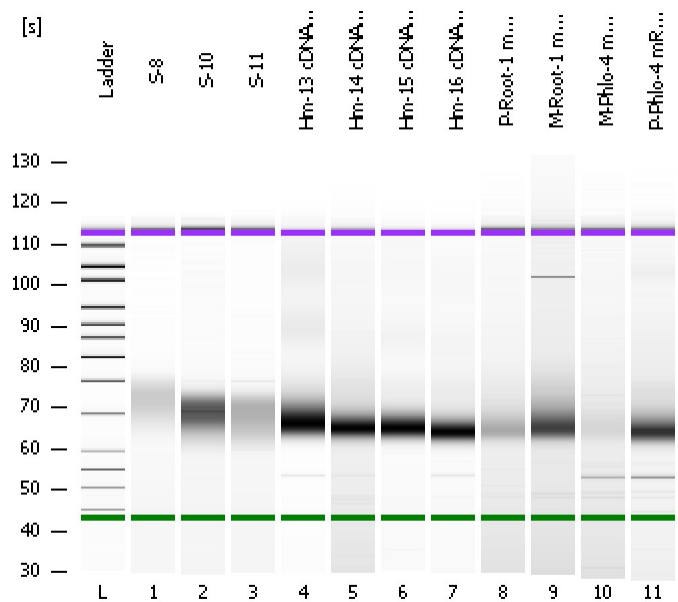


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-08\2013-10-08\_004.xad

Created: 10/8/2013 2:13:47 PM  
Modified: 10/8/2013 2:59:45 PM

**Electrophoresis File Run Summary**



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

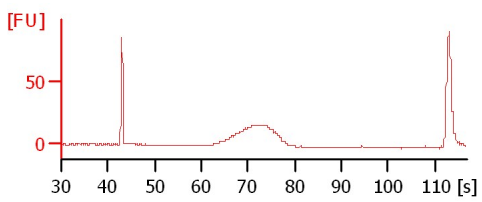
**Assay Information:**  
 Assay Origin Path: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\assays\dsDNA\High Sensitivity DNA.xsy  
 Assay Class: High Sensitivity DNA Assay  
 Version: 1.03  
 Assay Comments: Copyright © 2003-2010 Agilent Technologies

**Chip Information:**  
 Chip Lot #:   
 Reagent Kit Lot #:   
 Chip Comments:

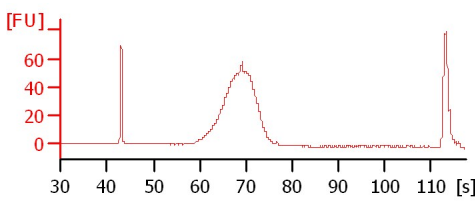
S-8

S-10

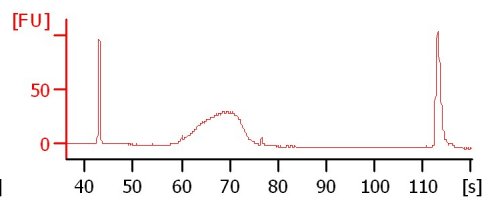
S-11



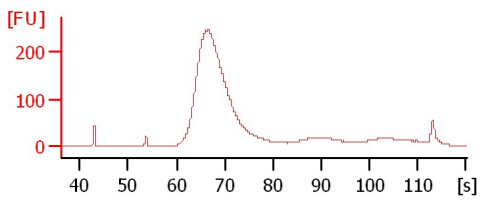
Hm-13 cDNA Lib



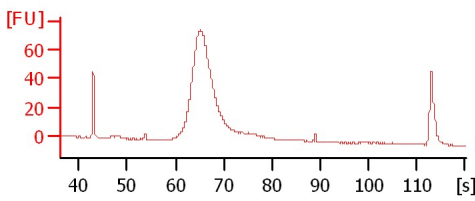
Hm-14 cDNA Lib



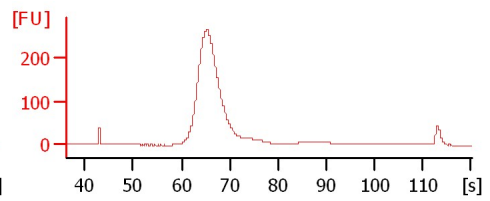
Hm-15 cDNA Lib



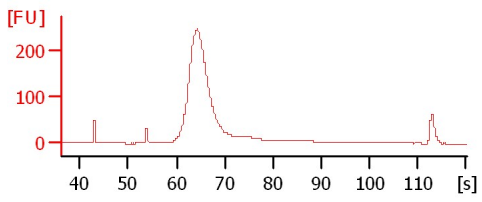
Hm-16 cDNA Lib



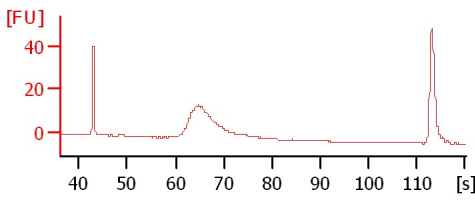
P-Root-1 mRNA Lib



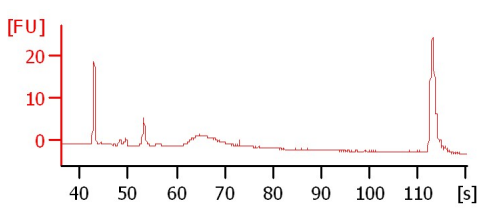
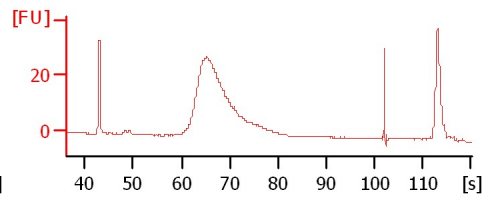
M-Root-1 mRNA Lib



