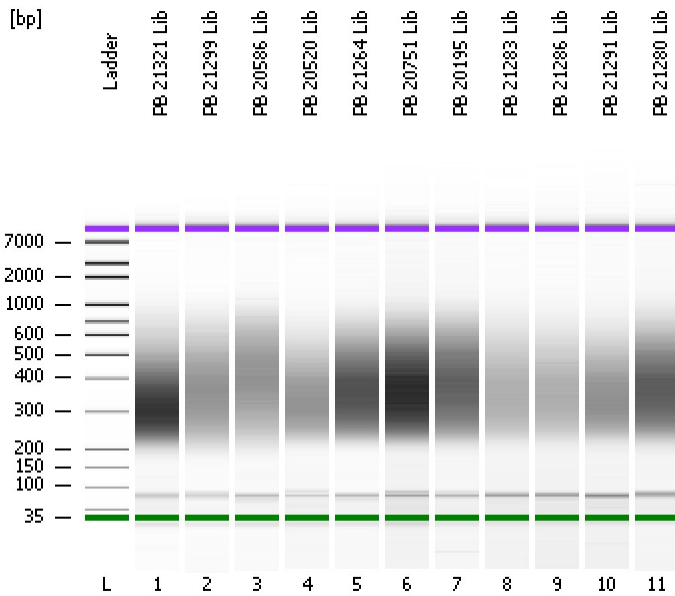


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-30\2013-10-30_009.xad

Created: 10/30/2013 4:13:56 PM
Modified: 10/30/2013 5:00:33 PM

Electrophoresis File Run Summary



Instrument Information:

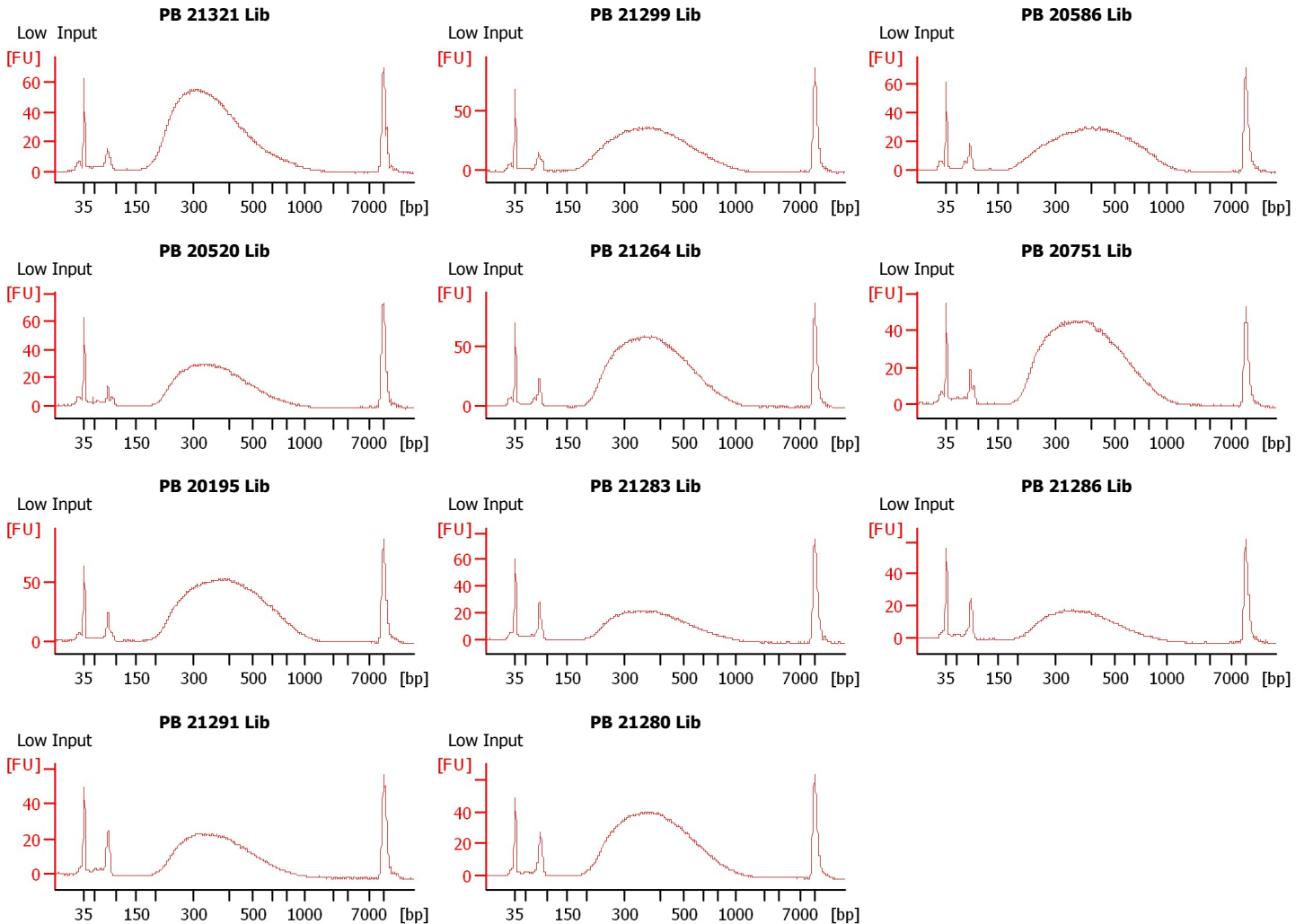
Instrument Name: DE13701086 Firmware: C.01.069
Serial#: DE13701086 Type: G2938B

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:



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-30\2013-10-30_009.xad

Created: 10/30/2013 4:13:56 PM
 Modified: 10/30/2013 5:00:33 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
PB 21321 Lib	Low Input	<input type="checkbox"/>	✓			
PB 21299 Lib	Low Input	<input type="checkbox"/>	✓			
PB 20586 Lib	Low Input	<input type="checkbox"/>	✓			
PB 20520 Lib	Low Input	<input type="checkbox"/>	✓			
PB 21264 Lib	Low Input	<input type="checkbox"/>	✓			
PB 20751 Lib	Low Input	<input type="checkbox"/>	✓			
PB 20195 Lib	Low Input	<input type="checkbox"/>	✓			
PB 21283 Lib	Low Input	<input type="checkbox"/>	✓			
PB 21286 Lib	Low Input	<input type="checkbox"/>	✓			
PB 21291 Lib	Low Input	<input type="checkbox"/>	✓			
PB 21280 Lib	Low Input	<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\2013-10-30\2013-10-30_009.xad

