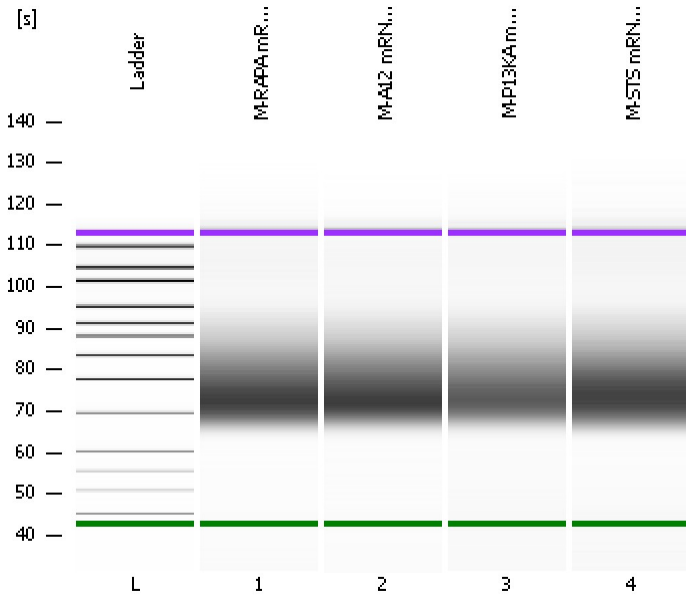


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...Settings\Bioanalyzer\2013-07-24\2013-07-24\_004\_mRNA\_Lib.xad

Created: 7/24/2013 4:08:04 PM  
Modified: 7/24/2013 4:42:57 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

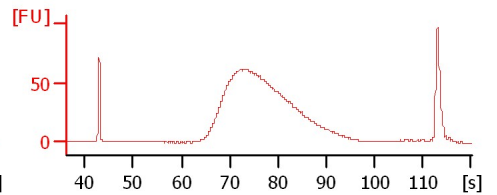
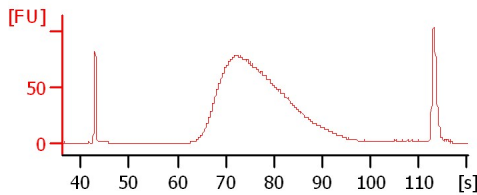
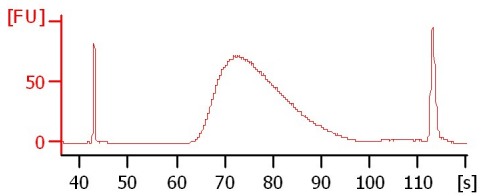
Chip Information:

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

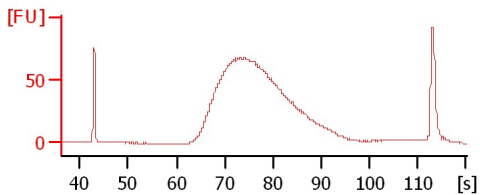
**M-RAPA mRNA Lib 1:22**

**M-A12 mRNA Lib 1:22**

**M-P13KA mRNA Lib 1:22**



**M-ST5 mRNA Lib 1:19**



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...Settings\Bioanalyzer\2013-07-24\2013-07-24\_004\_mRNA\_Lib.xad

Created: 7/24/2013 4:08:04 PM  
Modified: 7/24/2013 4:42:57 PM

**Electrophoresis File Run Summary (Chip Summary)**

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
M-RAPA mRNA Lib 1:22		<input type="checkbox"/>	✓			
M-A12 mRNA Lib 1:22		<input type="checkbox"/>	✓			
M-P13KA mRNA Lib 1:22		<input type="checkbox"/>	✓			
M-ST5 mRNA Lib 1:19		<input type="checkbox"/>	✓			
Ladder		<input type="checkbox"/>	✓			

