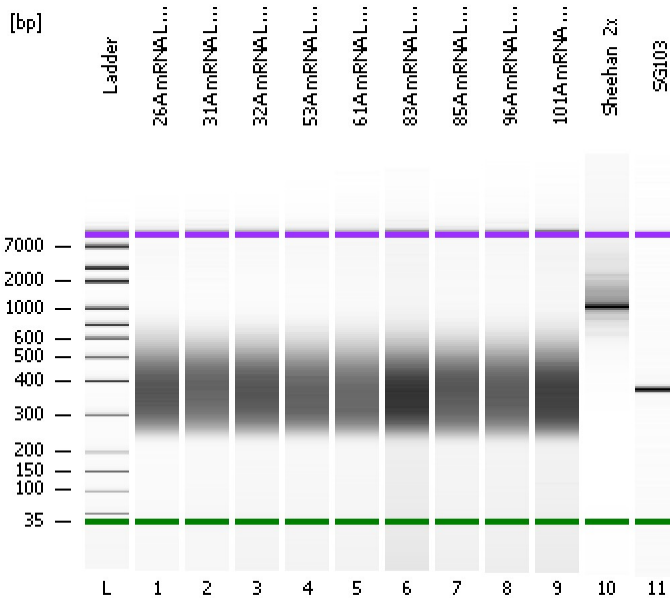


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-12\2014-02-12_005.xad

Created: 2/12/2014 4:32:39 PM
Modified: 2/12/2014 5:25:18 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

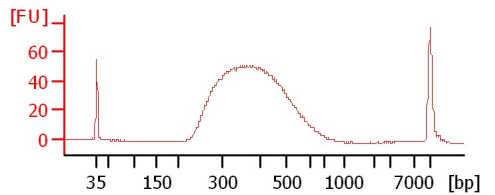
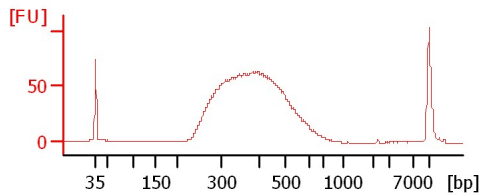
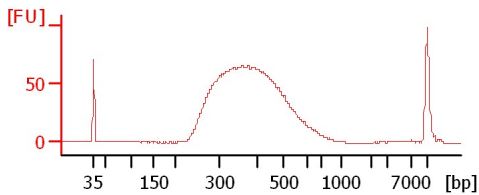
Chip Information:

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

26A mRNA Lib 1:12

31A mRNA Lib 1:10

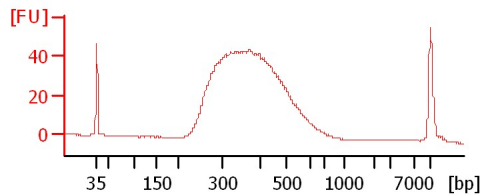
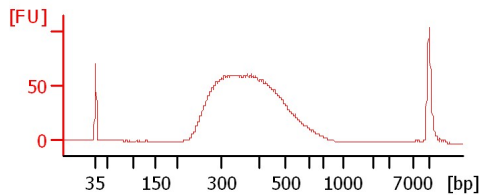
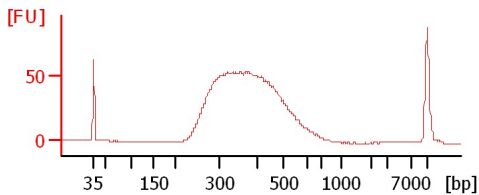
32A mRNA Lib 1:9



53A mRNA Lib 1:11

61A mRNA Lib 1:14

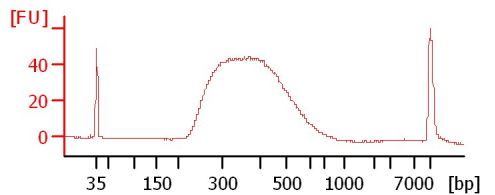
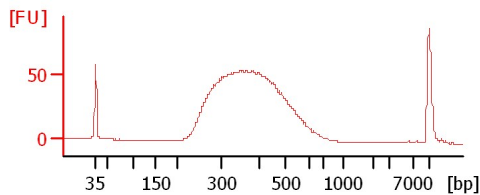
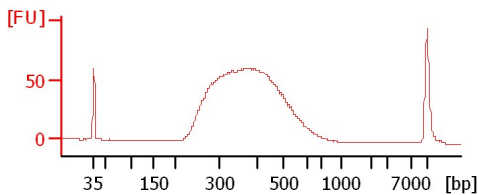
83A mRNA Lib 1:11



85A mRNA Lib 1:7

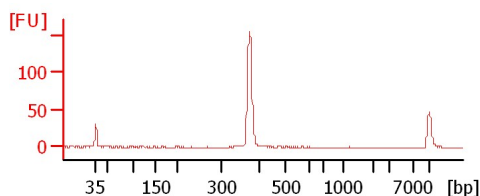
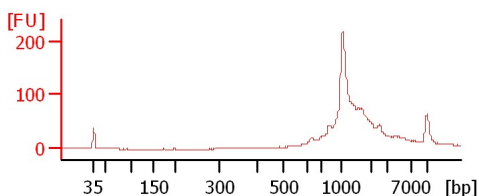
96A mRNA Lib 1:7

101A mRNA Lib 1:12



Sheehan_2x

SG103



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-12\2014-02-12_005.xad

Created: 2/12/2014 4:32:39 PM
 Modified: 2/12/2014 5:25:18 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
26A mRNA Lib 1:12		<input type="checkbox"/>	✓			
31A mRNA Lib 1:10		<input type="checkbox"/>	✓			
32A mRNA Lib 1:9		<input type="checkbox"/>	✓			
53A mRNA Lib 1:11		<input type="checkbox"/>	✓			
61A mRNA Lib 1:14		<input type="checkbox"/>	✓			
83A mRNA Lib 1:11		<input type="checkbox"/>	✓			
85A mRNA Lib 1:7		<input type="checkbox"/>	✓			
96A mRNA Lib 1:7		<input type="checkbox"/>	✓			
101A mRNA Lib 1:12		<input type="checkbox"/>	✓			
Sheehan_2x		<input type="checkbox"/>	✓			
SG103		<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\2014-02-12\2014-02-12_005.xad

Created: 2/12/2014 4:32:39 PM
Modified: 2/12/2014 5:25:18 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