Created: 10/30/2013 4:13:56 PM
Modified: 10/30/2013 5:00:33 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

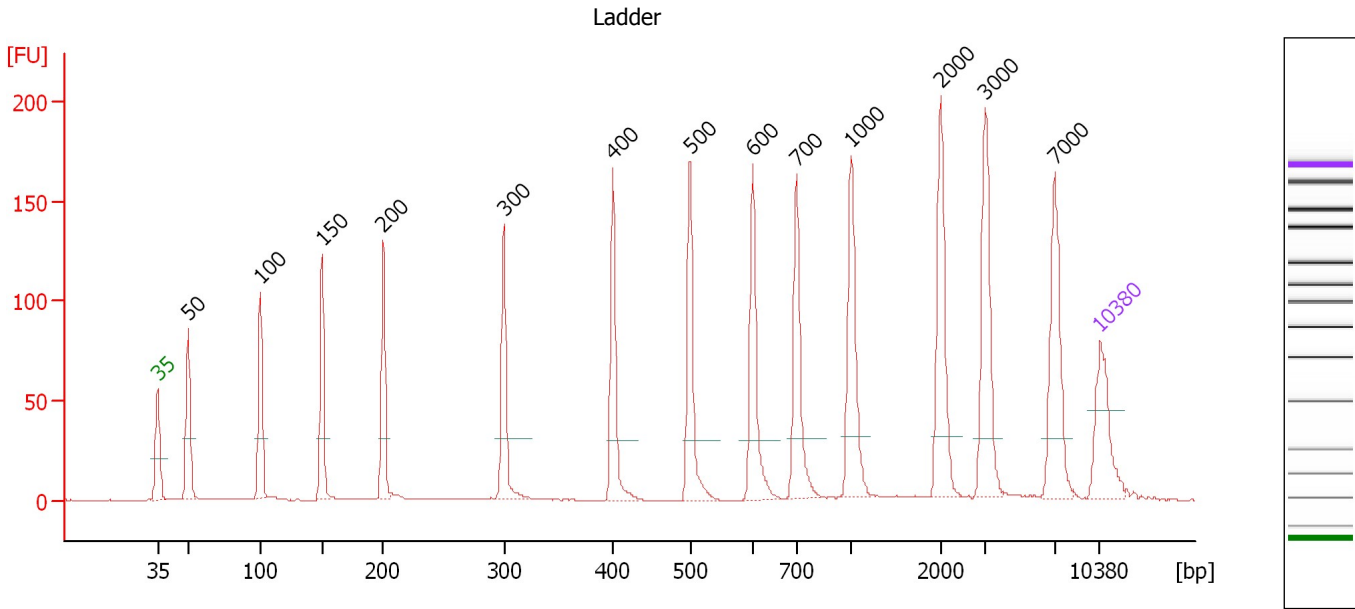
Ladder

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\2013-10-30\2013-10-30_009.xad

Created: 10/30/2013 4:13:56 PM
 Modified: 10/30/2013 5:00:33 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

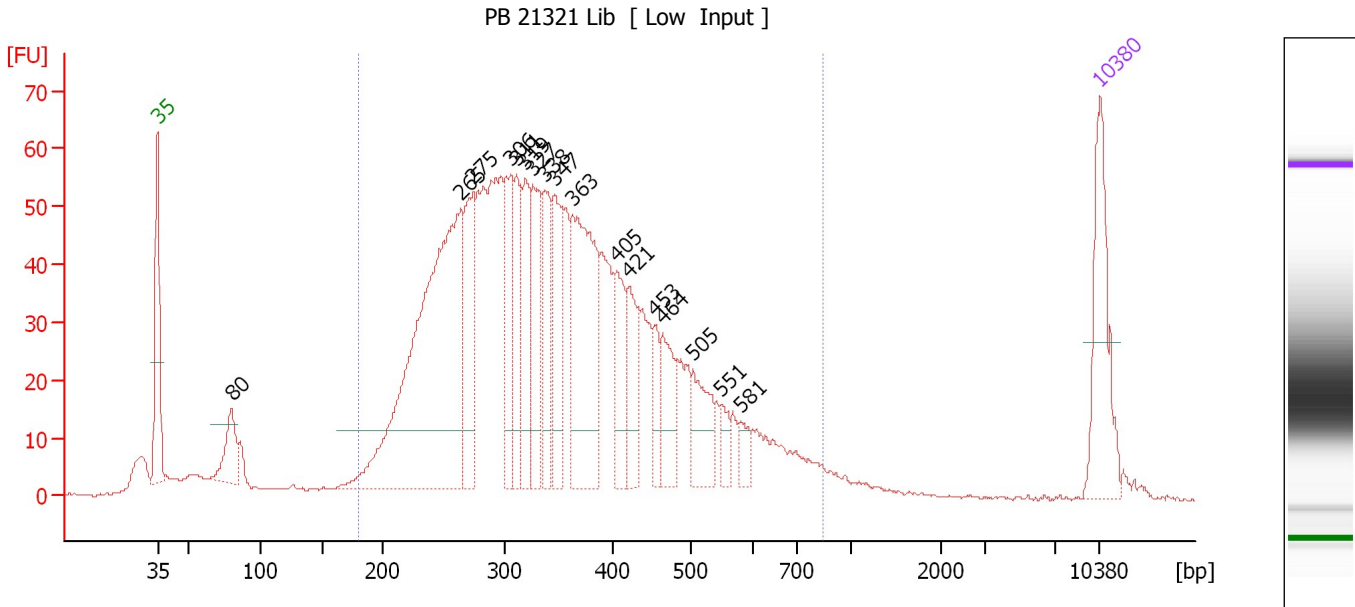
Peak table for Ladder

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\2013-10-30\2013-10-30_009.xad

Created: 10/30/2013 4:13:56 PM
 Modified: 10/30/2013 5:00:33 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 1 : PB 21321 Lib

Height Threshold [FU] : 10

Overall Results for sample 1 : PB 21321 Lib

Number of peaks found: 17 Corr. Area 1: 1,532.7
 Noise: 0.2

Peak table for sample 1 : PB 21321 Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	80	51.24	971.0	
3	265	485.57	2,779.9	
4	275	113.35	625.3	
5	306	86.15	426.3	
6	311	73.80	359.0	
7	319	76.63	363.6	
8	327	88.66	411.2	
9	338	75.65	339.4	
10	347	90.09	393.8	
11	363	194.86	813.6	
12	405	60.78	227.6	
13	421	59.76	215.0	
14	453	27.23	91.1	
15	464	55.50	181.1	
16	505	52.17	156.6	
17	551	16.67	45.9	
18	581	14.71	38.4	
19	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-30\2013-10-30_009.xad

Created: 10/30/2013 4:13:56 PM
Modified: 10/30/2013 5:00:33 PM

Electropherogram Summary Continued ...