M-Phlo-4 mRNA Lib



P-Phlo-4 mRNA Lib



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-08\2013-10-08\_004.xad

Created: 10/8/2013 2:13:47 PM  
Modified: 10/8/2013 2:59:45 PM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
S-8		<input type="checkbox"/>	✓			
S-10		<input type="checkbox"/>	✓			
S-11		<input type="checkbox"/>	✓			
Hm-13 cDNA Lib		<input type="checkbox"/>	✓			
Hm-14 cDNA Lib		<input type="checkbox"/>	✓			
Hm-15 cDNA Lib		<input type="checkbox"/>	✓			
Hm-16 cDNA Lib		<input type="checkbox"/>	✓			
P-Root-1 mRNA Lib		<input type="checkbox"/>	✓			
M-Root-1 mRNA Lib		<input type="checkbox"/>	✓			
M-Phlo-4 mRNA Lib		<input type="checkbox"/>	✓			
P-Phlo-4 mRNA Lib		<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\2013-10-08\2013-10-08\_004.xad

Created: 10/8/2013 2:13:47 PM  
Modified: 10/8/2013 2:59:45 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

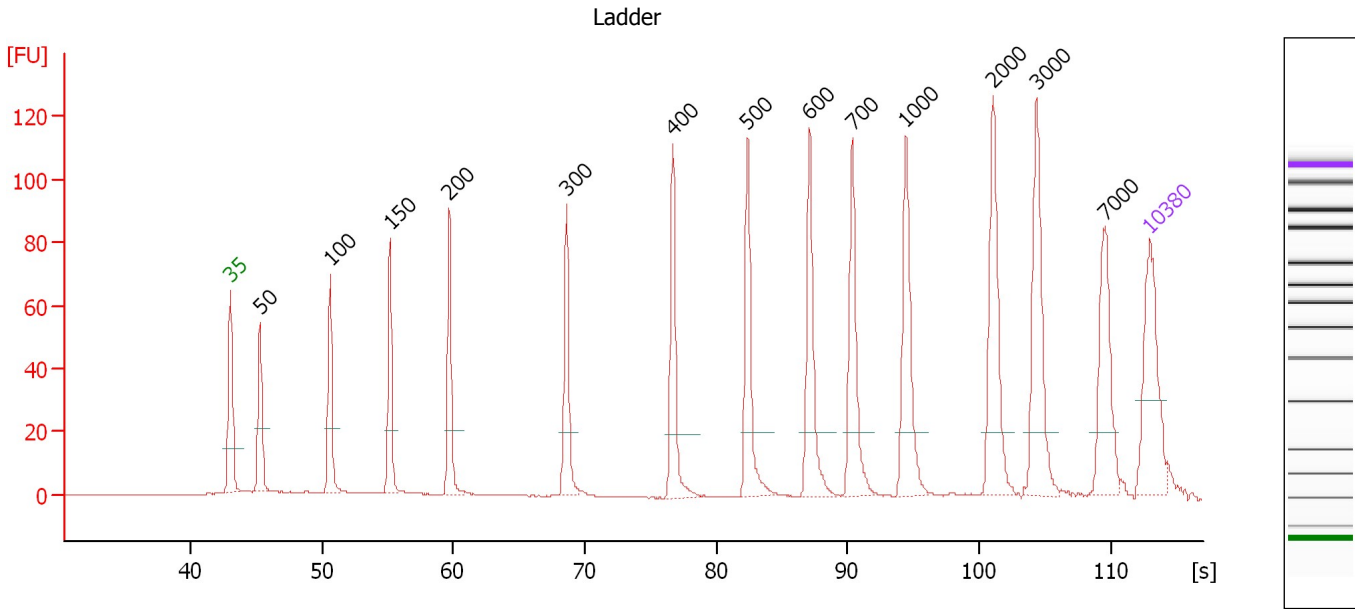
**Ladder**

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\2013-10-08\2013-10-08\_004.xad

Created: 10/8/2013 2:13:47 PM  
 Modified: 10/8/2013 2:59:45 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.1

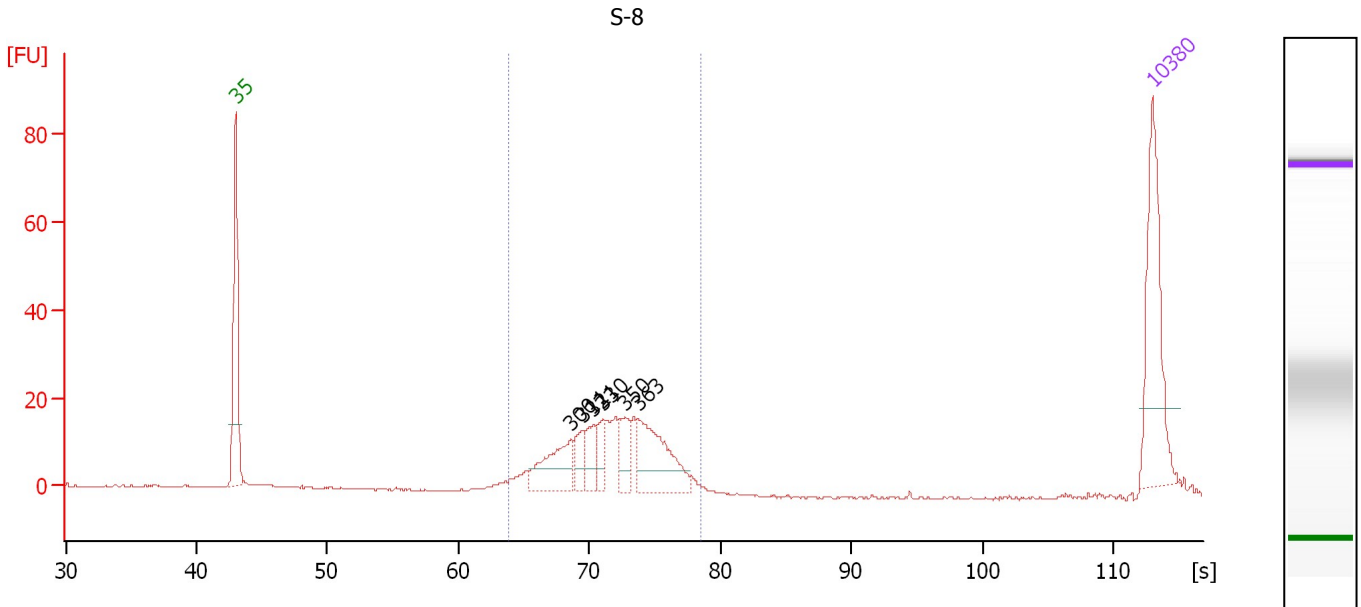
**Peak table for Ladder**

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\2013-10-08\2013-10-08\_004.xad