**Chip Lot #**

**Reagent Kit Lot #**

**Chip Comments :**

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...Settings\Bioanalyzer\2013-07-24\2013-07-24\_004\_mRNA\_Lib.xad

Created: 7/24/2013 4:08:04 PM  
Modified: 7/24/2013 4:42:57 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

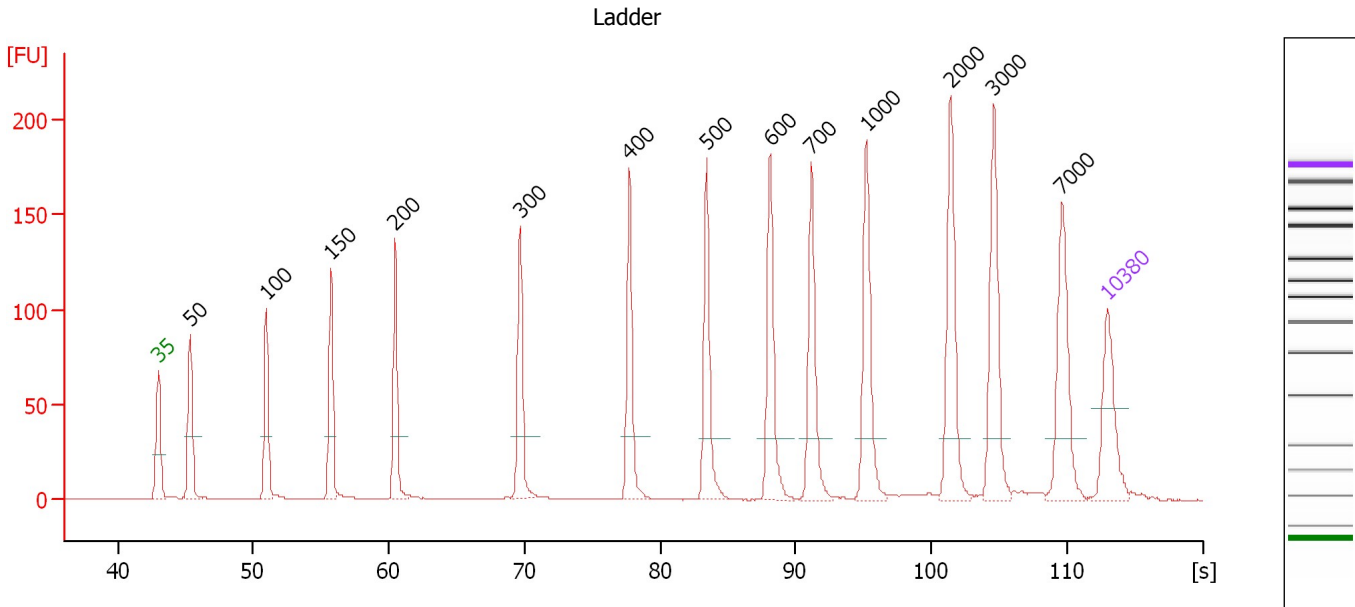
**Ladder**

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:\...Settings\Bioanalyzer\2013-07-24\2013-07-24\_004\_mRNA\_Lib.xad

Created: 7/24/2013 4:08:04 PM  
 Modified: 7/24/2013 4:42:57 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.1