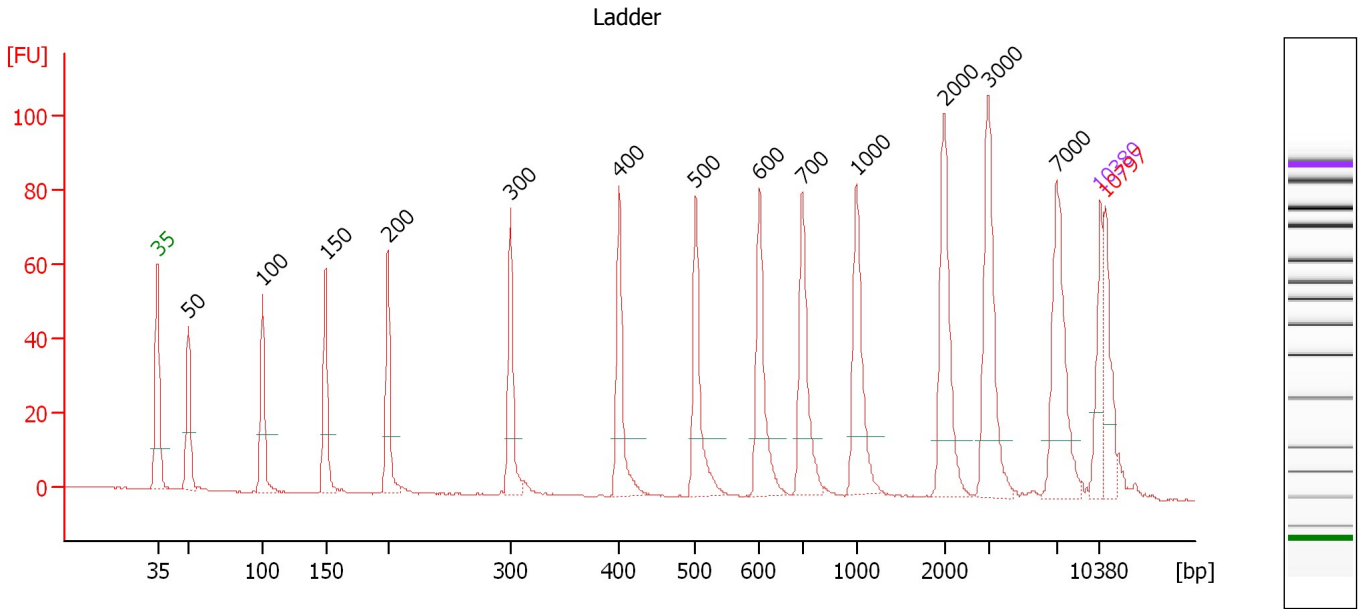
Ladder

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\2014-02-12\2014-02-12_005.xad

Created: 2/12/2014 4:32:39 PM
 Modified: 2/12/2014 5:25:18 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

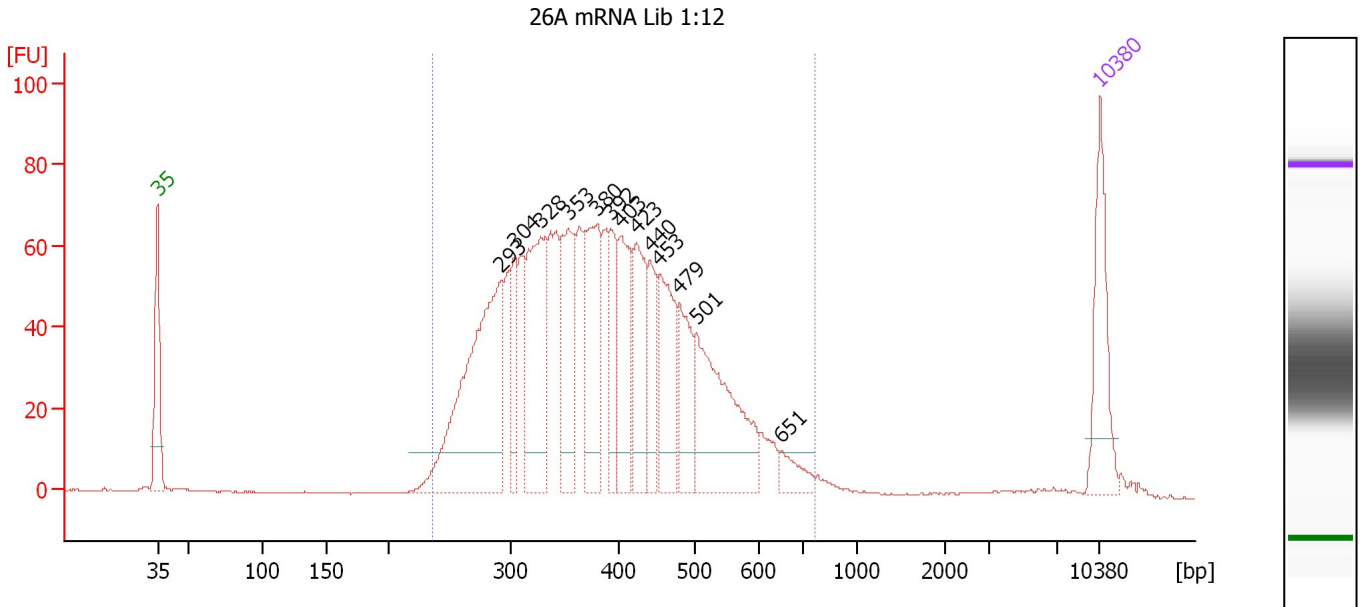
Peak table for Ladder

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	50.81	100	150.00	2,272.7	Ladder Peak
4	55.48	150	150.00	1,515.2	Ladder Peak
5	60.11	200	150.00	1,136.4	Ladder Peak
6	69.20	300	150.00	757.6	Ladder Peak
7	77.27	400	150.00	568.2	Ladder Peak
8	82.96	500	150.00	454.5	Ladder Peak
9	87.73	600	150.00	378.8	Ladder Peak
10	90.90	700	150.00	324.7	Ladder Peak
11	94.92	1,000	150.00	227.3	Ladder Peak
12	101.44	2,000	150.00	113.6	Ladder Peak
13	104.71	3,000	150.00	75.8	Ladder Peak
14	109.78	7,000	150.00	32.5	Ladder Peak
15	113.00	10,380	75.00	10.9	Upper Marker
16	113.40	10,797	0.00	0.0	excluded peak