Created: 10/8/2013 2:13:47 PM  
 Modified: 10/8/2013 2:59:45 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : S-8**

Number of peaks found: 6                      Corr. Area 1: 215.2  
 Noise: 0.2

**Peak table for sample 1 : S-8**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	300	54.49	275.3	
3	311	19.47	95.0	
4	321	23.29	109.9	
5	330	18.96	87.0	
6	350	23.70	102.6	
7	363	73.70	307.4	
8	10,380	75.00	10.9	Upper Marker

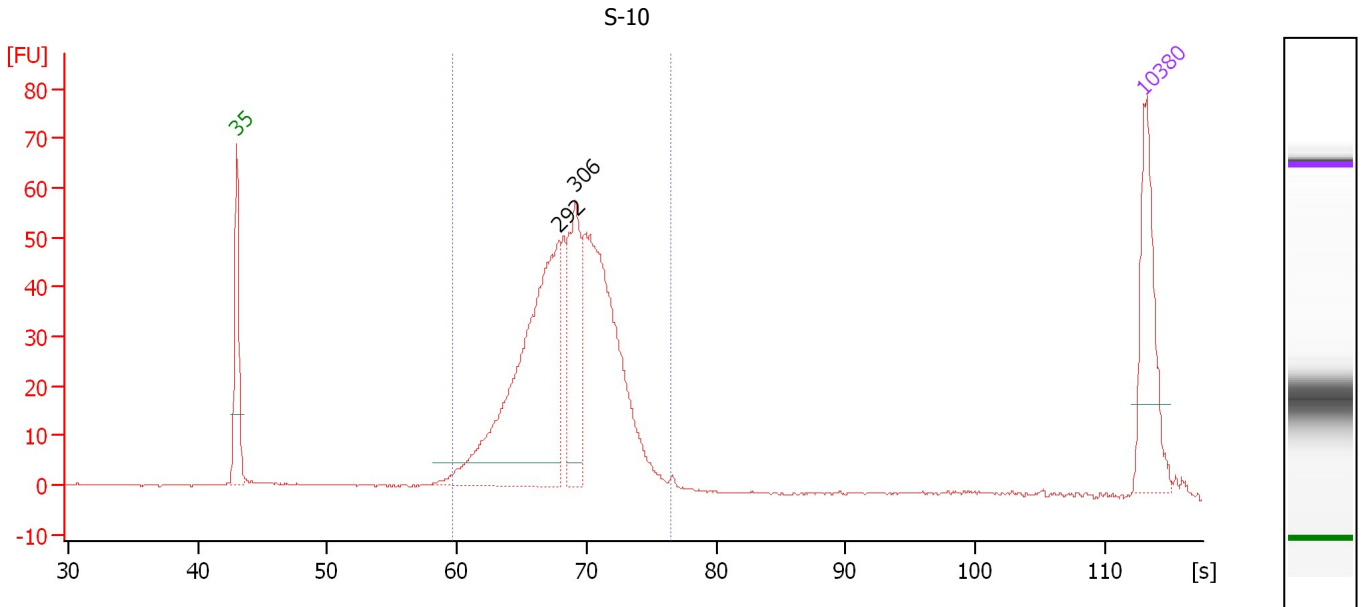
**Region table for sample 1 : S-8**

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
63.91	78.54	337	1,194.7	261.62	215.2	94	11.7	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-08\2013-10-08\_004.xad

Created: 10/8/2013 2:13:47 PM  
 Modified: 10/8/2013 2:59:45 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : S-10**

Number of peaks found: 2                      Corr. Area 1: 679.0  
 Noise: 0.2

**Peak table for sample 2 : S-10**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	292	376.29	1,950.6	
3	306	130.60	645.9	
4	10,380	75.00	10.9	Upper Marker