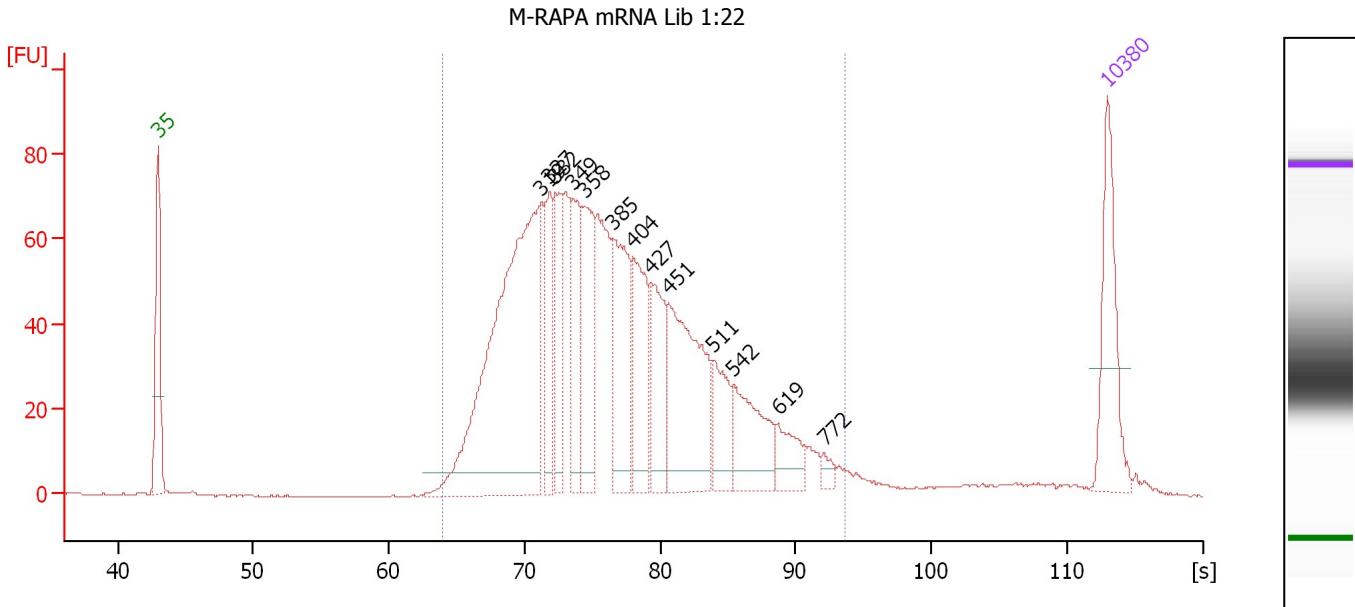
**Peak table for Ladder**

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:\...Settings\Bioanalyzer\2013-07-24\2013-07-24\_004\_mRNA\_Lib.xad

Created: 7/24/2013 4:08:04 PM  
 Modified: 7/24/2013 4:42:57 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : M-RAPA mRNA Lib 1:22**

Number of peaks found: 13      Corr. Area 1: 1,538.1  
 Noise: 0.1

**Peak table for sample 1 : M-RAPA mRNA Lib 1:22**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	319	484.26	2,300.0	
3	327	85.18	394.7	
4	332	73.85	336.8	
5	349	79.61	345.8	
6	358	106.17	448.7	
7	385	119.24	468.8	
8	404	97.49	365.2	
9	427	82.52	292.6	
10	451	176.56	593.2	
11	511	55.88	165.8	
12	542	80.46	224.8	
13	619	34.09	83.5	
14	772	8.69	17.1	
15	10,380	75.00	10.9	Upper Marker

