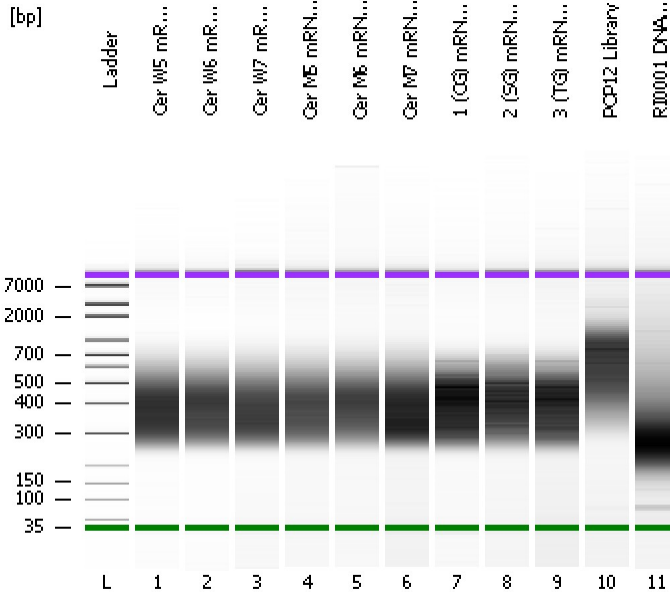


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-09-03\2013-09-03_004.xad

Created: 9/3/2013 4:28:36 PM
Modified: 9/3/2013 5:17:13 PM

Electrophoresis File Run Summary



Instrument Information:

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

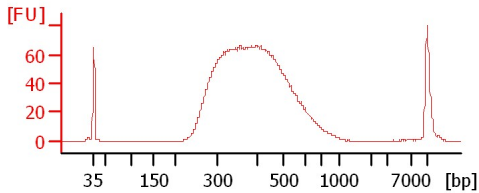
Assay Information:

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

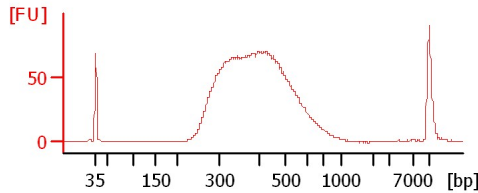
Chip Information:

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

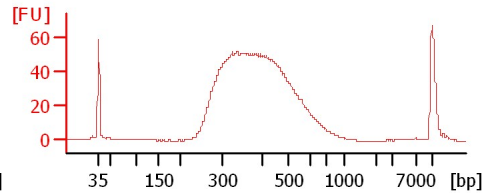
Cer W5 mRNA Lib 1:4



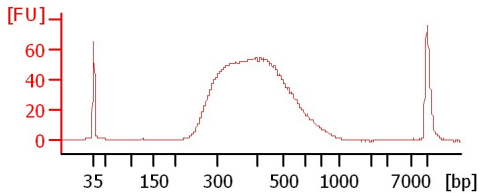
Cer W6 mRNA Lib 1:5



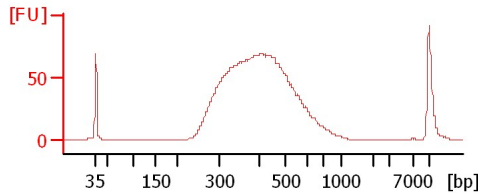
Cer W7 mRNA Lib 1:4



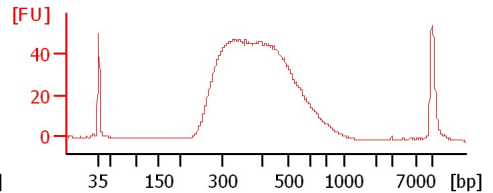
Cer M5 mRNA Lib 1:5



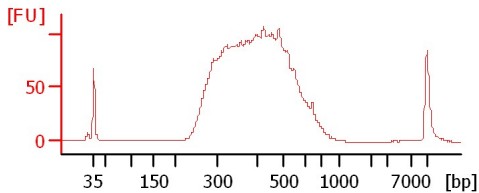
Cer M6 mRNA Lib 1:4



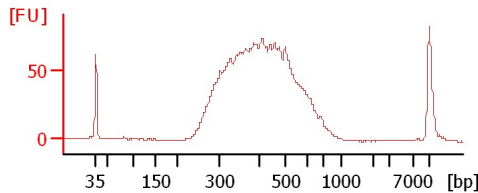
Cer M7 mRNA Lib 1:4



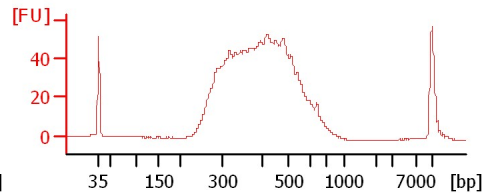
1 (CG) mRNA Lib



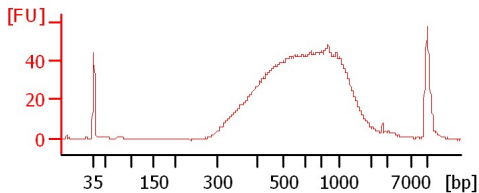
2 (SG) mRNA Lib 1:3



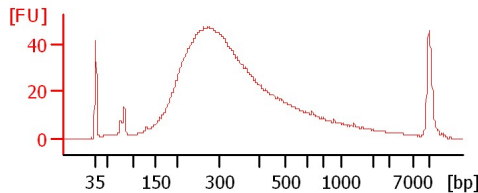
3 (TG) mRNA Lib 1:5



POP12 Library



RI0001 DNA Library



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-09-03\2013-09-03_004.xad

Created: 9/3/2013 4:28:36 PM
Modified: 9/3/2013 5:17:13 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
Cer W5 mRNA Lib 1:4		<input type="checkbox"/>	✓			
Cer W6 mRNA Lib 1:5		<input type="checkbox"/>	✓			
Cer W7 mRNA Lib 1:4		<input type="checkbox"/>	✓			
Cer M5 mRNA Lib 1:5		<input type="checkbox"/>	✓			
Cer M6 mRNA Lib 1:4		<input type="checkbox"/>	✓			
Cer M7 mRNA Lib 1:4		<input type="checkbox"/>	✓			
1 (CG) mRNA Lib		<input type="checkbox"/>	✓			
2 (SG) mRNA Lib 1:3		<input type="checkbox"/>	✓			
3 (TG) mRNA Lib 1:5		<input type="checkbox"/>	✓			
POP12 Library		<input type="checkbox"/>	✓			
RI0001 DNA Library		<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\2013-09-03\2013-09-03_004.xad