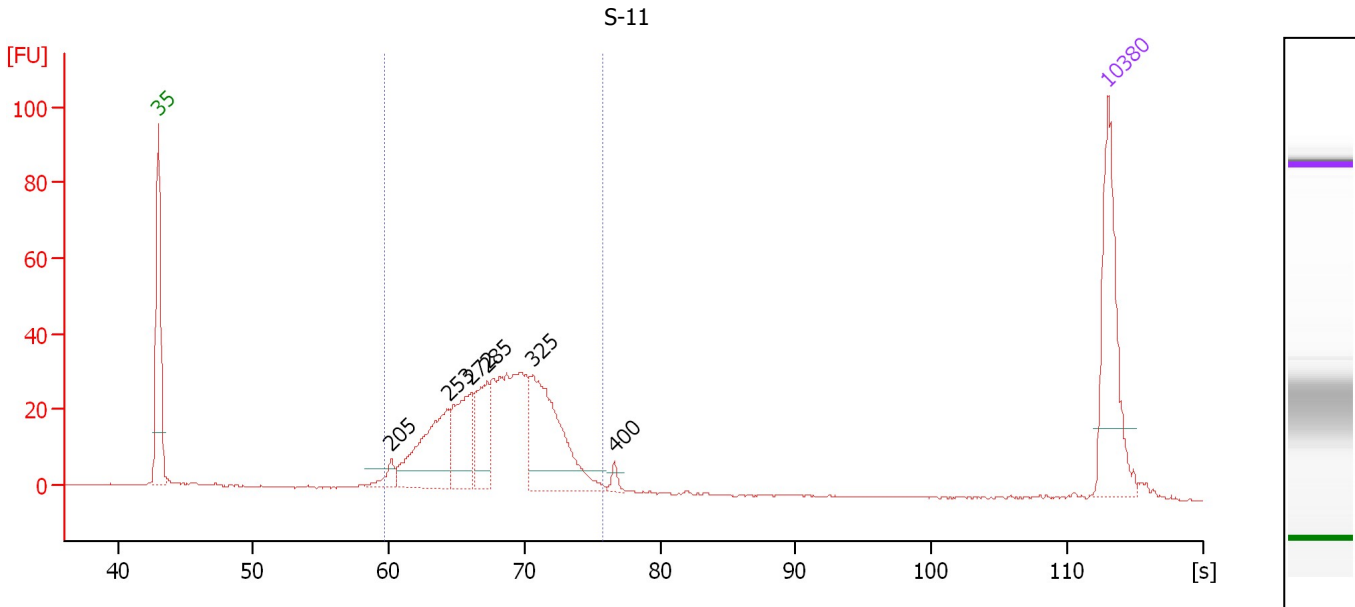
**Region table for sample 2 : S-10**

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area % of Total	Size distribution in CV [%]	Color
59.68	76.47	300	4,617.9	897.22	679.0	95	12.5

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-08\2013-10-08\_004.xad

Created: 10/8/2013 2:13:47 PM  
 Modified: 10/8/2013 2:59:45 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : S-11**

Number of peaks found: 6                      Corr. Area 1: 469.6  
 Noise: 0.1

**Peak table for sample 3 : S-11**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	205	12.93	95.3	
3	253	94.03	563.6	
4	272	64.07	357.0	
5	285	51.13	271.5	
6	325	120.79	563.4	
7	400	5.24	19.9	
8	10,380	75.00	10.9	Upper Marker

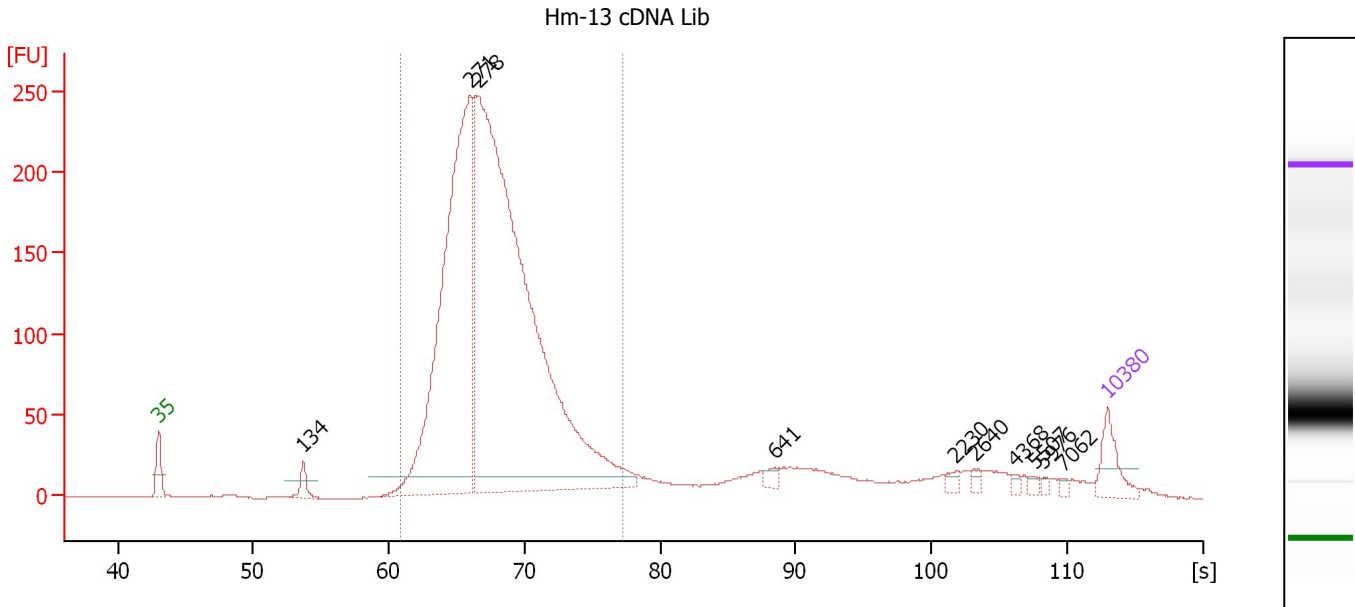
**Region table for sample 3 : S-11**

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
59.68	75.75	293	2,618.8	495.38	469.6	91	13.9	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-08\2013-10-08\_004.xad

Created: 10/8/2013 2:13:47 PM  
 Modified: 10/8/2013 2:59:45 PM

**Electropherogram Summary Continued ...**



**Setpoint Deviations for sample 4 : Hm-13 cDNA Lib**

Height Threshold [FU] : 10

**Overall Results for sample 4 : Hm-13 cDNA Lib**

Number of peaks found: 10      Corr. Area 1: 2,738.6  
 Noise: 0.2

**Peak table for sample 4 : Hm-13 cDNA Lib**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	134	51.13	577.9	
3	271	1,811.13	10,125.5	
4	278	3,211.92	17,512.1	
5	641	21.26	50.2	
6	2,230	16.18	11.0	
7	2,640	13.46	7.7	
8	4,368	9.96	3.5	
9	5,507	11.36	3.1	
10	5,976	8.63	2.2	
11	7,062	9.27	2.0	
12	10,380	75.00	10.9	Upper Marker