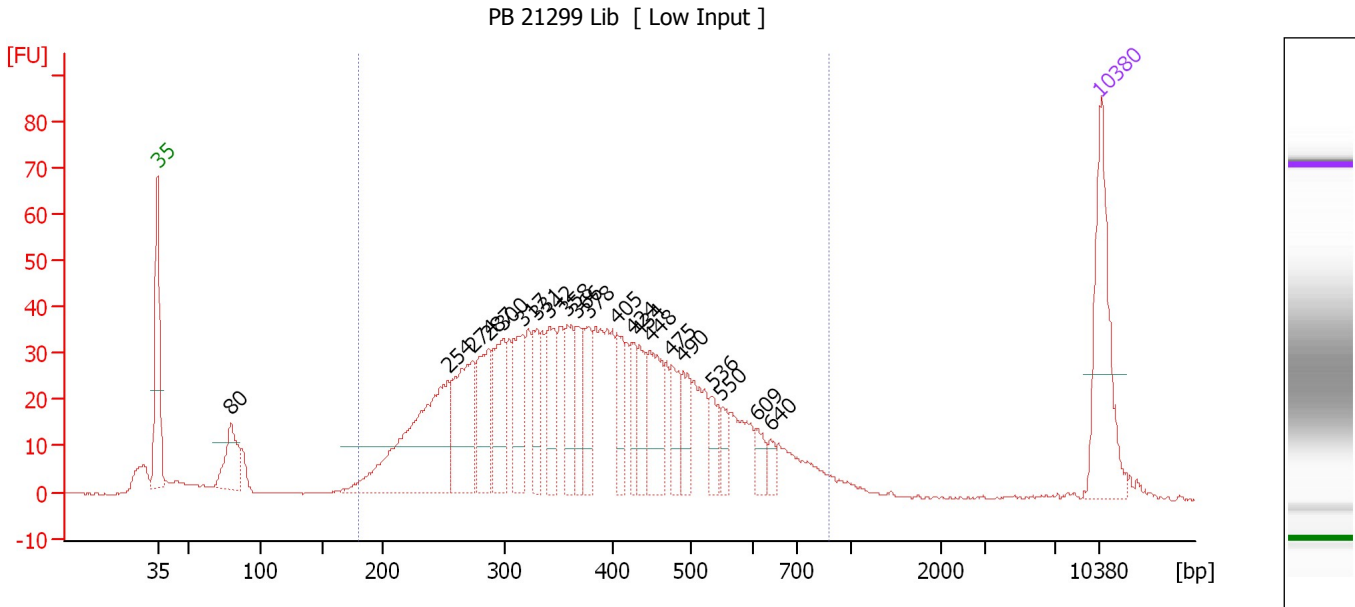
... Region table for sample 1 : PB 21321 Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
180	845	360	10,956.1	2,315.78	1,532.7	91	30.8	■

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-30\2013-10-30_009.xad

Created: 10/30/2013 4:13:56 PM
 Modified: 10/30/2013 5:00:33 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 2 : PB 21299 Lib

Height Threshold [FU] : 10

Overall Results for sample 2 : PB 21299 Lib

Number of peaks found: 21 Corr. Area 1: 1,140.2
 Noise: 0.2


Peak table for sample 2 : PB 21299 Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	80	54.26	1,032.9	
3	254	190.83	1,139.0	
4	274	94.44	522.4	
5	287	65.09	343.9	
6	300	65.21	329.7	
7	317	57.70	275.4	
8	331	34.40	157.7	
9	342	49.38	219.0	
10	358	40.55	171.4	
11	366	34.94	144.5	
12	378	36.18	144.9	
13	405	34.55	129.3	
14	424	26.46	94.5	
15	434	31.10	108.5	
16	448	55.07	186.1	
17	475	29.44	93.9	
18	490	29.22	90.3	
19	536	20.49	58.0	
20	550	14.25	39.2	
21	609	13.34	33.2	
22	640	8.77	20.7	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-30\2013-10-30_009.xad

Created: 10/30/2013 4:13:56 PM
Modified: 10/30/2013 5:00:33 PM

Electropherogram Summary Continued ...**... Peak table for sample 2 : PB 21299 Lib**

Peak	Size [bp]	Conc. [pg/ μ l]	Molarity [pmol/l]	Observations
23	 10,380	75.00	10.9	Upper Marker

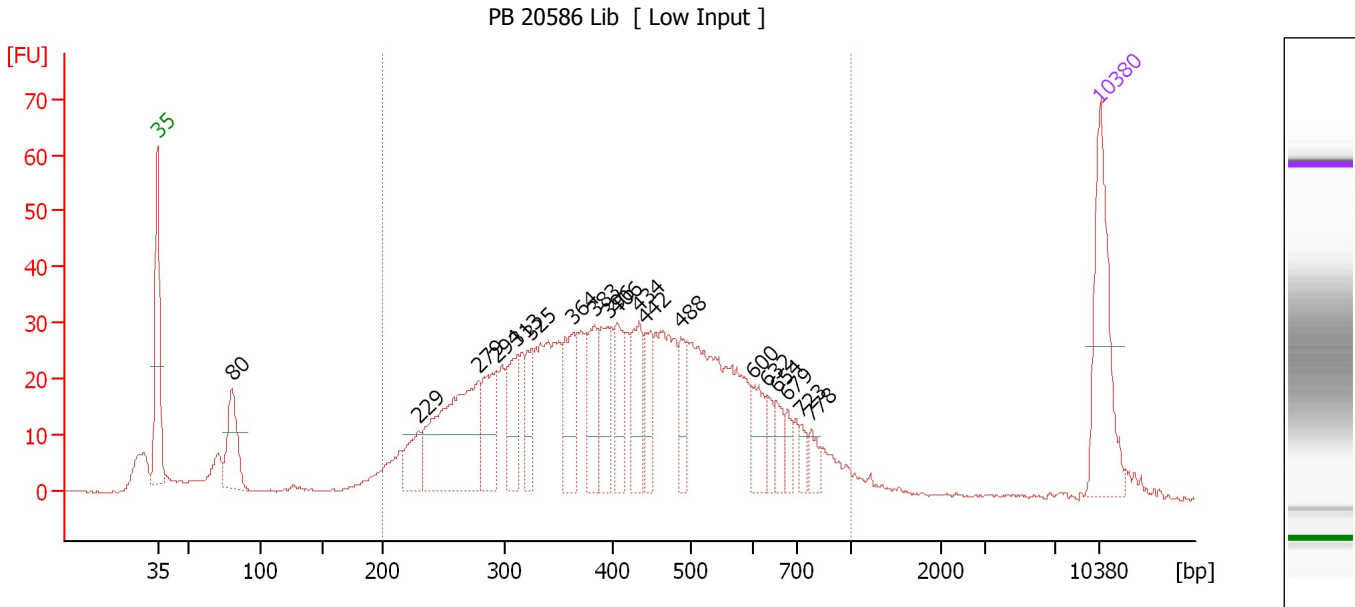
Region table for sample 2 : PB 21299 Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/ μ l]	Corr. Area	% of Total	Size distribution in CV [%]	Color
179	875	391	5,973.5	1,345.69	1,140.2	92	31.5	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-30\2013-10-30_009.xad