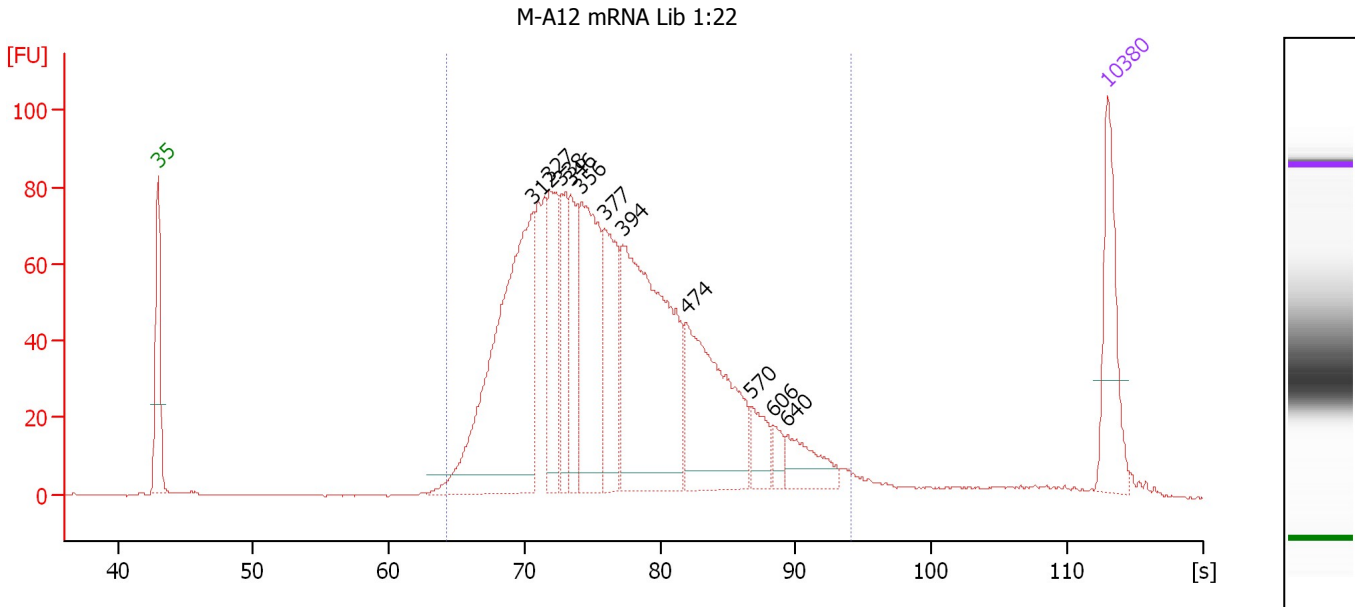
**Region table for sample 1 : M-RAPA mRNA Lib 1:22**

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
64.03	93.62	401	7,492.6	1,817.40	1,538.1	95	27.1	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...Settings\Bioanalyzer\2013-07-24\2013-07-24\_004\_mRNA\_Lib.xad

Created: 7/24/2013 4:08:04 PM  
 Modified: 7/24/2013 4:42:57 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : M-A12 mRNA Lib 1:22**

Number of peaks found: 11                      Corr. Area 1: 1,670.8  
 Noise: 0.1

**Peak table for sample 2 : M-A12 mRNA Lib 1:22**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	312	419.01	2,034.8	
3	327	115.59	535.6	
4	338	82.57	370.2	
5	346	79.37	347.6	
6	356	200.82	855.1	
7	377	119.81	482.1	
8	394	361.39	1,390.2	
9	474	205.83	658.5	
10	570	32.78	87.1	
11	606	15.54	38.8	
12	640	44.42	105.1	
13	10,380	75.00	10.9	Upper Marker