Created: 9/3/2013 4:28:36 PM
Modified: 9/3/2013 5:17:13 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

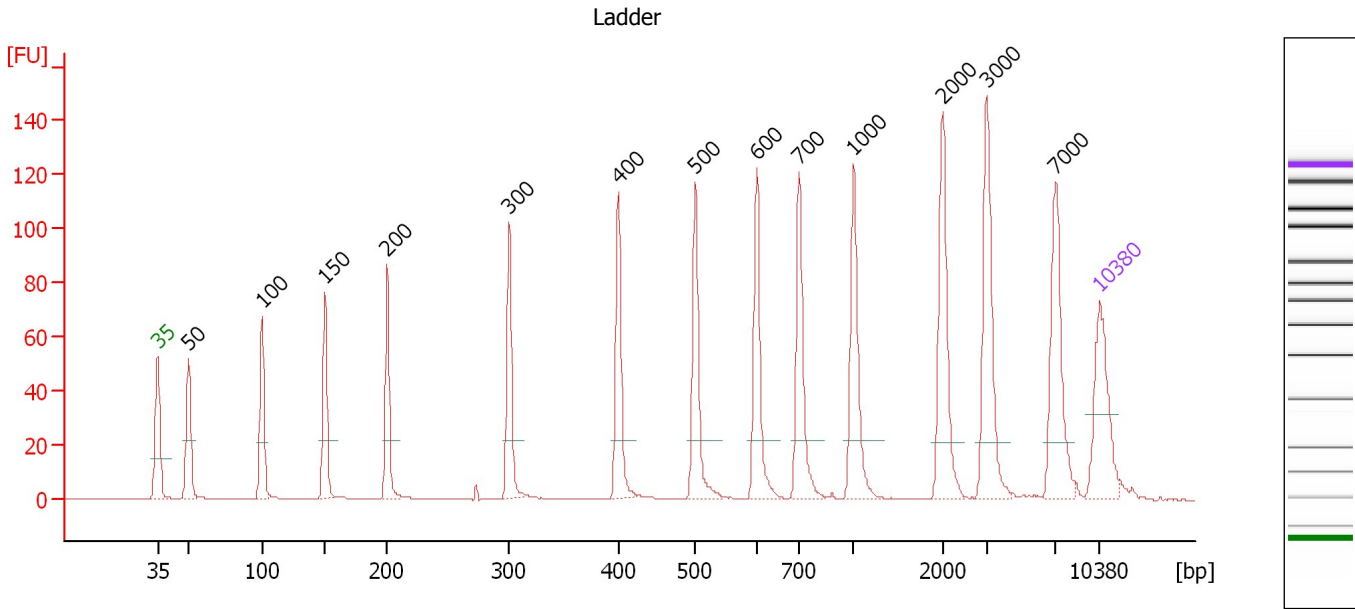
Ladder

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\2013-09-03\2013-09-03_004.xad

Created: 9/3/2013 4:28:36 PM
 Modified: 9/3/2013 5:17:13 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

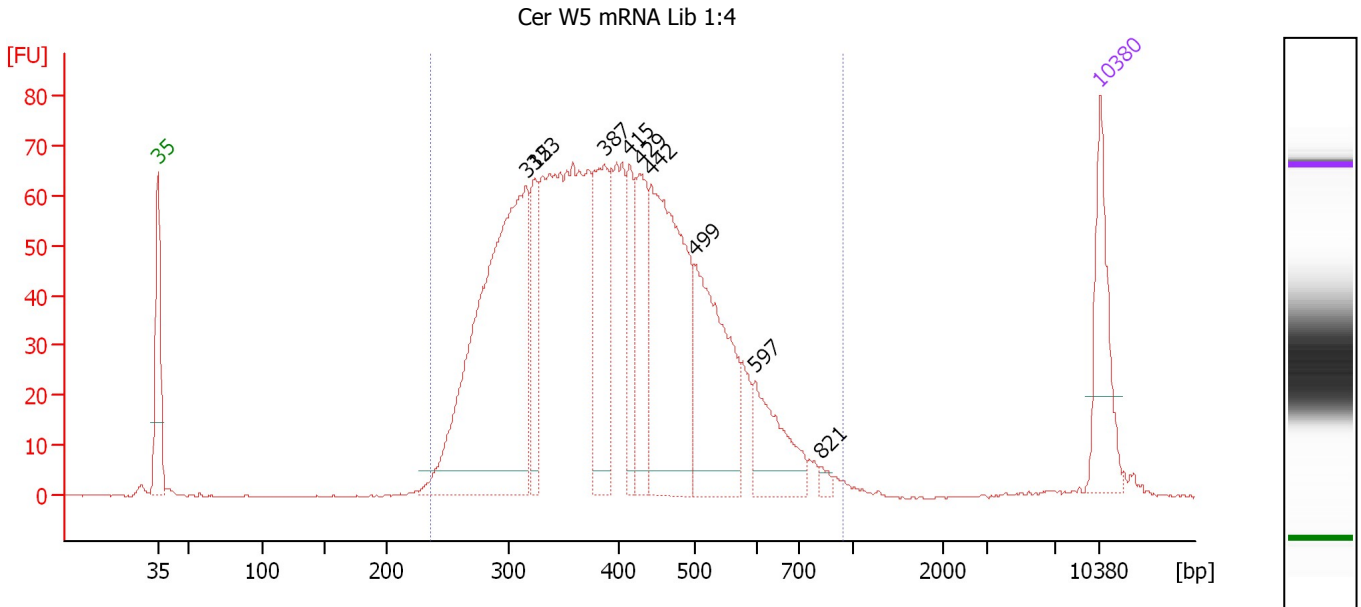
Peak table for Ladder

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\2013-09-03\2013-09-03_004.xad