Created: 10/30/2013 4:13:56 PM
 Modified: 10/30/2013 5:00:33 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 3 : PB 20586 Lib

Height Threshold [FU] : 10

Overall Results for sample 3 : PB 20586 Lib

Number of peaks found: 19 Corr. Area 1: 977.8
 Noise: 0.3

Peak table for sample 3 : PB 20586 Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	80	64.80	1,226.1	
3	229	34.81	229.9	
4	279	164.11	891.5	
5	294	58.61	301.6	
6	313	49.79	241.3	
7	325	33.03	153.8	
8	364	56.77	236.4	
9	383	42.95	169.9	
10	396	51.37	196.6	
11	406	39.27	146.7	
12	434	49.31	172.3	
13	442	32.57	111.6	
14	488	28.05	87.0	
15	600	28.71	72.6	
16	632	13.76	33.0	
17	654	17.46	40.5	
18	679	11.38	25.4	
19	723	9.97	20.9	
20	778	11.79	23.0	
21	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-30\2013-10-30_009.xad

Created: 10/30/2013 4:13:56 PM
Modified: 10/30/2013 5:00:33 PM

Electropherogram Summary Continued ...

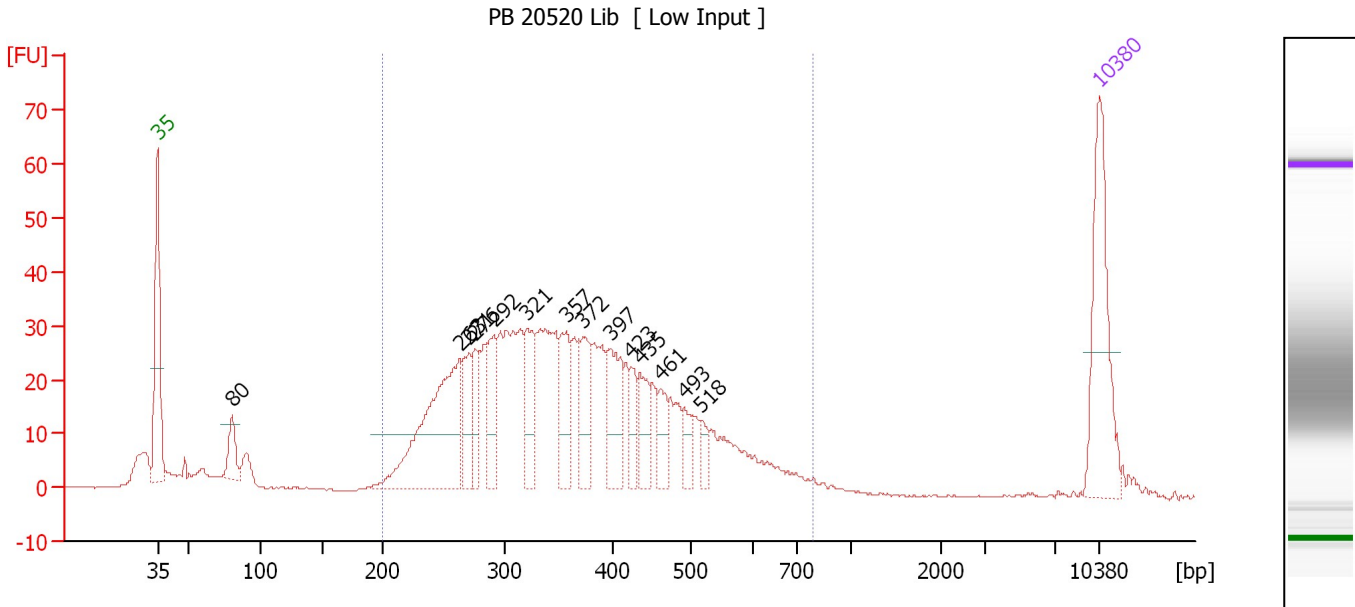
... Region table for sample 3 : PB 20586 Lib

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	433	5,600.6	1,372.39	977.8	88	33.9	■

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-30\2013-10-30_009.xad

Created: 10/30/2013 4:13:56 PM
 Modified: 10/30/2013 5:00:33 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 4 : PB 20520 Lib

Height Threshold [FU] : 10

Overall Results for sample 4 : PB 20520 Lib

Number of peaks found: 14 Corr. Area 1: 830.4
 Noise: 0.2

Peak table for sample 4 : PB 20520 Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	80	27.93	527.0	
3	263	170.41	979.9	
4	271	39.48	220.4	
5	276	32.95	180.7	
6	292	42.62	221.4	
7	321	44.39	209.3	
8	357	46.56	197.4	
9	372	45.88	186.8	
10	397	51.66	197.1	
11	423	20.75	74.3	
12	435	29.53	102.9	
13	461	21.38	70.3	
14	493	17.54	53.9	
15	518	12.74	37.3	
16	10,380	75.00	10.9	Upper Marker