**Region table for sample 4 : Hm-13 cDNA Lib**

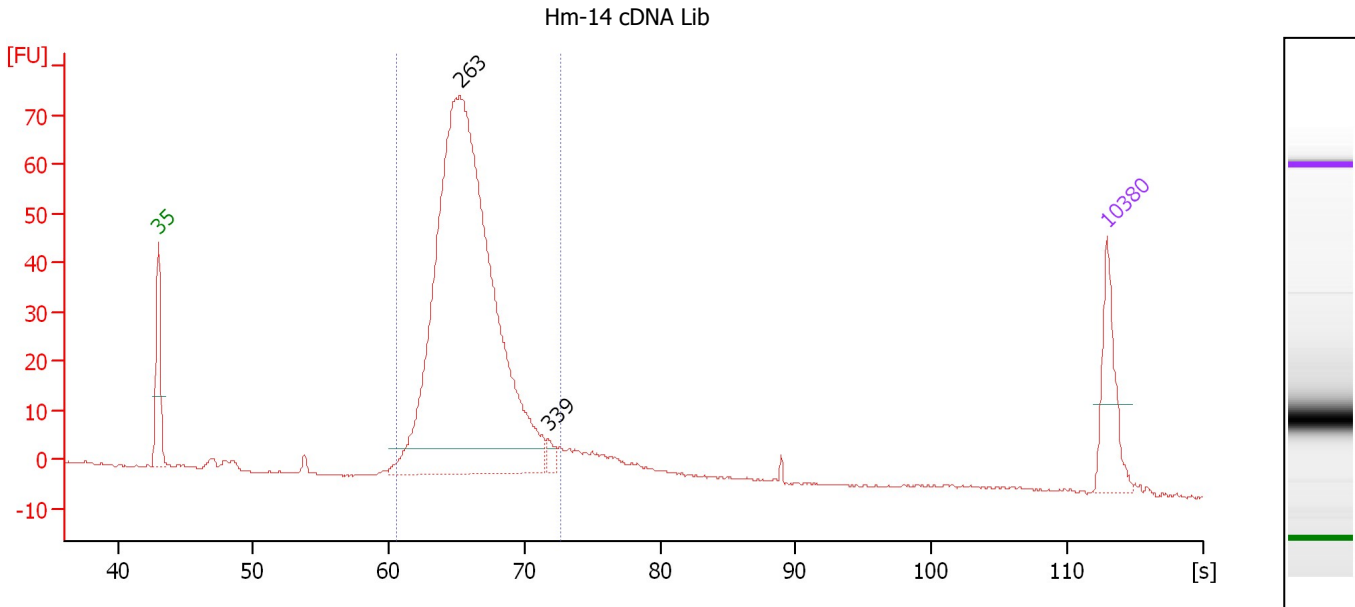
From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area % of Total	Size distribution in CV [%]	Color
60.92	77.33	292	26,317.6	4,990.17	2,738.6 83	12.8	Blue



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-08\2013-10-08\_004.xad

Created: 10/8/2013 2:13:47 PM  
 Modified: 10/8/2013 2:59:45 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : Hm-14 cDNA Lib**

Number of peaks found: 2                      Corr. Area 1: 602.8  
 Noise: 0.2

**Peak table for sample 5 : Hm-14 cDNA Lib**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	263	1,488.94	8,572.0	
3	339	13.21	59.1	
4	10,380	75.00	10.9	Upper Marker

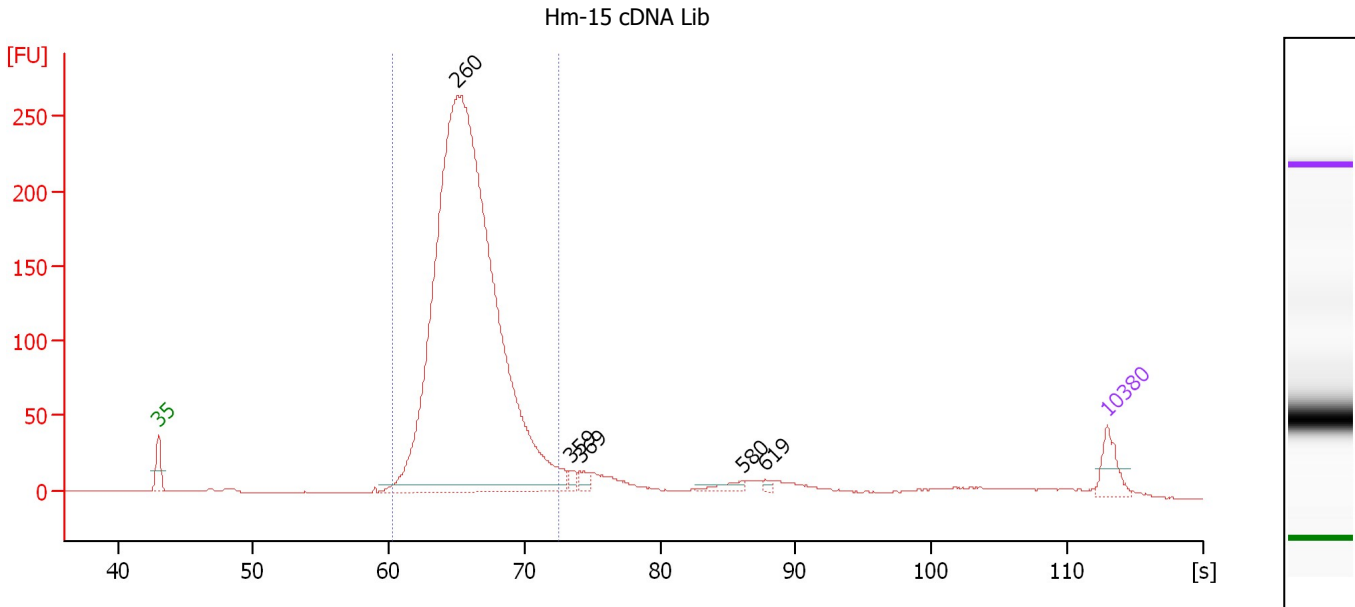
**Region table for sample 5 : Hm-14 cDNA Lib**