Created: 9/3/2013 4:28:36 PM
 Modified: 9/3/2013 5:17:13 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : Cer W5 mRNA Lib 1:4

Number of peaks found: 9 Corr. Area 1: 1,661.6
 Noise: 0.1

Peak table for sample 1 : Cer W5 mRNA Lib 1:4

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	315	574.59	2,760.0	
3	323	83.68	392.3	
4	387	162.42	635.8	
5	415	71.95	262.9	
6	429	112.39	397.1	
7	442	308.95	1,058.2	
8	499	209.33	636.0	
9	597	85.85	217.8	
10	821	6.72	12.4	
11	10,380	75.00	10.9	Upper Marker

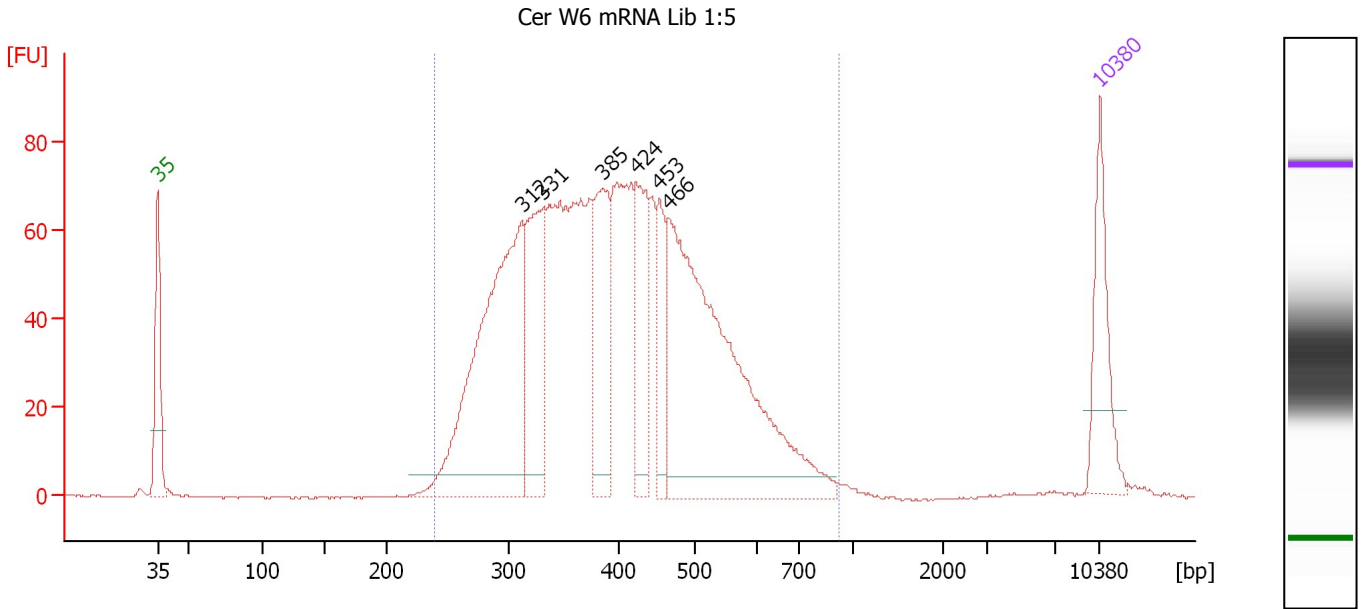
Region table for sample 1 : Cer W5 mRNA Lib 1:4

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
236	936	408	9,609.8	2,371.16	1,661.6	98	26.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-09-03\2013-09-03_004.xad

Created: 9/3/2013 4:28:36 PM
 Modified: 9/3/2013 5:17:13 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : Cer W6 mRNA Lib 1:5

Number of peaks found: 6 Corr. Area 1: 1,704.5
 Noise: 0.2

Peak table for sample 2 : Cer W6 mRNA Lib 1:5

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	312	471.80	2,291.7	
3	331	176.41	806.8	
4	385	145.28	571.4	
5	424	112.66	403.0	
6	453	73.93	247.0	
7	466	536.80	1,744.5	
8	10,380	75.00	10.9	Upper Marker

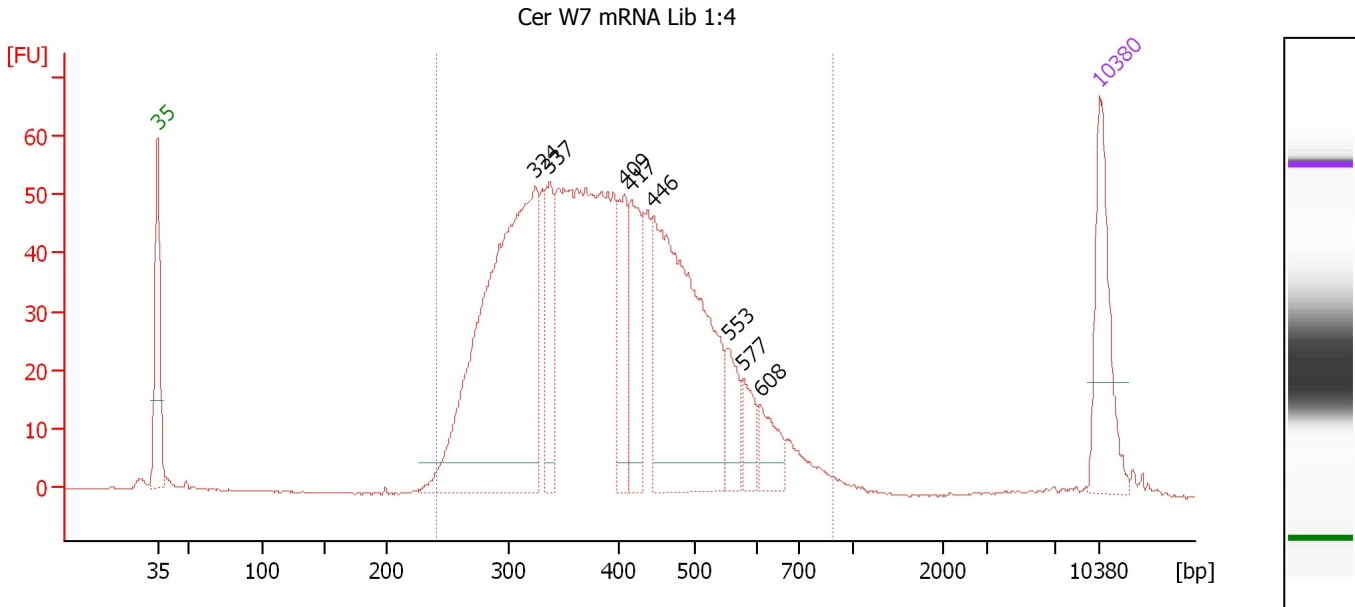
Region table for sample 2 : Cer W6 mRNA Lib 1:5