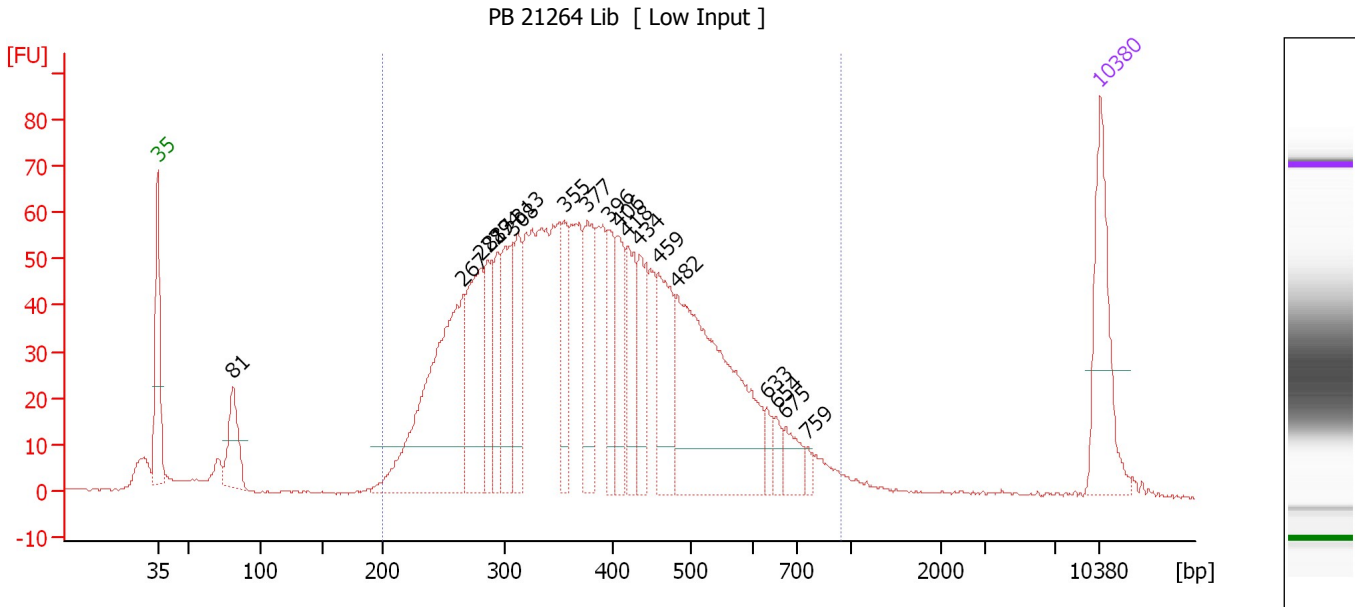
Region table for sample 4 : PB 20520 Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	786	373	4,999.0	1,110.71	830.4	87	28.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-30\2013-10-30_009.xad

Created: 10/30/2013 4:13:56 PM
 Modified: 10/30/2013 5:00:33 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 5 : PB 21264 Lib

Height Threshold [FU] : 10

Overall Results for sample 5 : PB 21264 Lib

Number of peaks found: 19 Corr. Area 1: 1,703.7
 Noise: 0.2

Peak table for sample 5 : PB 21264 Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	81	63.13	1,182.0	
3	267	285.53	1,622.3	
4	281	124.00	667.8	
5	287	61.07	322.5	
6	294	57.57	296.2	
7	308	88.67	436.5	
8	313	72.54	351.4	
9	355	56.57	241.4	
10	377	82.21	330.6	
11	396	49.75	190.2	
12	406	58.52	218.1	
13	418	65.44	237.0	
14	434	52.59	183.5	
15	459	84.47	279.1	
16	482	285.39	896.5	
17	633	13.33	31.9	
18	654	13.48	31.2	
19	675	22.98	51.6	
20	759	6.38	12.7	
21	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-30\2013-10-30_009.xad

Created: 10/30/2013 4:13:56 PM
Modified: 10/30/2013 5:00:33 PM

Electropherogram Summary Continued ...

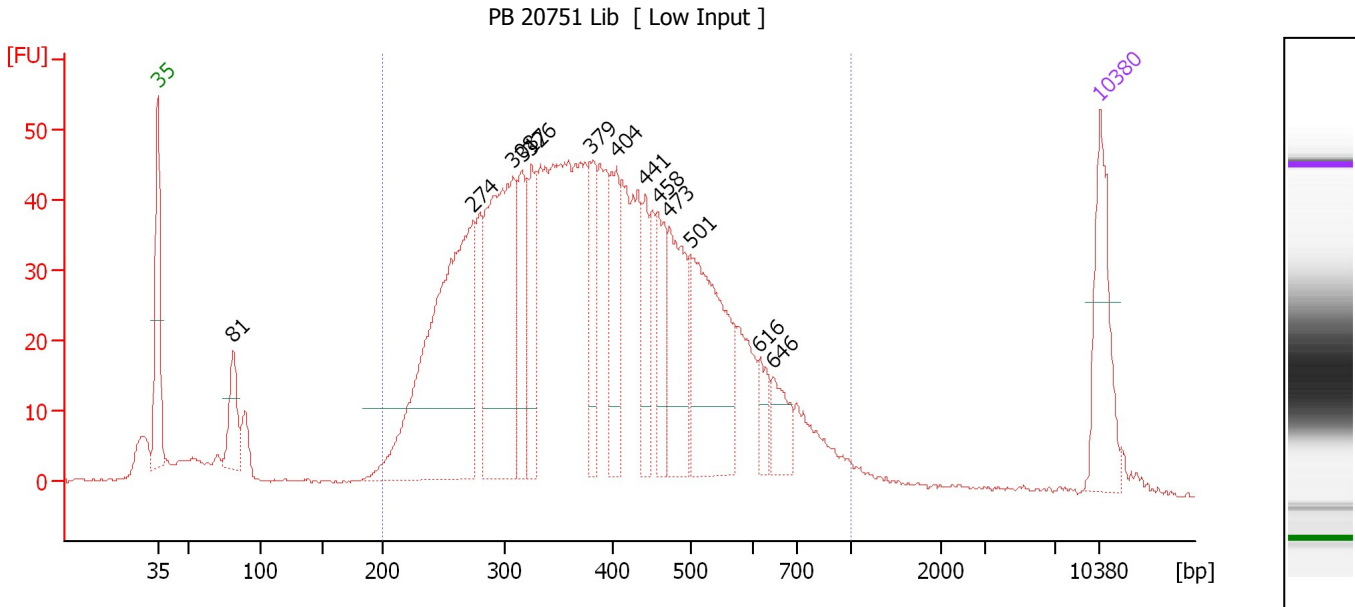
... Region table for sample 5 : PB 21264 Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	947	398	8,615.9	2,007.60	1,703.7	93	30.7	■