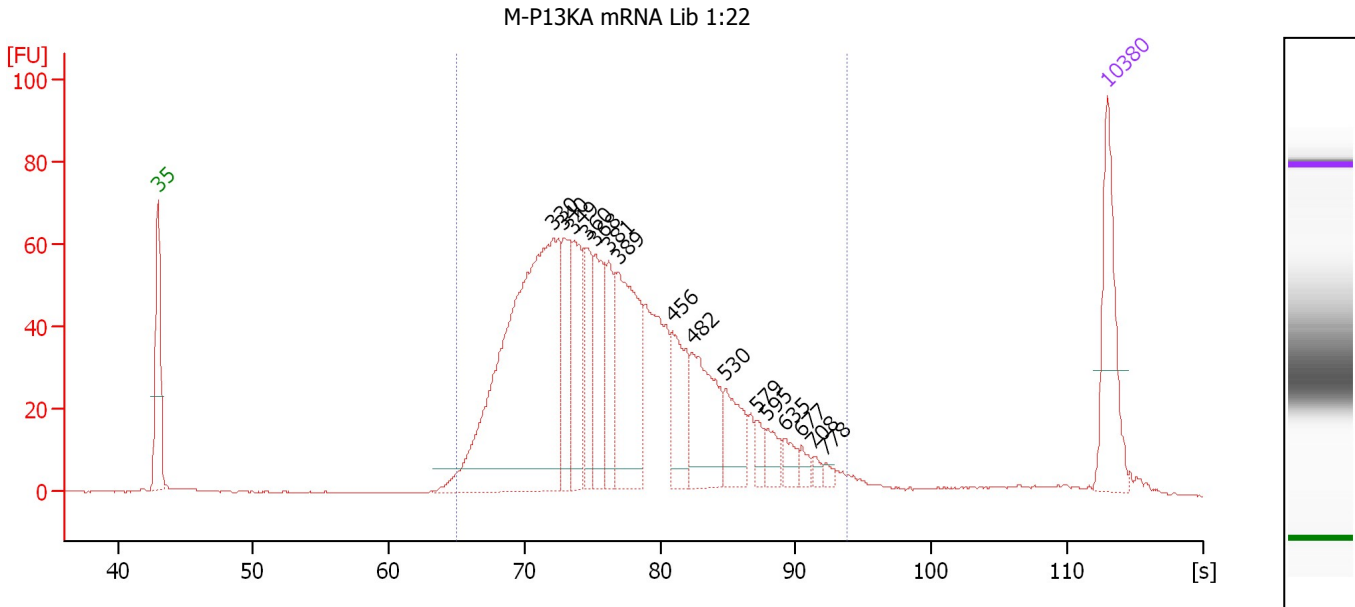
**Region table for sample 2 : M-A12 mRNA Lib 1:22**

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area % of Total	Size distribution in CV [%]	Color
64.24	94.07	403	7,720.8	1,884.64	1,670.8 96	27.4	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...Settings\Bioanalyzer\2013-07-24\2013-07-24\_004\_mRNA\_Lib.xad

Created: 7/24/2013 4:08:04 PM  
 Modified: 7/24/2013 4:42:57 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : M-P13KA mRNA Lib 1:22**

Number of peaks found: 16                      Corr. Area 1: 1,302.1  
 Noise: 0.2

**Peak table for sample 3 : M-P13KA mRNA Lib 1:22**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	330	518.55	2,382.1	
3	340	70.44	314.1	
4	349	91.86	399.4	
5	360	64.02	269.3	
6	368	82.27	338.4	
7	381	56.93	226.3	
8	389	155.38	604.6	
9	456	72.86	242.2	
10	482	100.34	315.7	
11	530	50.28	143.7	
12	579	12.71	33.2	
13	595	18.10	46.1	
14	635	15.04	35.9	
15	677	9.10	20.4	
16	708	6.01	12.9	
17	778	4.89	9.5	
18	10,380	75.00	10.9	Upper Marker