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
238	915	411	8,770.7	2,186.20	1,704.5	98	25.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-09-03\2013-09-03_004.xad

Created: 9/3/2013 4:28:36 PM
 Modified: 9/3/2013 5:17:13 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : Cer W7 mRNA Lib 1:4

Number of peaks found: 8 Corr. Area 1: 1,260.7
 Noise: 0.2

Peak table for sample 3 : Cer W7 mRNA Lib 1:4

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	324	540.57	2,530.4	
3	337	77.90	350.6	
4	409	78.04	289.4	
5	417	89.08	323.5	
6	446	348.70	1,184.6	
7	553	38.65	105.9	
8	577	30.29	79.5	
9	608	35.97	89.6	
10	10,380	75.00	10.9	Upper Marker

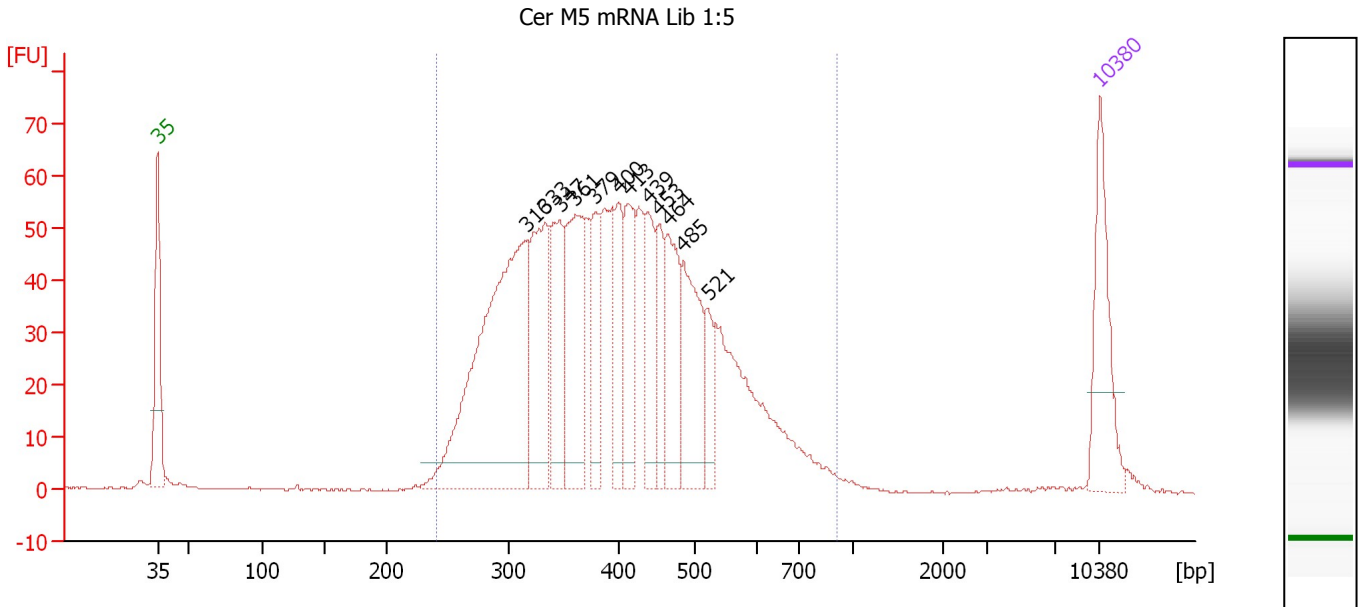
Region table for sample 3 : Cer W7 mRNA Lib 1:4

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
240	888	405	7,683.1	1,890.10	1,260.7	97	25.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-09-03\2013-09-03_004.xad

Created: 9/3/2013 4:28:36 PM
 Modified: 9/3/2013 5:17:13 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : Cer M5 mRNA Lib 1:5

Number of peaks found: 12 Corr. Area 1: 1,336.9
 Noise: 0.1

Peak table for sample 4 : Cer M5 mRNA Lib 1:5

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	316	417.13	2,001.6	
3	333	153.94	699.6	
4	347	102.33	447.3	
5	361	140.96	592.4	
6	379	63.92	255.6	
7	400	67.24	254.9	
8	413	85.56	314.0	
9	439	75.96	262.4	
10	453	55.14	184.5	
11	464	90.72	296.0	
12	485	106.80	333.8	
13	521	37.08	107.8	
14	10,380	75.00	10.9	Upper Marker