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area % of Total	Size distribution in CV [%]	Color
60.51	72.74	271	8,478.4	1,503.65	602.8 88	9.6	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-08\2013-10-08\_004.xad

Created: 10/8/2013 2:13:47 PM  
 Modified: 10/8/2013 2:59:45 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : Hm-15 cDNA Lib**

Number of peaks found: 5                      Corr. Area 1: 2,125.1  
 Noise: 0.1

**Peak table for sample 6 : Hm-15 cDNA Lib**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	260	5,007.54	29,169.8	
3	359	27.11	114.3	
4	369	36.80	151.3	
5	580	32.09	83.9	
6	619	13.35	32.7	
7	10,380	75.00	10.9	Upper Marker

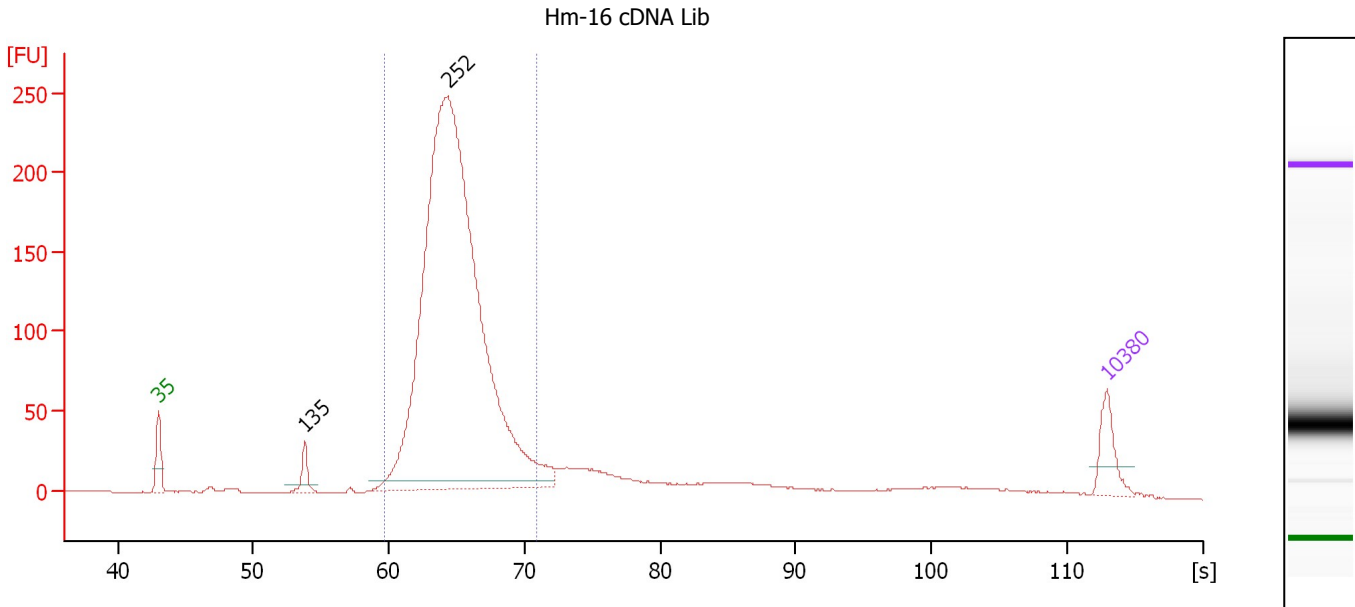
**Region table for sample 6 : Hm-15 cDNA Lib**

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area % of Total	Size distribution in CV [%]	Color
60.35	72.55	270	27,702.0	4,907.02	2,125.1 85	9.4	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-08\2013-10-08\_004.xad

Created: 10/8/2013 2:13:47 PM  
 Modified: 10/8/2013 2:59:45 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : Hm-16 cDNA Lib**

Number of peaks found: 2                      Corr. Area 1: 1,827.9  
 Noise: 0.1

**Peak table for sample 7 : Hm-16 cDNA Lib**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	135	59.59	668.3	
3	252	3,167.47	19,020.5	
4	10,380	75.00	10.9	Upper Marker

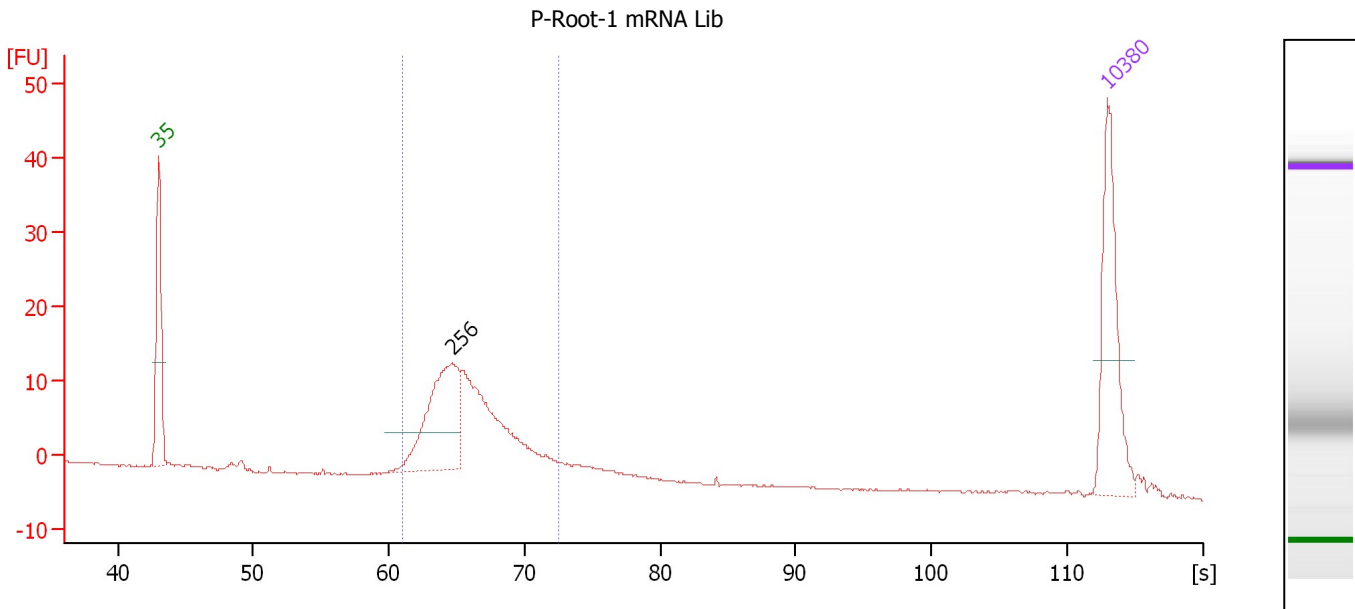
**Region table for sample 7 : Hm-16 cDNA Lib**