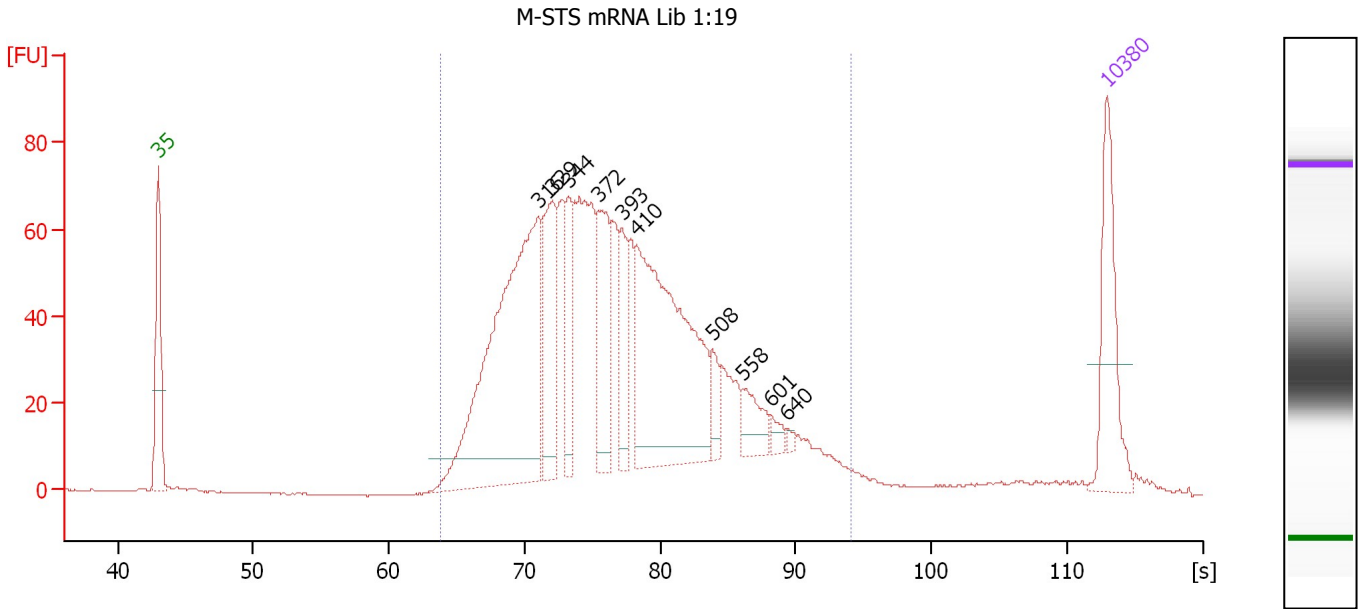
**Region table for sample 3 : M-P13KA mRNA Lib 1:22**

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area % of Total	Size distribution in CV [%]	Color
65.07	93.85	406	6,415.6	1,580.80	1,302.1 94	26.8	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...Settings\Bioanalyzer\2013-07-24\2013-07-24\_004\_mRNA\_Lib.xad

Created: 7/24/2013 4:08:04 PM  
 Modified: 7/24/2013 4:42:57 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : M-STS mRNA Lib 1:19**

Number of peaks found: 10      Corr. Area 1: 1,515.1  
 Noise: 0.2

**Peak table for sample 4 : M-STS mRNA Lib 1:19**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	316	433.03	2,073.7	
3	329	118.94	547.0	
4	344	66.35	292.5	
5	372	98.47	401.5	
6	393	50.65	195.3	
7	410	301.91	1,116.9	
8	508	24.61	73.3	
9	558	31.29	85.0	
10	601	9.47	23.9	
11	640	3.67	8.7	
12	10,380	75.00	10.9	Upper Marker