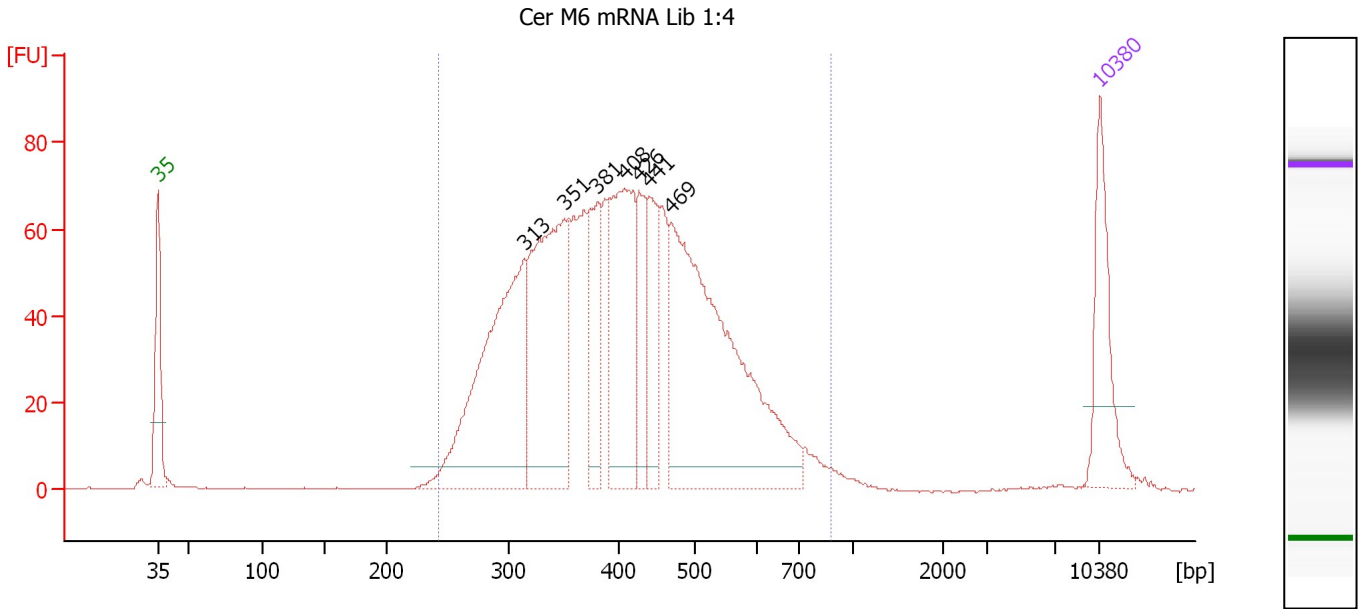
Region table for sample 4 : Cer M5 mRNA Lib 1:5

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
239	910	413	7,535.9	1,881.62	1,336.9	95	26.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-09-03\2013-09-03_004.xad

Created: 9/3/2013 4:28:36 PM
 Modified: 9/3/2013 5:17:13 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : Cer M6 mRNA Lib 1:4

Number of peaks found: 7 Corr. Area 1: 1,595.2
 Noise: 0.2

Peak table for sample 5 : Cer M6 mRNA Lib 1:4

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	313	343.31	1,659.6	
3	351	285.77	1,234.7	
4	381	90.57	360.3	
5	408	200.65	744.6	
6	426	63.96	227.3	
7	441	76.26	262.1	
8	469	443.54	1,433.1	
9	10,380	75.00	10.9	Upper Marker

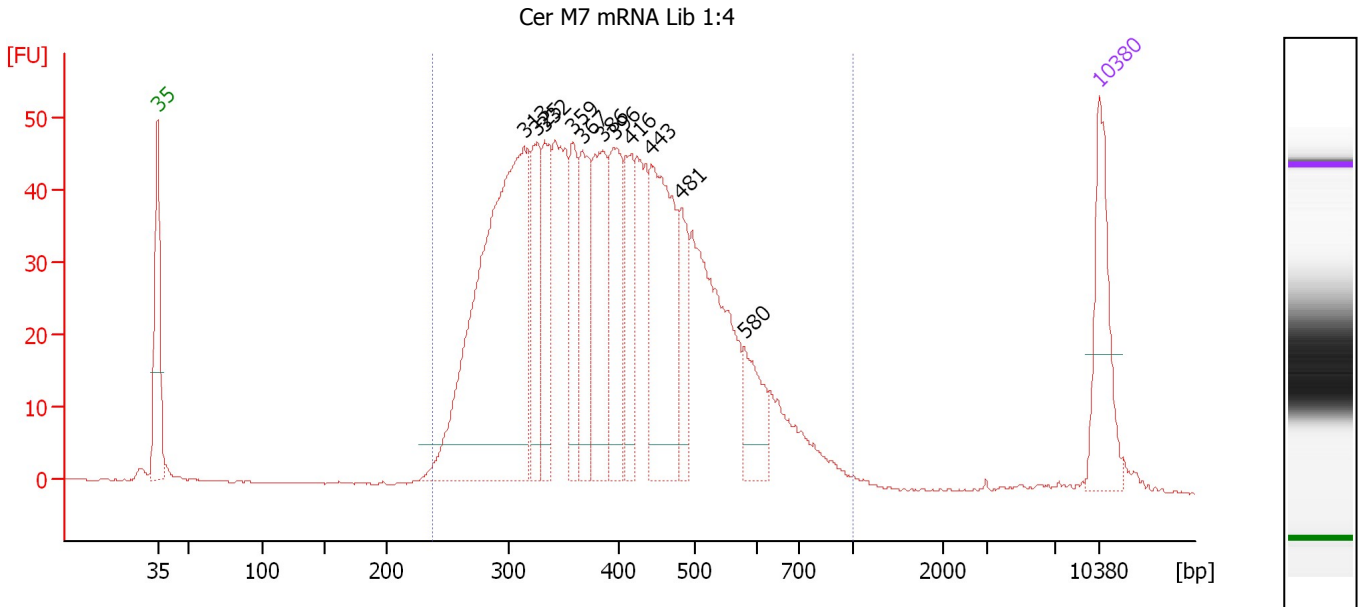
Region table for sample 5 : Cer M6 mRNA Lib 1:4

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
242	873	419	7,211.0	1,834.38	1,595.2	96	25.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-09-03\2013-09-03_004.xad

Created: 9/3/2013 4:28:36 PM
 Modified: 9/3/2013 5:17:13 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : Cer M7 mRNA Lib 1:4