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-30\2013-10-30_009.xad

Created: 10/30/2013 4:13:56 PM
 Modified: 10/30/2013 5:00:33 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 6 : PB 20751 Lib

Height Threshold [FU] : 10

Overall Results for sample 6 : PB 20751 Lib

Number of peaks found: 13 Corr. Area 1: 1,409.5
 Noise: 0.2

Peak table for sample 6 : PB 20751 Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	81	62.81	1,176.0	
3	274	442.89	2,445.3	
4	308	289.38	1,423.4	
5	317	89.30	427.5	
6	326	77.37	360.1	
7	379	70.09	280.4	
8	404	82.44	309.0	
9	441	51.91	178.3	
10	458	70.29	232.5	
11	473	109.70	351.2	
12	501	193.72	586.1	
13	616	24.80	61.0	
14	646	38.14	89.5	
15	10,380	75.00	10.9	Upper Marker

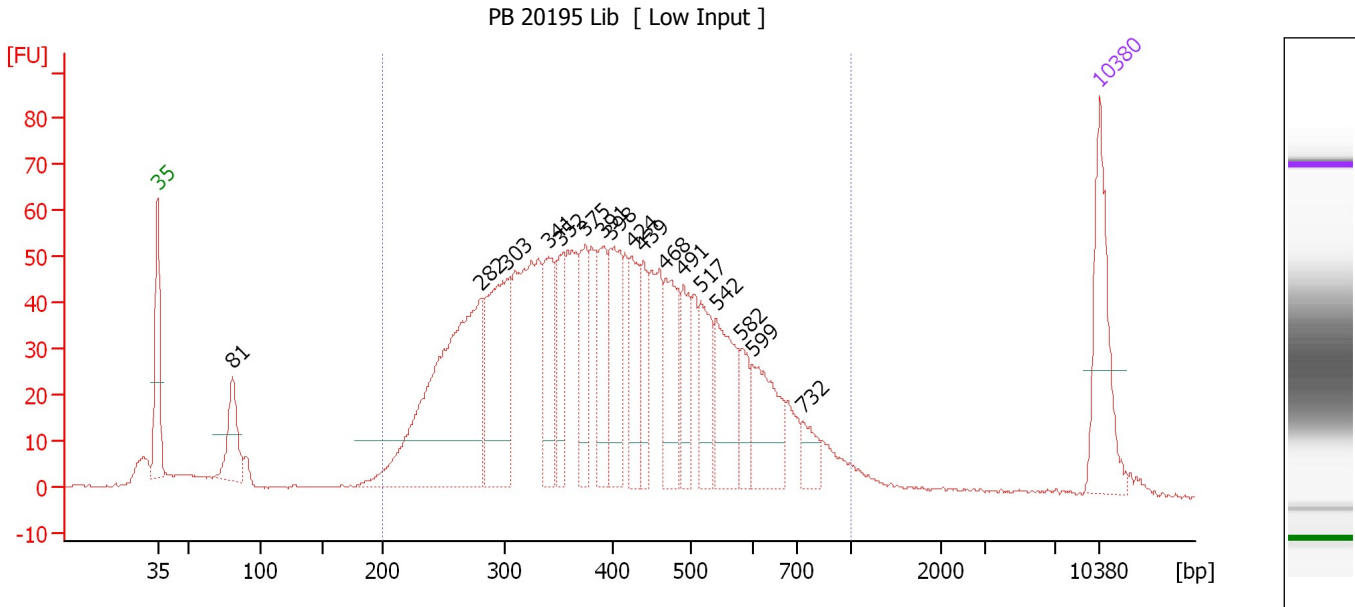
Region table for sample 6 : PB 20751 Lib

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	404	11,157.1	2,608.33	1,409.5	90	32.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-30\2013-10-30_009.xad

Created: 10/30/2013 4:13:56 PM
 Modified: 10/30/2013 5:00:33 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 7 : PB 20195 Lib

Height Threshold [FU] : 10

Overall Results for sample 7 : PB 20195 Lib

Number of peaks found: 17 Corr. Area 1: 1,646.8
 Noise: 0.2

Peak table for sample 7 : PB 20195 Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	81	66.75	1,255.9	
3	282	358.10	1,926.9	
4	303	165.10	824.7	
5	341	81.62	362.4	
6	352	52.51	226.3	
7	375	63.08	255.2	
8	391	68.55	265.4	
9	398	85.70	326.6	
10	424	62.62	223.6	
11	439	43.73	150.9	
12	468	78.88	255.5	
13	491	48.44	149.4	
14	517	57.37	168.3	
15	542	82.67	231.2	
16	582	32.37	84.3	
17	599	70.85	179.2	
18	732	20.64	42.7	
19	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-30\2013-10-30_009.xad

Created: 10/30/2013 4:13:56 PM
Modified: 10/30/2013 5:00:33 PM

Electropherogram Summary Continued ...

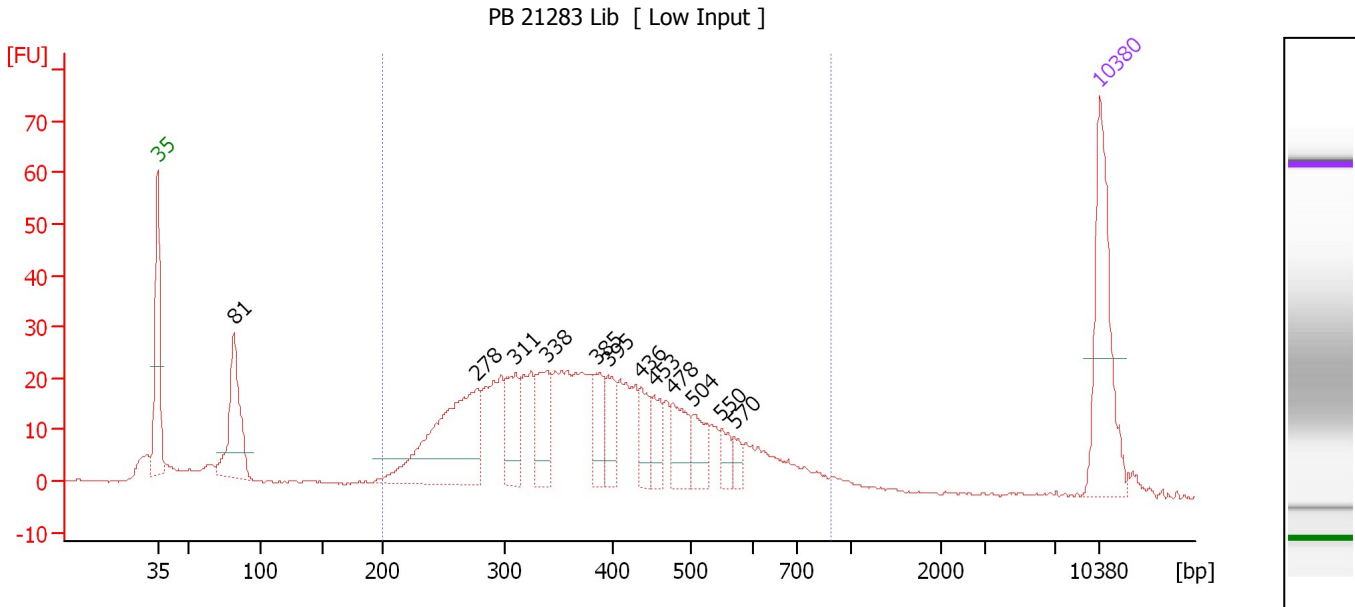
... Region table for sample 7 : PB 20195 Lib