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
59.68	70.94	258	18,578.1	3,154.09	1,827.9	81	9.1	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-08\2013-10-08\_004.xad

Created: 10/8/2013 2:13:47 PM  
 Modified: 10/8/2013 2:59:45 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : P-Root-1 mRNA Lib**

Number of peaks found: 1                      Corr. Area 1: 126.7  
 Noise: 0.1

**Peak table for sample 8 : P-Root-1 mRNA Lib**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	256	127.39	753.1	
3	10,380	75.00	10.9	Upper Marker

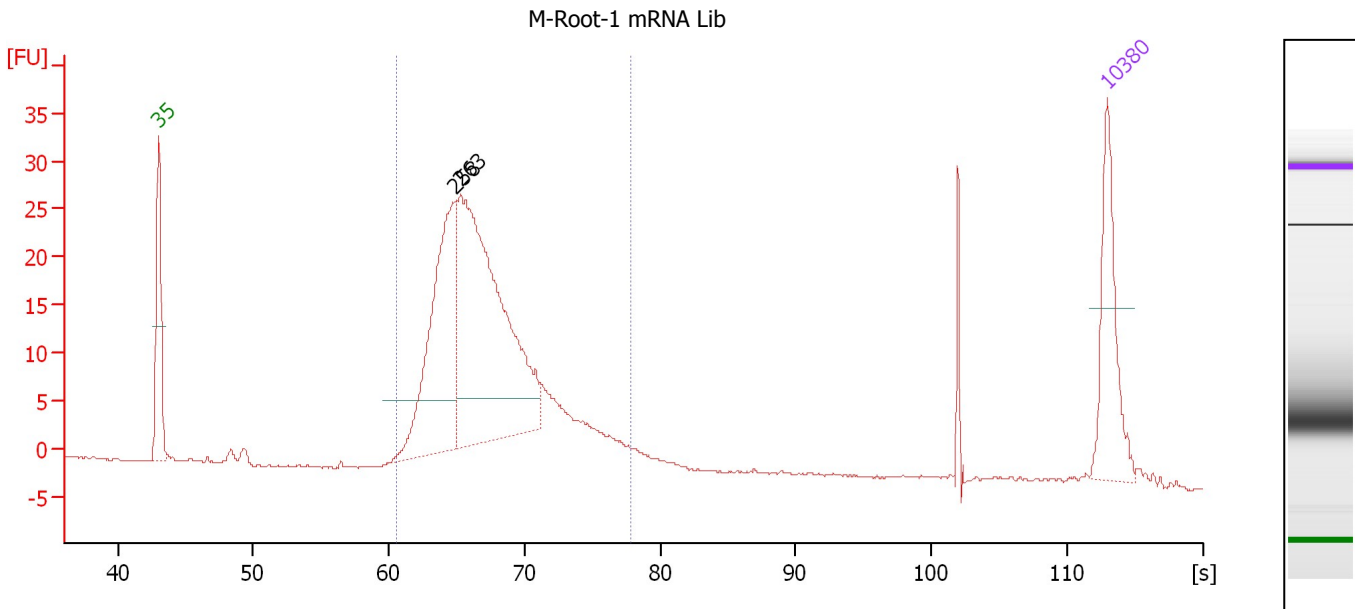
**Region table for sample 8 : P-Root-1 mRNA Lib**

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
61.03	72.57	271	1,556.2	275.71	126.7	91	10.5	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-08\2013-10-08\_004.xad

Created: 10/8/2013 2:13:47 PM  
 Modified: 10/8/2013 2:59:45 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : M-Root-1 mRNA Lib**

Number of peaks found: 2                      Corr. Area 1: 299.1  
 Noise: 0.1

**Peak table for sample 9 : M-Root-1 mRNA Lib**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	258	249.30	1,463.7	
3	263	438.15	2,525.0	
4	10,380	75.00	10.9	Upper Marker