Number of peaks found: 11 Corr. Area 1: 1,192.6
 Noise: 0.1

Peak table for sample 6 : Cer M7 mRNA Lib 1:4

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	313	539.75	2,608.9	
3	325	98.80	460.4	
4	332	90.93	414.6	
5	359	78.34	330.8	
6	367	98.81	408.3	
7	386	128.21	503.1	
8	396	120.75	461.5	
9	416	69.17	251.9	
10	443	189.78	648.4	
11	481	65.55	206.5	
12	580	54.61	142.7	
13	10,380	75.00	10.9	Upper Marker

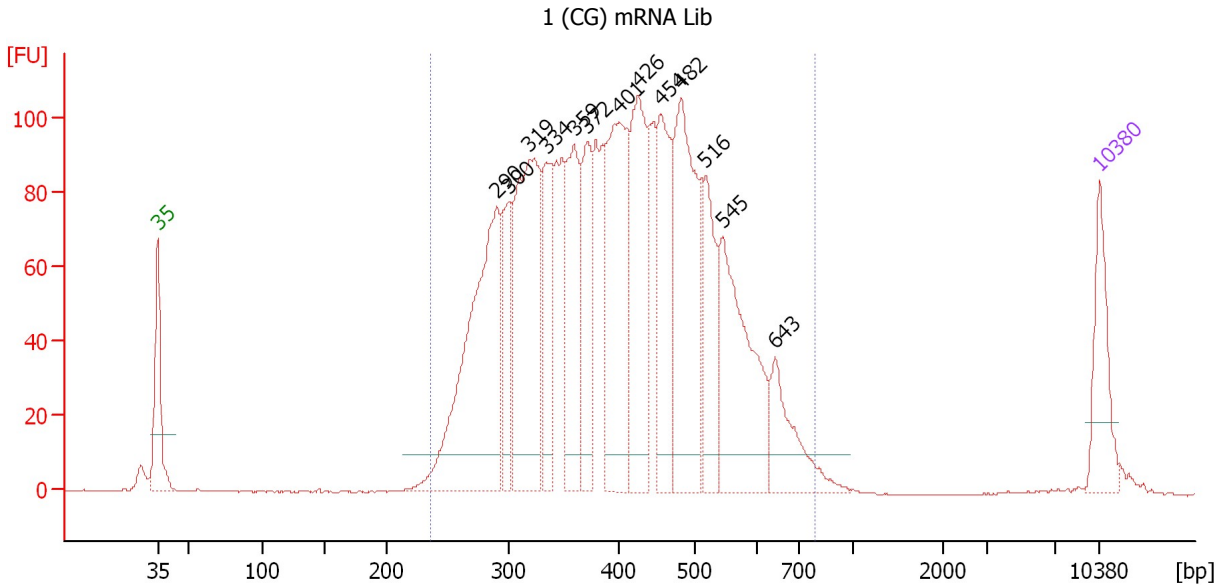
Region table for sample 6 : Cer M7 mRNA Lib 1:4

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
238	1,000	410	8,984.5	2,217.46	1,192.6	98	27.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-09-03\2013-09-03_004.xad

Created: 9/3/2013 4:28:36 PM
 Modified: 9/3/2013 5:17:13 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 7 : 1 (CG) mRNA Lib

Height Threshold [FU] : 10

Overall Results for sample 7 : 1 (CG) mRNA Lib

Number of peaks found: 13 Corr. Area 1: 2,485.3
 Noise: 0.1

Peak table for sample 7 : 1 (CG) mRNA Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	290	453.55	2,372.0	
3	300	109.73	554.7	
4	319	367.65	1,747.7	
5	334	133.77	607.1	
6	359	181.63	765.5	
7	372	136.41	555.6	
8	401	280.57	1,059.5	
9	426	243.85	866.8	
10	454	181.26	604.9	
11	482	309.07	972.0	
12	516	133.44	392.2	
13	545	258.65	719.3	
14	643	99.85	235.1	
15	10,380	75.00	10.9	Upper Marker

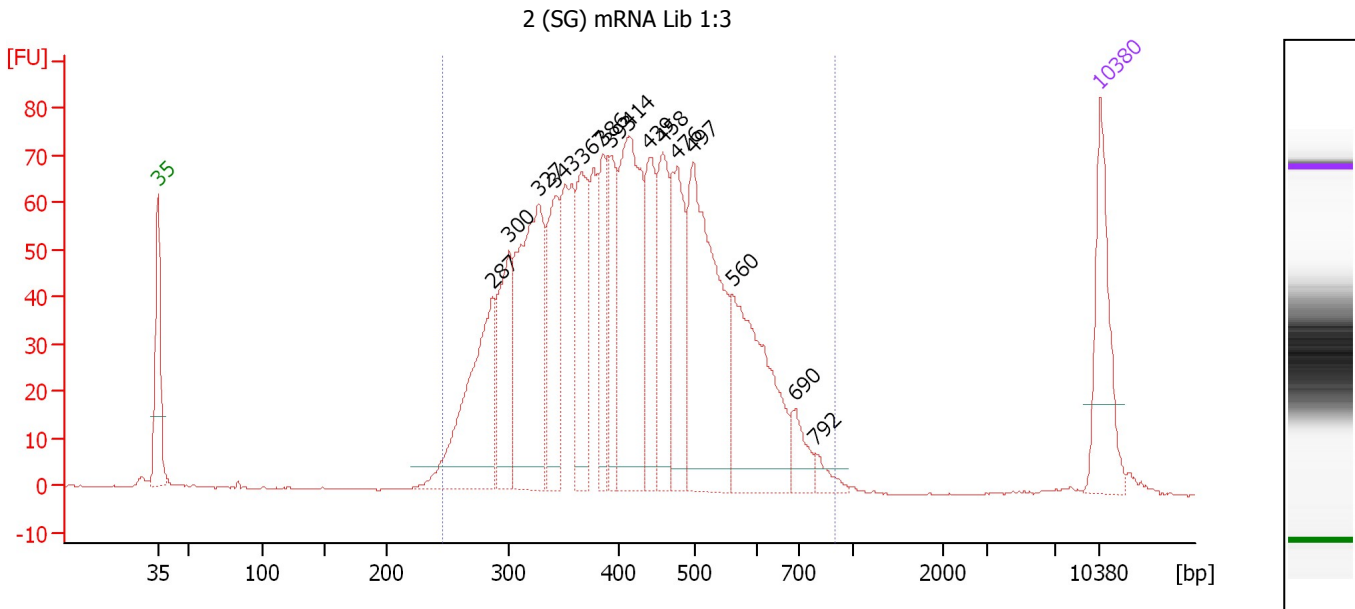
Region table for sample 7 : 1 (CG) mRNA Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
236	782	414	13,303.7	3,336.12	2,485.3	98	24.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-09-03\2013-09-03_004.xad