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-12\2014-02-12_005.xad

Created: 2/12/2014 4:32:39 PM
 Modified: 2/12/2014 5:25:18 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 1 : 26A mRNA Lib 1:12

Height Threshold [FU] : 10

Overall Results for sample 1 : 26A mRNA Lib 1:12

Number of peaks found: 13 Corr. Area 1: 1,624.3
 Noise: 0.1

Peak table for sample 1 : 26A mRNA Lib 1:12

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	68.55	293	342.74	1,773.5	
3	69.52	304	66.33	330.6	
4	71.47	328	186.16	859.7	
5	73.51	353	117.47	503.7	
6	75.63	380	132.20	527.6	
7	76.61	392	70.08	271.1	
8	77.45	403	93.02	349.7	
9	78.60	423	104.10	372.6	
10	79.57	440	65.58	225.6	
11	80.28	453	110.96	371.2	
12	81.74	479	78.15	247.4	
13	83.03	501	190.29	575.1	
14	89.36	651	23.68	55.1	
15	113.00	10,380	75.00	10.9	Upper Marker

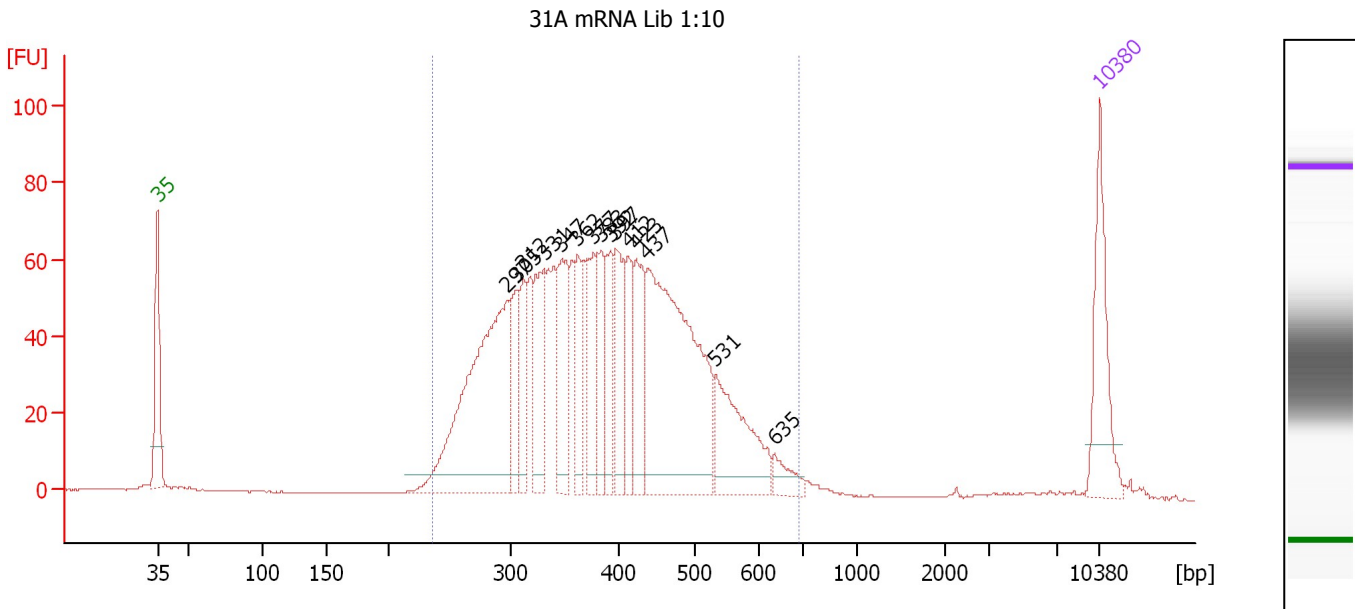
Region table for sample 1 : 26A mRNA Lib 1:12

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
237	774	395	8,481.0	2,041.51	1,624.3	97	24.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-12\2014-02-12_005.xad

Created: 2/12/2014 4:32:39 PM
 Modified: 2/12/2014 5:25:18 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : 31A mRNA Lib 1:10

Number of peaks found: 15 Corr. Area 1: 1,549.3
 Noise: 0.2

Peak table for sample 2 : 31A mRNA 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	68.94	297	350.82	1,788.8	
3	69.60	305	67.39	334.8	
4	70.18	312	60.09	291.7	
5	71.72	331	97.01	443.7	
6	73.01	347	93.71	409.0	
7	74.20	362	59.85	250.6	
8	75.39	377	71.87	289.0	
9	75.92	383	58.24	230.2	
10	76.63	392	57.08	220.6	
11	77.03	397	73.70	281.3	
12	77.96	412	58.31	214.4	
13	78.57	423	84.93	304.3	
14	79.37	437	357.54	1,240.0	
15	84.45	531	119.31	340.3	
16	88.83	635	21.47	51.3	
17	113.00	10,380	75.00	10.9	Upper Marker