**Region table for sample 4 : M-STS mRNA Lib 1:19**

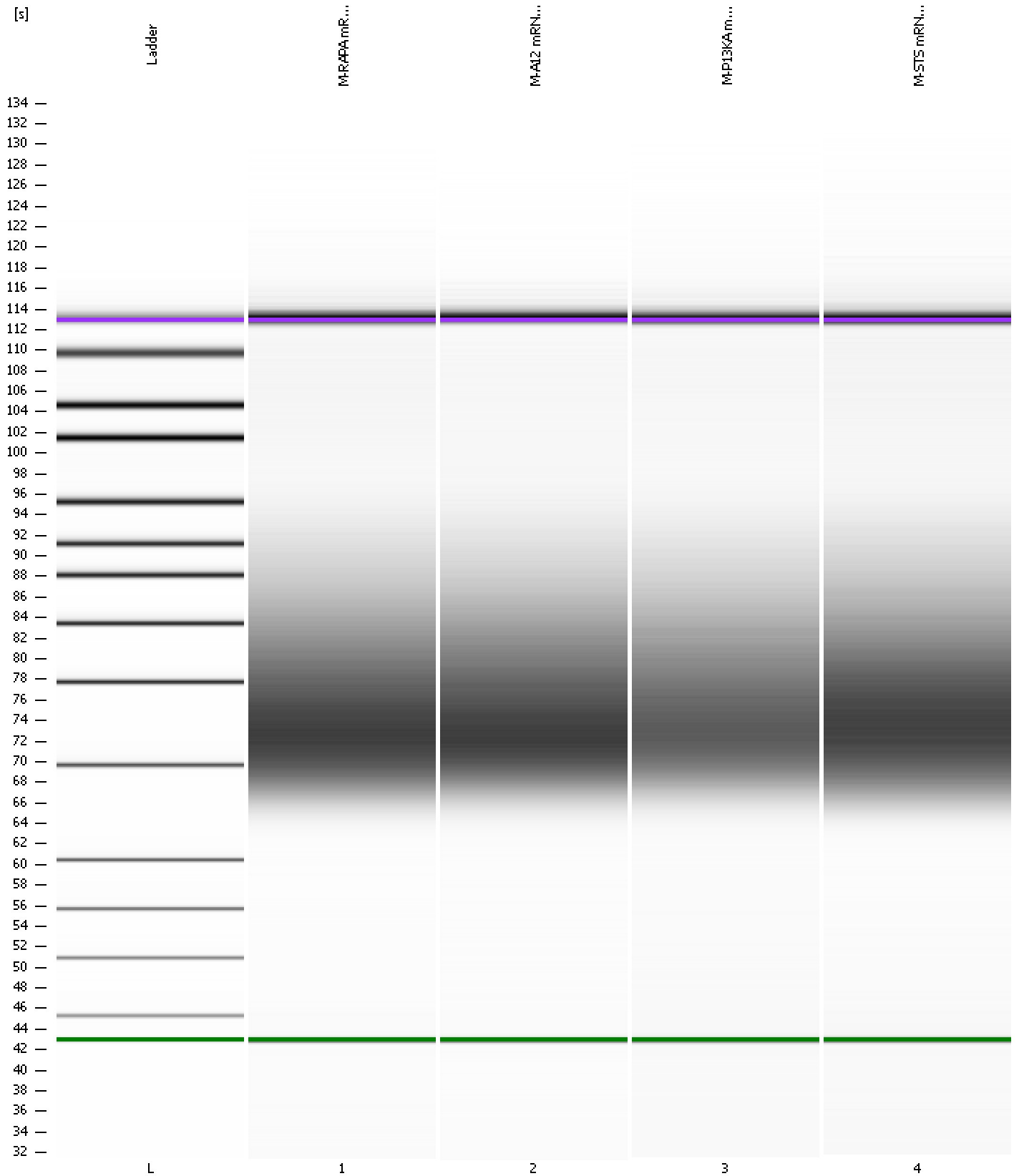
From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area % of Total	Size distribution in CV [%]	Color
63.87	94.06	405	7,271.5	1,775.42	1,515.1 95	27.8	Blue



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...Settings\Bioanalyzer\2013-07-24\2013-07-24\_004\_mRNA\_Lib.xad

Created: 7/24/2013 4:08:04 PM  
Modified: 7/24/2013 4:42:57 PM

**Gel Image**



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...Settings\Bioanalyzer\2013-07-24\2013-07-24\_004\_mRNA\_Lib.xad

Created: 7/24/2013 4:08:04 PM  
 Modified: 7/24/2013 4:42:57 PM

**Run Logbook**

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 8)		Instrument	Run		7/24/2013 4:37:57 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-07-24\2013-07-24_004.xad)		Instrument	Run		7/24/2013 4:08:10 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		7/24/2013 4:08:10 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		7/24/2013 4:08:10 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		7/24/2013 4:08:10 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		7/24/2013 4:08:10 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		7/24/2013 4:08:10 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		7/24/2013 4:08:10 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1