Created: 9/3/2013 4:28:36 PM
 Modified: 9/3/2013 5:17:13 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : 2 (SG) mRNA Lib 1:3

Number of peaks found: 15 Corr. Area 1: 1,696.7
 Noise: 0.2

Peak table for sample 8 : 2 (SG) mRNA Lib 1:3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	287	194.37	1,027.9	
3	300	116.46	587.9	
4	327	244.92	1,136.1	
5	343	109.60	484.8	
6	367	113.93	470.3	
7	386	78.64	308.5	
8	393	77.69	299.6	
9	414	218.36	798.7	
10	439	95.75	330.2	
11	458	106.08	350.9	
12	476	119.16	379.5	
13	497	252.74	770.1	
14	560	180.36	487.9	
15	690	29.84	65.5	
16	792	12.84	24.6	
17	10,380	75.00	10.9	Upper Marker

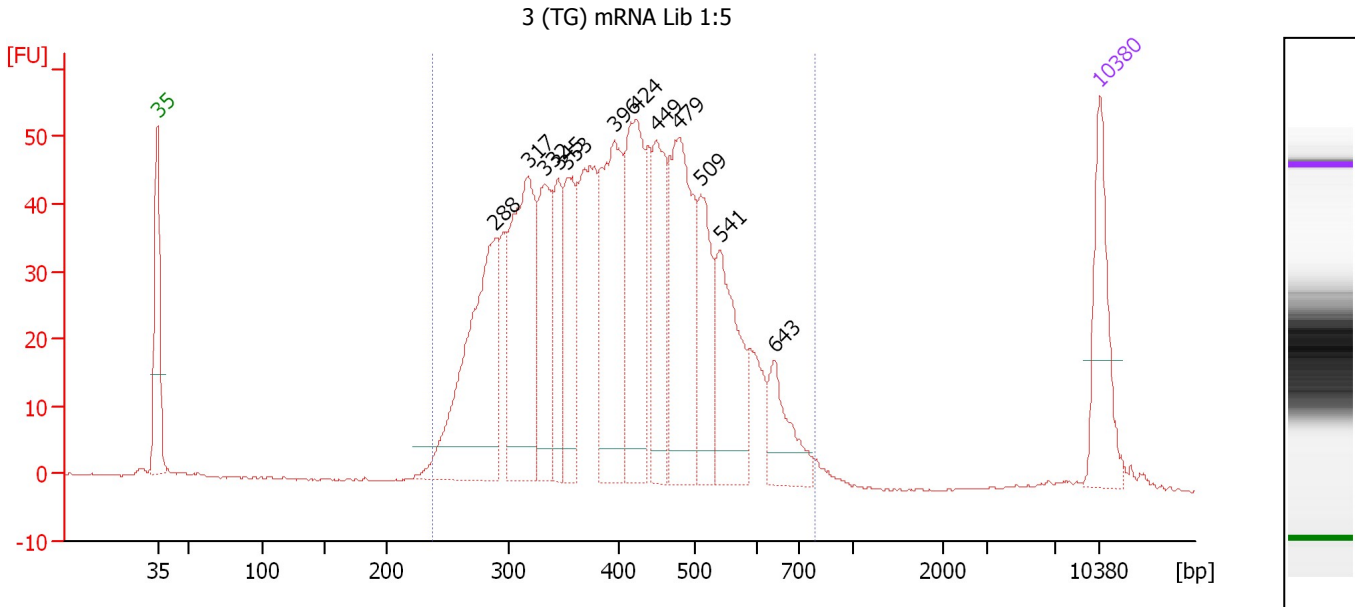
Region table for sample 8 : 2 (SG) mRNA Lib 1:3

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
245	891	426	8,387.6	2,161.46	1,696.7	98	25.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-09-03\2013-09-03_004.xad

Created: 9/3/2013 4:28:36 PM
 Modified: 9/3/2013 5:17:13 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : 3 (TG) mRNA Lib 1:5

Number of peaks found: 12 Corr. Area 1: 1,224.0
 Noise: 0.1

Peak table for sample 9 : 3 (TG) mRNA Lib 1:5

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	288	280.40	1,473.2	
3	317	240.36	1,149.1	
4	332	124.20	566.4	
5	345	76.13	334.5	
6	353	104.76	449.8	
7	396	200.40	766.5	
8	424	179.51	642.1	
9	449	117.97	398.2	
10	479	198.88	629.2	
11	509	101.12	301.1	
12	541	129.27	362.2	
13	643	61.08	144.0	
14	10,380	75.00	10.9	Upper Marker