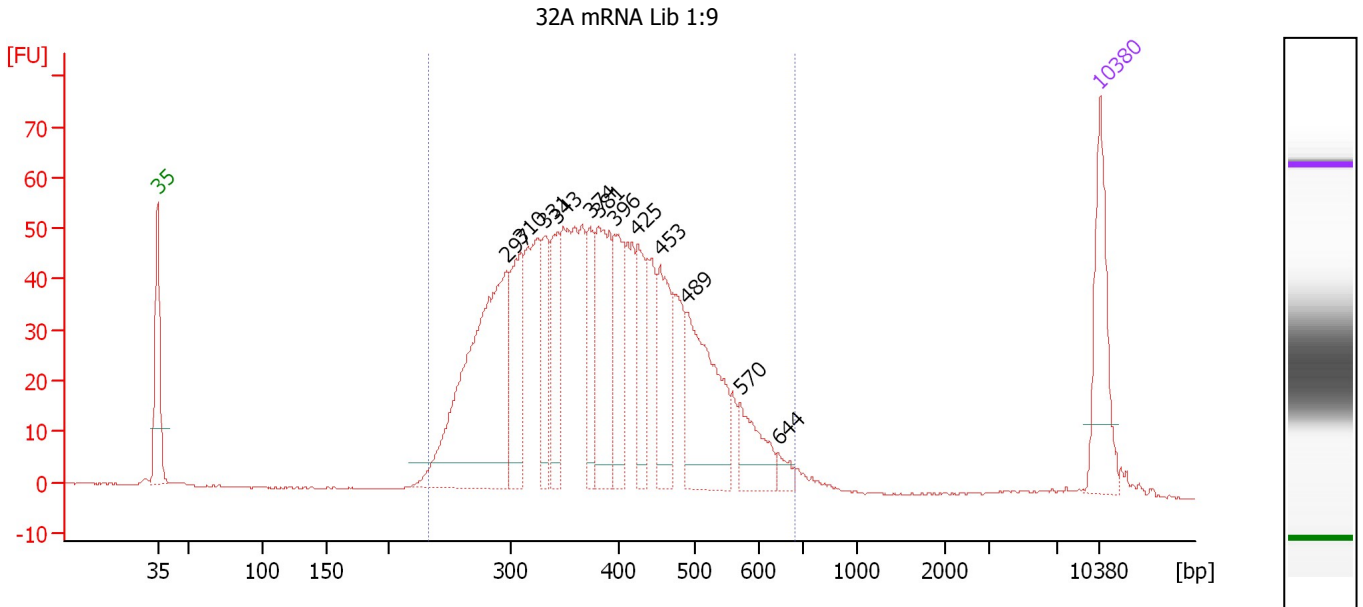
Region table for sample 2 : 31A mRNA Lib 1:10

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
236	689	395	7,767.5	1,876.84	1,549.3	96	23.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-12\2014-02-12_005.xad

Created: 2/12/2014 4:32:39 PM
 Modified: 2/12/2014 5:25:18 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : 32A mRNA Lib 1:9

Number of peaks found: 12 Corr. Area 1: 1,273.2
 Noise: 0.2

Peak table for sample 3 : 32A mRNA Lib 1:9

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	68.96	297	373.56	1,903.4	
3	69.98	310	108.99	533.2	
4	71.72	331	74.27	339.8	
5	72.70	343	77.89	343.7	
6	75.15	374	60.13	243.8	
7	75.73	381	131.35	522.5	
8	76.93	396	85.47	327.2	
9	78.67	425	70.71	252.3	
10	80.32	453	88.23	294.8	
11	82.36	489	160.13	495.7	
12	86.28	570	54.42	144.7	
13	89.13	644	11.17	26.3	
14	113.00	10,380	75.00	10.9	Upper Marker

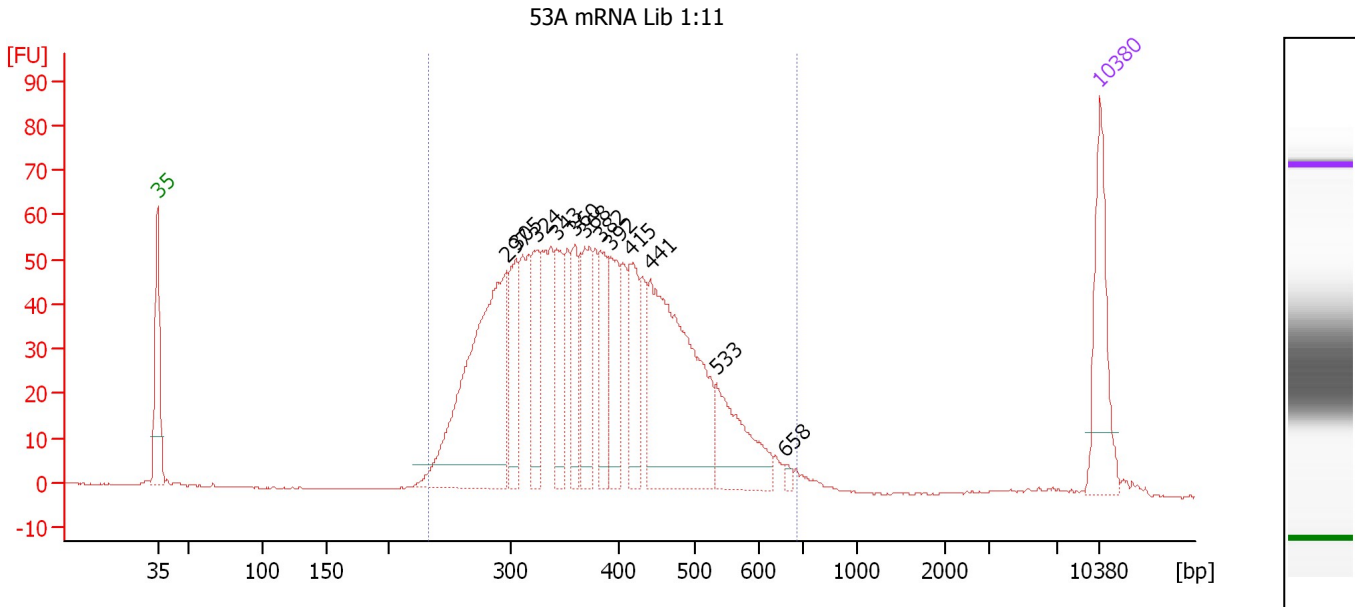
Region table for sample 3 : 32A mRNA Lib 1:9

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
234	684	391	7,992.1	1,911.77	1,273.2	97	23.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-12\2014-02-12_005.xad

Created: 2/12/2014 4:32:39 PM
 Modified: 2/12/2014 5:25:18 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : 53A mRNA Lib 1:11

Number of peaks found: 12 Corr. Area 1: 1,336.0
 Noise: 0.2

Peak table for sample 4 : 53A mRNA Lib 1:11

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	68.95	297	353.64	1,802.6	
3	69.63	305	86.73	430.5	
4	71.16	324	82.77	386.7	
5	72.65	343	70.07	309.7	
6	74.01	360	63.35	267.0	
7	74.73	368	93.02	382.5	
8	75.86	382	63.55	251.7	
9	76.62	392	76.35	295.1	
10	78.11	415	75.30	275.0	
11	79.60	441	296.33	1,018.2	
12	84.52	533	96.09	273.3	
13	89.58	658	4.92	11.3	
14	113.00	10,380	75.00	10.9	Upper Marker

