0
 Noise: 0.3

Peak table for sample 10 : HD45 Resoni 1:7

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	78.97	438	9.52	32.9	
3	79.69	451	12.68	42.6	
4	80.55	466	17.49	56.9	
5	81.73	487	18.10	56.4	
6	82.85	508	11.25	33.6	
7	84.34	540	11.55	32.4	
8	86.64	590	12.27	31.5	
9	90.01	690	9.74	21.4	
10	90.62	722	16.66	35.0	
11	113.00	10,380	75.00	10.9	Upper Marker

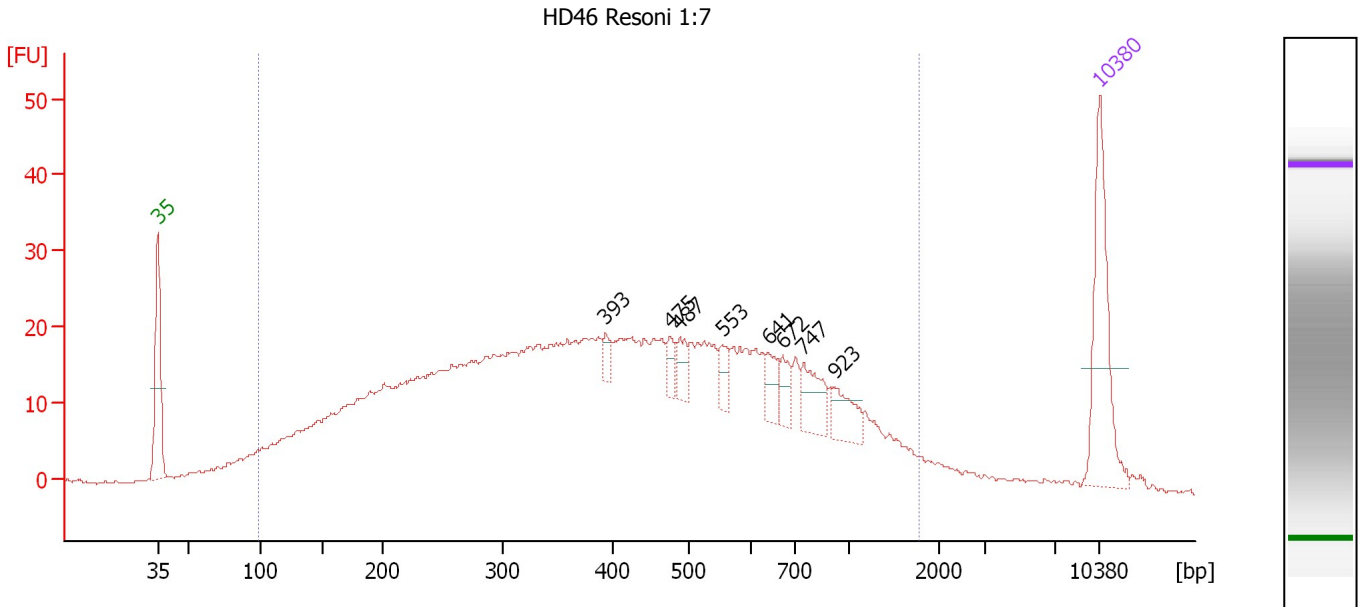
Region table for sample 10 : HD45 Resoni 1:7

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
98	1,239	402	11,263.3	2,047.70	796.0	94	49.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-12-30\2013-12-30_001.xad

Created: 12/30/2013 12:14:08 PM
 Modified: 12/30/2013 1:01:00 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : HD46 Resoni 1:7

Number of peaks found: 8 Corr. Area 1: 941.2
 Noise: 0.2

Peak table for sample 11 : HD46 Resoni 1:7

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	76.24	393	10.20	39.3	
3	81.10	475	12.42	39.6	
4	81.77	487	17.56	54.6	
5	84.92	553	15.40	42.2	
6	88.43	641	18.04	42.6	
7	89.41	672	15.66	35.3	
8	90.96	747	31.62	64.2	
9	93.33	923	24.44	40.1	
10	113.00	10,380	75.00	10.9	Upper Marker

Region table for sample 11 : HD46 Resoni 1:7

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
99	1,765	471	10,675.4	2,094.22	941.2	93	61.4	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-12-30\2013-12-30_001.xad

Created: 12/30/2013 12:14:08 PM
Modified: 12/30/2013 1:01:00 PM

Gel Image