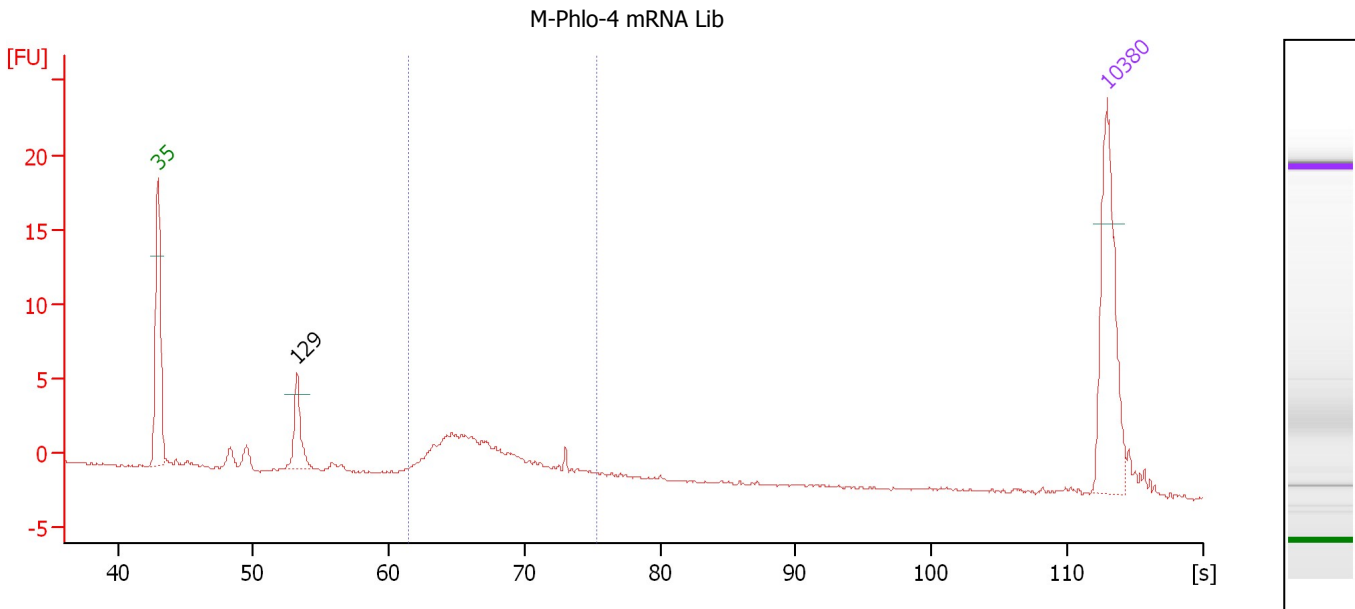
**Region table for sample 9 : M-Root-1 mRNA Lib**

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
60.60	77.87	288	4,816.6	894.65	299.1	92	14.8	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-08\2013-10-08\_004.xad

Created: 10/8/2013 2:13:47 PM  
 Modified: 10/8/2013 2:59:45 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : M-Phlo-4 mRNA Lib**

Number of peaks found: 1                      Corr. Area 1: 24.7  
 Noise: 0.1

**Peak table for sample 10 : M-Phlo-4 mRNA Lib**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	129	34.94	410.1	
3	10,380	75.00	10.9	Upper Marker

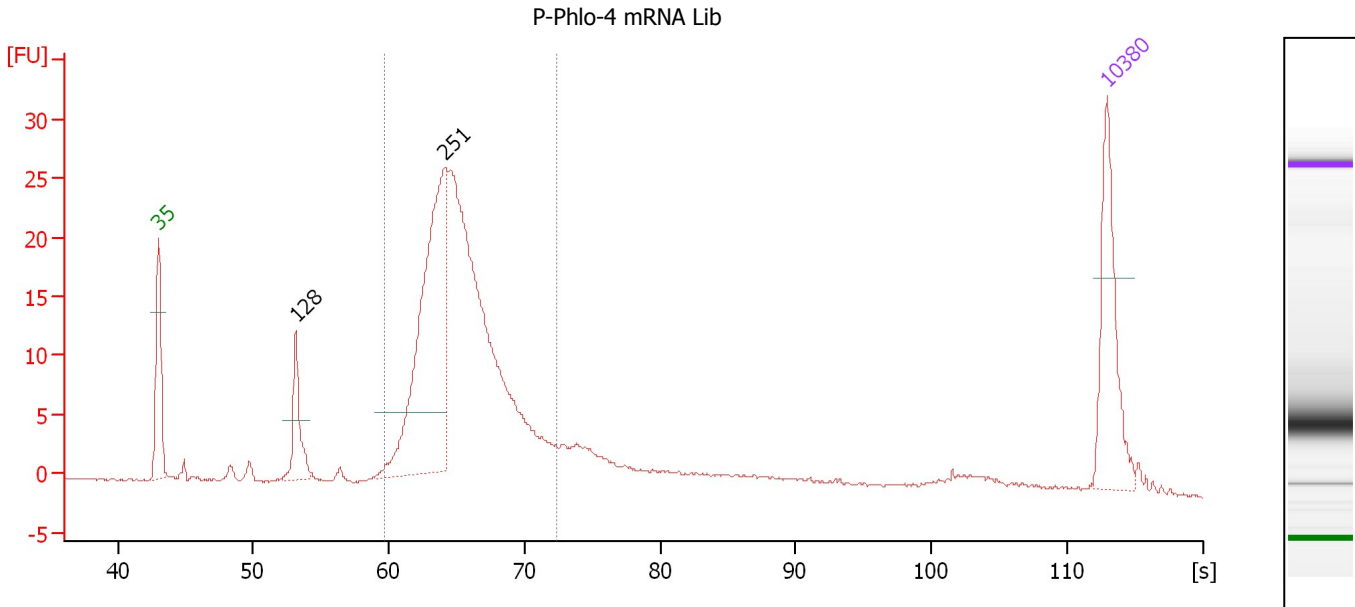
**Region table for sample 10 : M-Phlo-4 mRNA Lib**

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
61.44	75.40	283	596.9	109.77	24.7	65	12.8	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-08\2013-10-08\_004.xad

Created: 10/8/2013 2:13:47 PM  
 Modified: 10/8/2013 2:59:45 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : P-Phlo-4 mRNA Lib**

Number of peaks found: 2                      Corr. Area 1: 225.8  
 Noise: 0.1

**Peak table for sample 11 : P-Phlo-4 mRNA Lib**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	128	56.08	662.9	
3	251	308.65	1,866.7	
4	10,380	75.00	10.9	Upper Marker

**Region table for sample 11 : P-Phlo-4 mRNA Lib**

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area % of Total	Size distribution in CV [%]	Color
59.68	72.32	264	4,691.3	810.21	225.8 75	11.1	Blue

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-08\2013-10-08\_004.xad

Created: 10/8/2013 2:13:47 PM  
Modified: 10/8/2013 2:59:45 PM

**Gel Image**