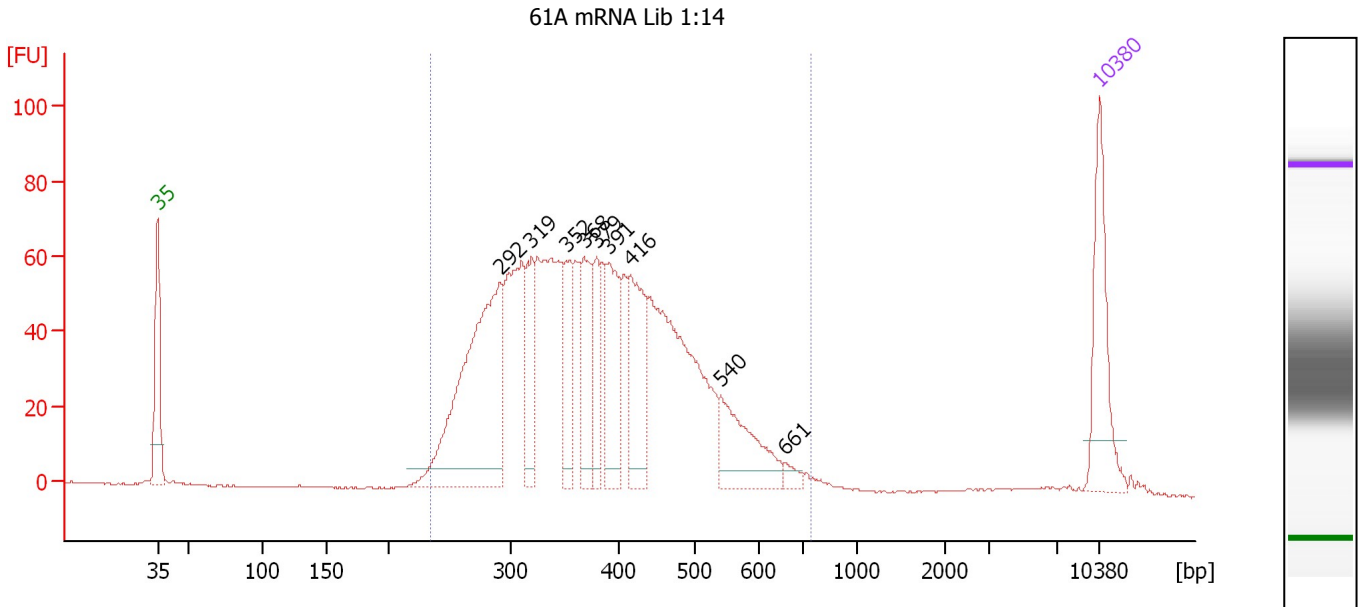
Region table for sample 4 : 53A mRNA Lib 1:11

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
233	688	387	7,576.2	1,796.58	1,336.0	97	23.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-12\2014-02-12_005.xad

Created: 2/12/2014 4:32:39 PM
 Modified: 2/12/2014 5:25:18 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : 61A mRNA Lib 1:14

Number of peaks found: 9 Corr. Area 1: 1,517.5
 Noise: 0.2

Peak table for sample 5 : 61A mRNA Lib 1:14

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	68.45	292	325.08	1,688.5	
3	70.77	319	68.74	326.0	
4	73.37	352	72.27	311.4	
5	74.69	368	78.05	321.3	
6	75.61	379	52.02	207.8	
7	76.56	391	90.15	349.2	
8	78.16	416	107.69	392.6	
9	84.86	540	86.37	242.4	
10	89.65	661	9.40	21.6	
11	113.00	10,380	75.00	10.9	Upper Marker

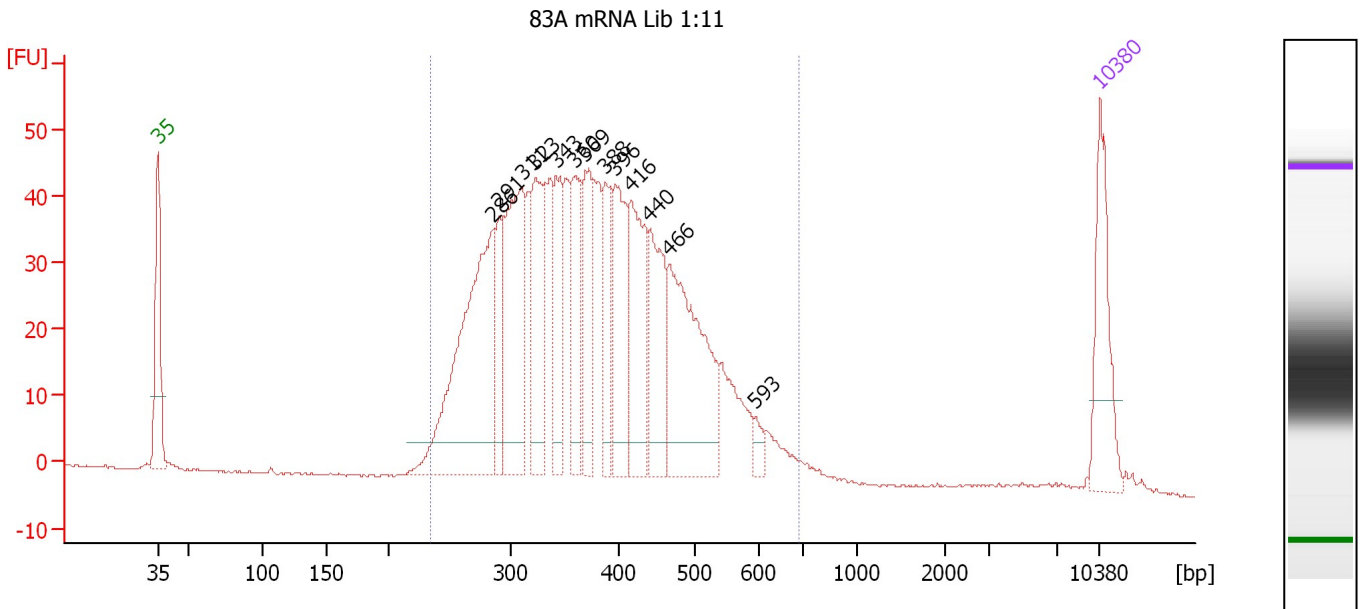
Region table for sample 5 : 61A mRNA Lib 1:14

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
235	742	386	7,060.4	1,666.17	1,517.5	98	24.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-12\2014-02-12_005.xad

Created: 2/12/2014 4:32:39 PM
 Modified: 2/12/2014 5:25:18 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : 83A mRNA Lib 1:11