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	418	8,399.9	2,012.84	1,646.8	91	33.2	■

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-30\2013-10-30_009.xad

Created: 10/30/2013 4:13:56 PM
 Modified: 10/30/2013 5:00:33 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : PB 21283 Lib

Number of peaks found: 12 Corr. Area 1: 652.8
 Noise: 0.3

Peak table for sample 8 : PB 21283 Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	81	92.31	1,716.2	
3	278	155.02	845.0	
4	311	44.24	215.8	
5	338	45.02	201.5	
6	385	30.07	118.4	
7	395	28.39	108.8	
8	436	23.83	82.7	
9	453	23.20	77.6	
10	478	31.86	100.9	
11	504	25.53	76.8	
12	550	13.06	36.0	
13	570	9.45	25.1	
14	10,380	75.00	10.9	Upper Marker

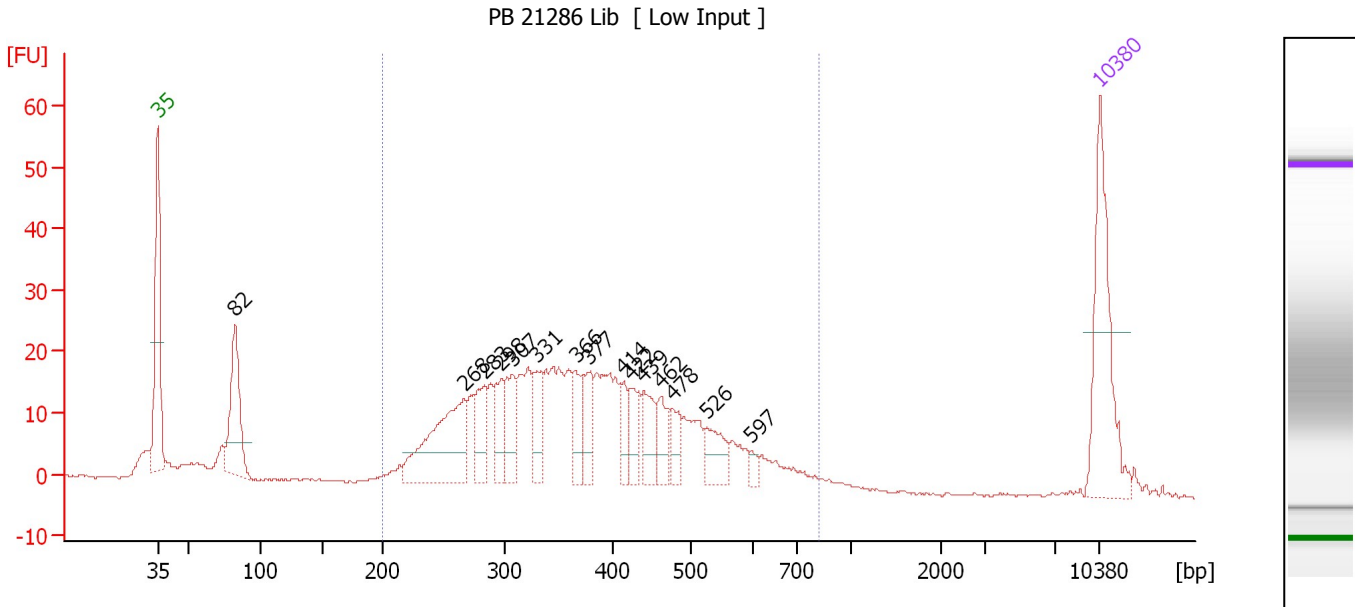
Region table for sample 8 : PB 21283 Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	888	395	3,543.0	819.96	652.8	84	30.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-30\2013-10-30_009.xad

Created: 10/30/2013 4:13:56 PM
 Modified: 10/30/2013 5:00:33 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : PB 21286 Lib

Number of peaks found: 15 Corr. Area 1: 511.7
 Noise: 0.2

Peak table for sample 9 : PB 21286 Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	82	85.74	1,580.7	
3	268	105.83	599.3	
4	283	32.44	173.4	
5	298	30.41	154.7	
6	307	32.86	161.9	
7	331	25.06	114.8	
8	366	29.91	123.9	
9	377	27.43	110.3	
10	414	18.81	68.9	
11	422	23.34	83.8	
12	439	28.90	99.7	
13	462	22.82	74.9	
14	478	18.31	58.0	
15	526	26.00	74.8	
16	597	5.38	13.7	
17	10,380	75.00	10.9	Upper Marker