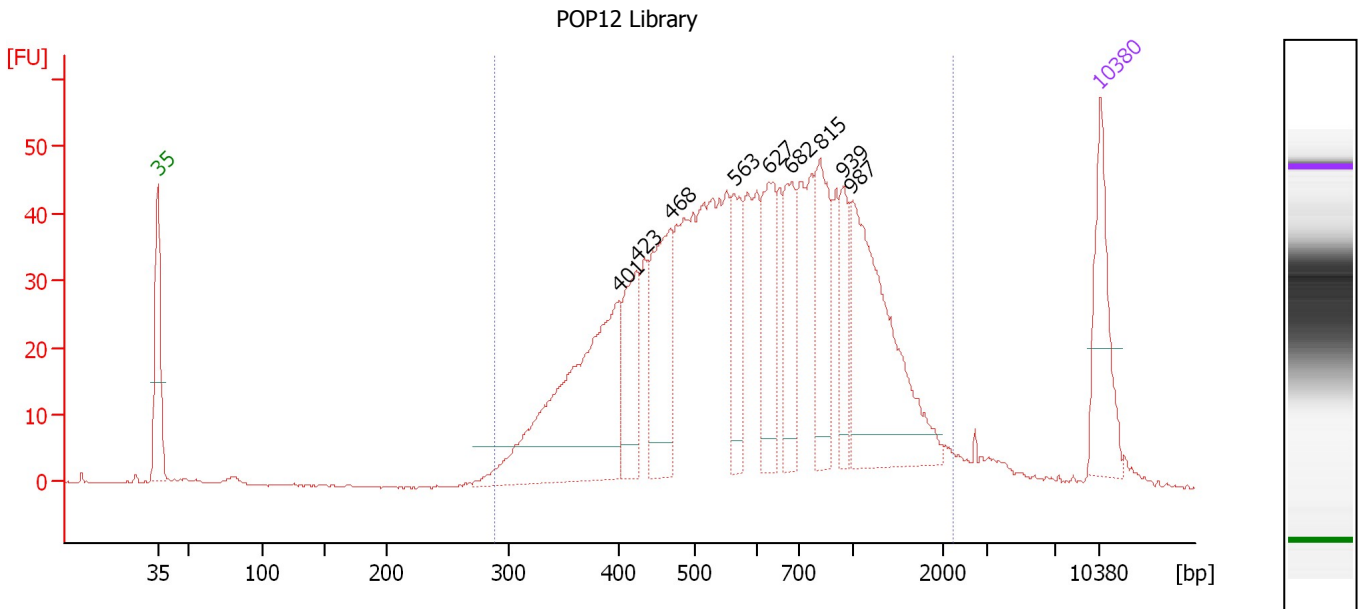
Region table for sample 9 : 3 (TG) mRNA Lib 1:5

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
238	789	414	8,749.8	2,194.88	1,224.0	98	24.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-09-03\2013-09-03_004.xad

Created: 9/3/2013 4:28:36 PM
 Modified: 9/3/2013 5:17:13 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : POP12 Library

Number of peaks found: 9 Corr. Area 1: 1,157.8
 Noise: 0.2

Peak table for sample 10 : POP12 Library

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	401	308.39	1,166.6	
3	423	86.87	311.0	
4	468	138.81	449.8	
5	563	74.96	201.7	
6	627	95.12	229.7	
7	682	82.76	183.8	
8	815	100.41	186.6	
9	939	47.71	77.0	
10	987	219.02	336.1	
11	10,380	75.00	10.9	Upper Marker

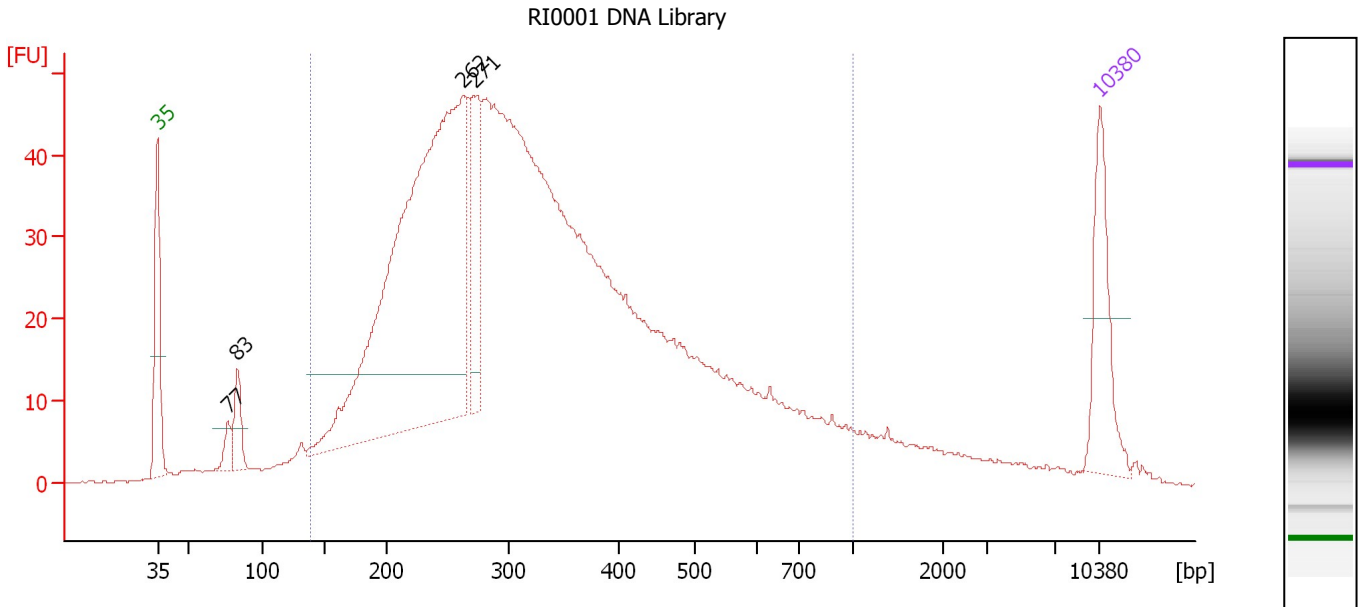
Region table for sample 10 : POP12 Library

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
288	2,238	703	5,533.5	2,022.47	1,157.8	94	50.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-09-03\2013-09-03_004.xad

Created: 9/3/2013 4:28:36 PM
 Modified: 9/3/2013 5:17:13 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : RI0001 DNA Library

Number of peaks found: 4 Corr. Area 1: 1,319.2
 Noise: 0.2

Peak table for sample 11 : RI0001 DNA Library

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	77	20.66	407.7	
3	83	44.54	809.7	
4	262	852.92	4,931.5	
5	271	112.69	629.7	
6	10,380	75.00	10.9	Upper Marker

Region table for sample 11 : RI0001 DNA Library

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
138	1,000	350	16,486.1	3,127.21	1,319.2	89	42.6	Blue