Number of peaks found: 13 Corr. Area 1: 1,102.2
 Noise: 0.2

Peak table for sample 6 : 83A mRNA Lib 1:11

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	67.93	286	333.75	1,768.0	
3	68.39	291	71.05	369.8	
4	70.05	311	202.79	989.4	
5	71.06	323	133.72	627.1	
6	72.63	343	84.30	372.9	
7	74.06	360	91.98	386.9	
8	74.75	369	102.10	419.5	
9	76.27	388	74.46	291.1	
10	76.96	396	113.30	433.3	
11	78.21	416	132.42	481.8	
12	79.54	440	110.69	381.2	
13	81.02	466	214.20	696.7	
14	87.38	593	12.06	30.8	
15	113.00	10,380	75.00	10.9	Upper Marker

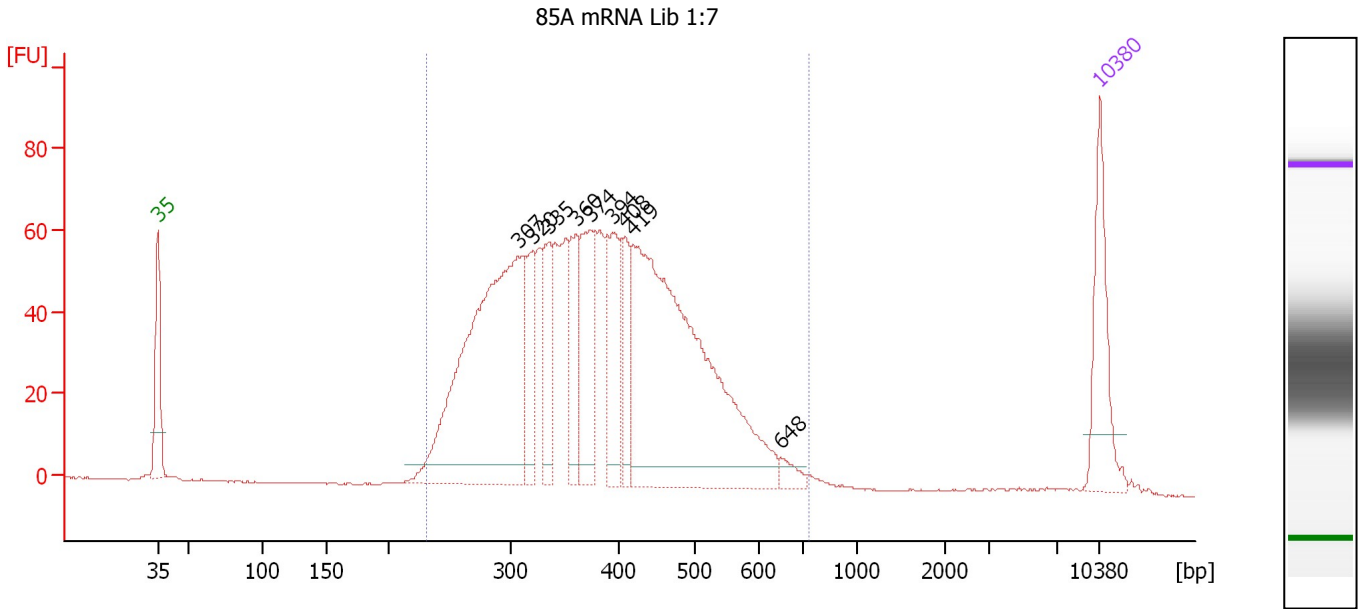
Region table for sample 6 : 83A mRNA Lib 1:11

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
235	694	385	8,938.5	2,108.17	1,102.2	96	23.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-12\2014-02-12_005.xad

Created: 2/12/2014 4:32:39 PM
 Modified: 2/12/2014 5:25:18 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : 85A mRNA Lib 1:7

Number of peaks found: 9 Corr. Area 1: 1,531.4
 Noise: 0.1

Peak table for sample 7 : 85A mRNA Lib 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	69.78	307	523.73	2,583.7	
3	70.85	320	69.19	327.1	
4	72.07	335	84.31	380.7	
5	74.07	360	77.38	325.3	
6	75.15	374	114.85	465.6	
7	76.79	394	99.55	382.9	
8	77.72	408	56.70	210.6	
9	78.33	419	556.67	2,015.2	
10	89.26	648	13.16	30.8	
11	113.00	10,380	75.00	10.9	Upper Marker

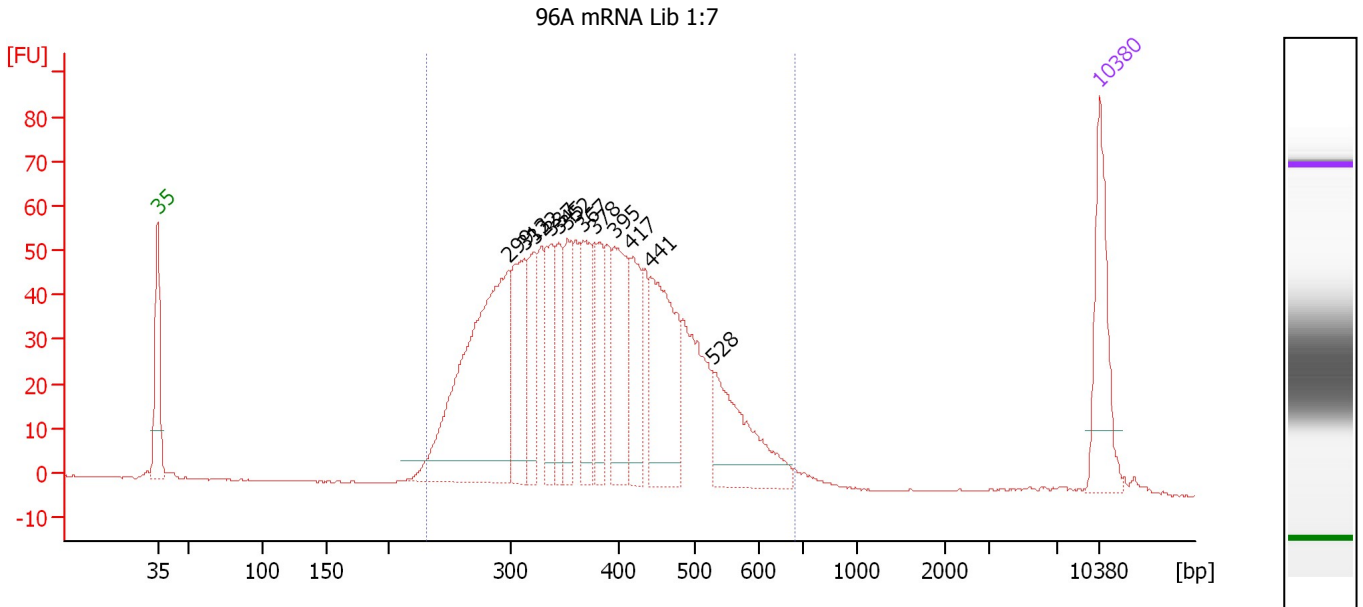
Region table for sample 7 : 85A mRNA Lib 1:7