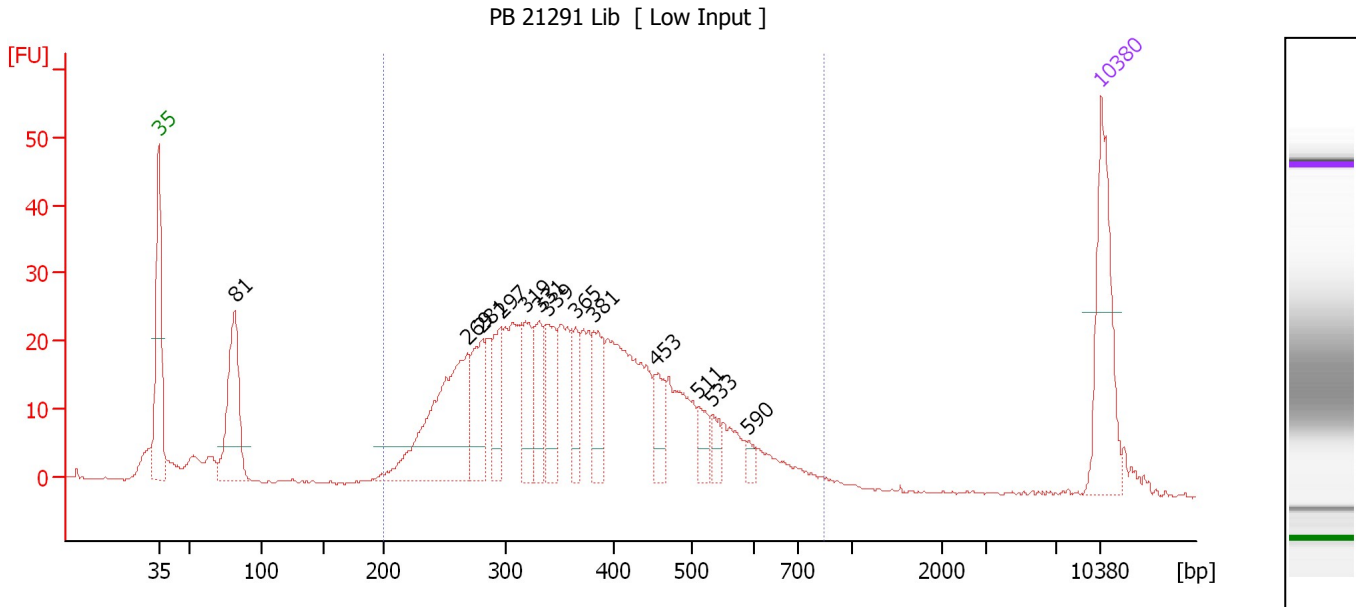
Region table for sample 9 : PB 21286 Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	827	388	3,437.9	790.90	511.7	84	28.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-30\2013-10-30_009.xad

Created: 10/30/2013 4:13:56 PM
 Modified: 10/30/2013 5:00:33 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : PB 21291 Lib

Number of peaks found: 13 Corr. Area 1: 640.3
 Noise: 0.2

Peak table for sample 10 : PB 21291 Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	81	124.61	2,323.6	
3	269	183.65	1,034.6	
4	281	59.95	323.6	
5	297	46.20	235.9	
6	319	49.19	233.4	
7	331	44.99	205.9	
8	339	49.10	219.2	
9	365	32.60	135.5	
10	381	44.63	177.4	
11	453	24.73	82.7	
12	511	18.13	53.7	
13	533	13.79	39.2	
14	590	6.36	16.3	
15	10,380	75.00	10.9	Upper Marker

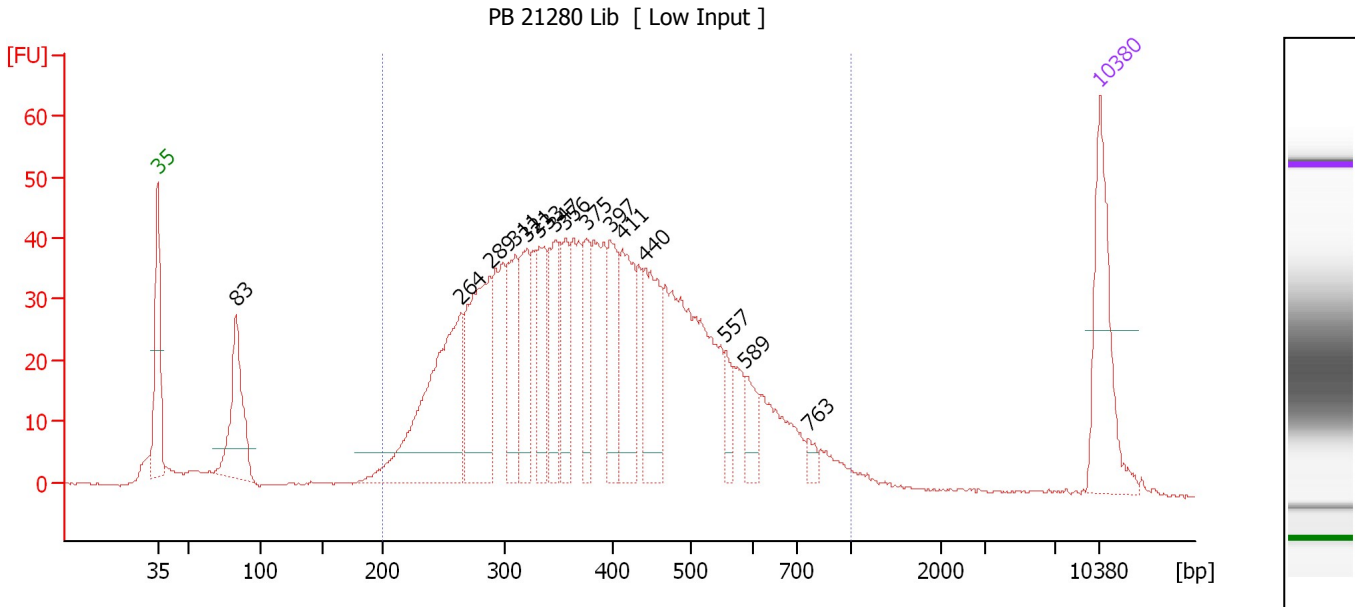
Region table for sample 10 : PB 21291 Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	844	380	5,006.4	1,133.08	640.3	86	28.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-30\2013-10-30_009.xad

Created: 10/30/2013 4:13:56 PM
 Modified: 10/30/2013 5:00:33 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : PB 21280 Lib

Number of peaks found: 15 Corr. Area 1: 1,184.7
 Noise: 0.2

Peak table for sample 11 : PB 21280 Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	83	110.09	2,009.0	
3	264	221.48	1,270.8	
4	289	155.28	814.5	
5	311	74.31	362.2	
6	321	70.83	334.4	
7	333	58.63	266.9	
8	347	57.70	251.9	
9	356	49.36	209.8	
10	375	47.48	191.6	
11	397	57.81	220.4	
12	411	88.93	327.5	
13	440	85.45	294.2	
14	557	21.07	57.3	
15	589	24.89	64.0	
16	763	8.27	16.4	
17	10,380	75.00	10.9	Upper Marker

Region table for sample 11 : PB 21280 Lib

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	407	7,371.9	1,737.87	1,184.7	91	32.3	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-30\2013-10-30_009.xad

Created: 10/30/2013 4:13:56 PM
Modified: 10/30/2013 5:00:33 PM

Gel Image