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
232	735	388	8,043.2	1,904.76	1,531.4	98	23.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-12\2014-02-12_005.xad

Created: 2/12/2014 4:32:39 PM
 Modified: 2/12/2014 5:25:18 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : 96A mRNA Lib 1:7

Number of peaks found: 12 Corr. Area 1: 1,326.8
 Noise: 0.1

Peak table for sample 8 : 96A mRNA Lib 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	69.08	299	384.59	1,951.1	
3	70.21	313	117.87	571.4	
4	70.97	322	71.87	338.3	
5	72.20	337	72.00	323.5	
6	72.82	345	61.54	270.4	
7	73.43	352	61.22	263.2	
8	74.62	367	95.50	394.2	
9	75.47	378	70.82	284.1	
10	76.89	395	119.40	457.7	
11	78.21	417	73.19	266.2	
12	79.59	441	157.80	542.6	
13	84.32	528	117.84	337.9	
14	113.00	10,380	75.00	10.9	Upper Marker

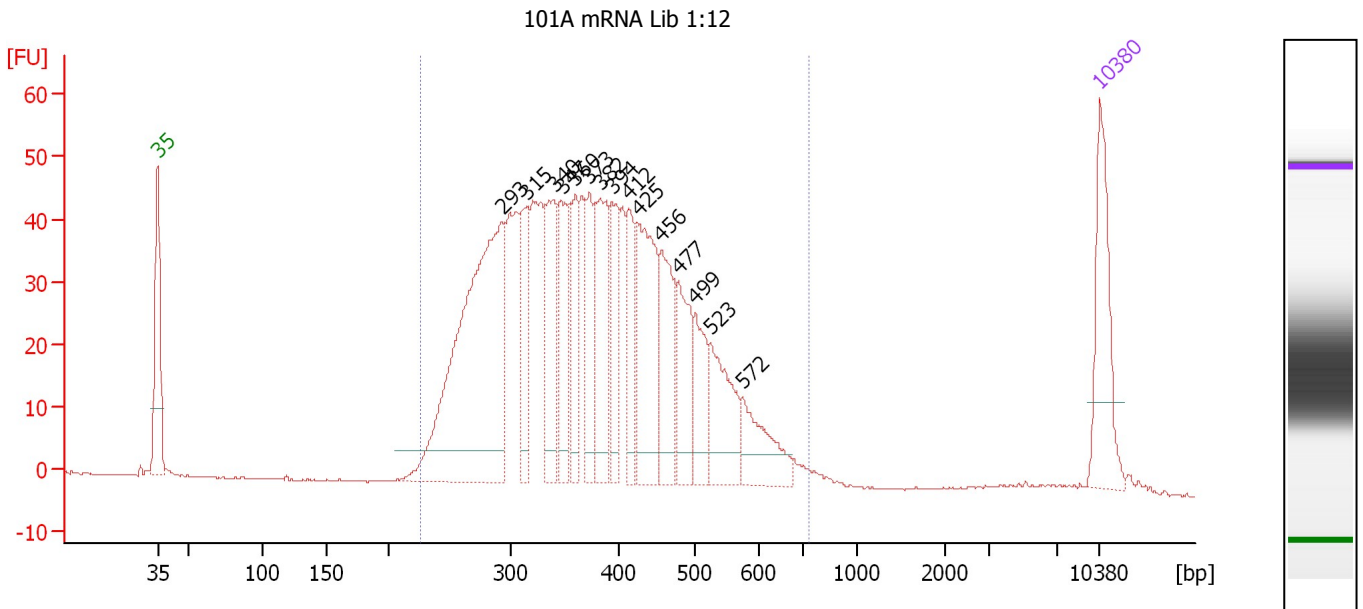
Region table for sample 8 : 96A mRNA Lib 1:7

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
232	682	386	7,433.6	1,756.99	1,326.8	97	23.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-12\2014-02-12_005.xad

Created: 2/12/2014 4:32:39 PM
 Modified: 2/12/2014 5:25:18 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : 101A mRNA Lib 1:12

Number of peaks found: 15 Corr. Area 1: 1,139.2
 Noise: 0.1

Peak table for sample 9 : 101A mRNA Lib 1:12

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	68.58	293	434.76	2,246.8	
3	70.40	315	78.35	377.1	
4	72.45	340	102.62	456.9	
5	73.03	347	95.39	416.0	
6	74.03	360	67.71	285.1	
7	75.08	373	66.15	268.8	
8	75.85	382	113.18	448.5	
9	76.76	394	71.27	274.3	
10	77.95	412	62.70	230.6	
11	78.67	425	138.84	495.5	
12	80.44	456	88.88	295.5	
13	81.68	477	76.62	243.1	
14	82.92	499	55.74	169.1	
15	84.07	523	81.91	237.2	
16	86.42	572	58.76	155.5	
17	113.00	10,380	75.00	10.9	Upper Marker

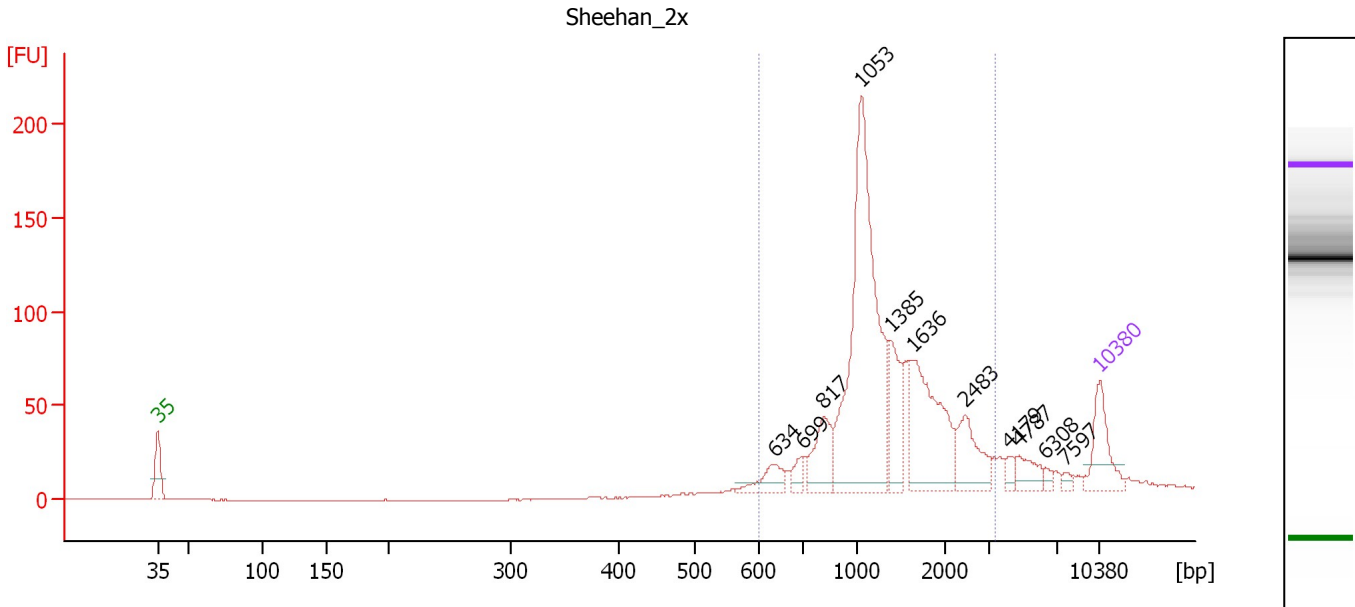
Region table for sample 9 : 101A mRNA Lib 1:12

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
227	737	385	8,701.2	2,041.34	1,139.2	97	24.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-12\2014-02-12_005.xad

Created: 2/12/2014 4:32:39 PM
 Modified: 2/12/2014 5:25:18 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : Sheehan_2x

Number of peaks found: 11 Corr. Area 1: 974.3
 Noise: 0.1

Peak table for sample 10 : Sheehan_2x

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	88.80	634	49.42	118.2	
3	90.87	699	25.58	55.4	
4	92.46	817	95.22	176.7	
5	95.26	1,053	584.39	841.2	
6	97.43	1,385	97.04	106.2	
7	99.07	1,636	220.64	204.3	
8	103.02	2,483	85.41	52.1	
9	106.20	4,179	15.45	5.6	
10	106.97	4,787	35.77	11.3	
11	108.90	6,308	9.15	2.2	
12	110.35	7,597	8.79	1.8	
13	113.00	10,380	75.00	10.9	Upper Marker

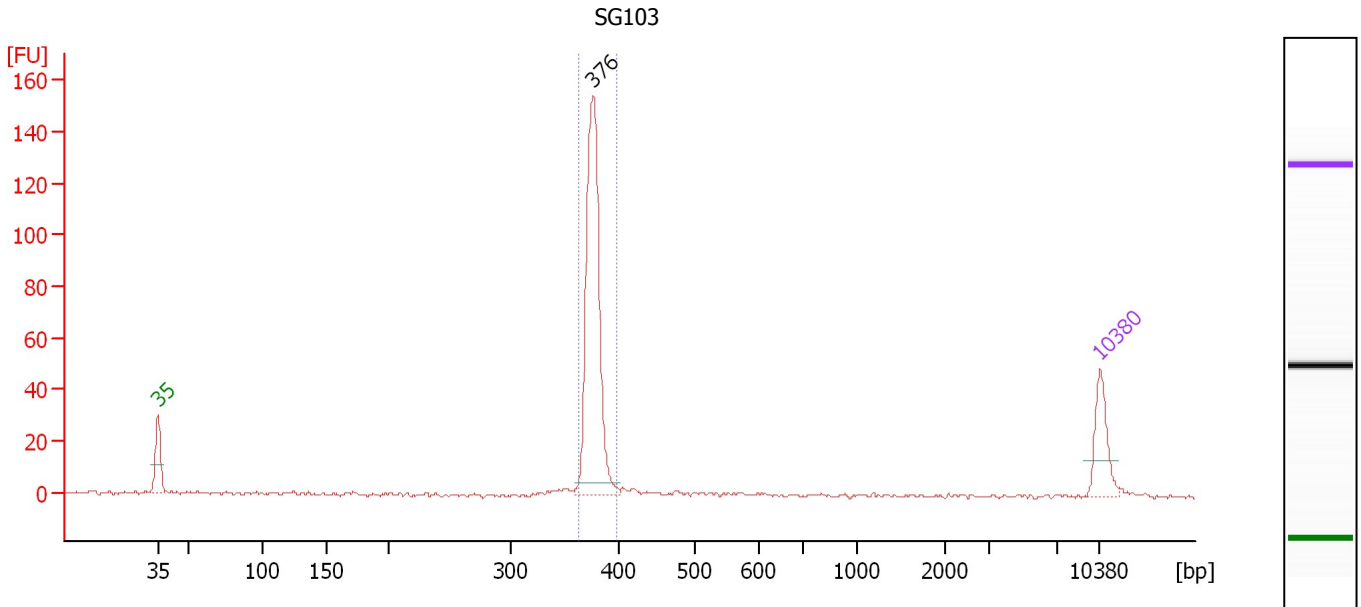
Region table for sample 10 : Sheehan_2x

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
598	3,383	1,384	1,561.4	1,244.07	974.3	86	39.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-12\2014-02-12_005.xad

Created: 2/12/2014 4:32:39 PM
 Modified: 2/12/2014 5:25:18 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : SG103

Number of peaks found: 1 Corr. Area 1: 230.7
 Noise: 0.7

Peak table for sample 11 : SG103

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	75.36	376	563.98	2,271.1	
3	113.00	10,380	75.00	10.9	Upper Marker

Region table for sample 11 : SG103

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
362	399	376	2,253.1	559.71	230.7	89	1.5	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-02-12\2014-02-12_005.xad

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Modified: 2/12/2014 5:25:18 PM

Gel Image

