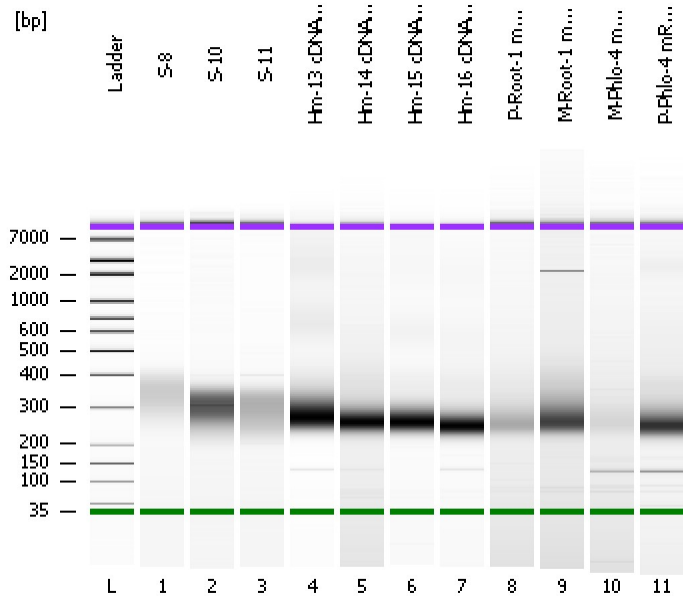


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-10-08\2013-10-08_004.xad

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

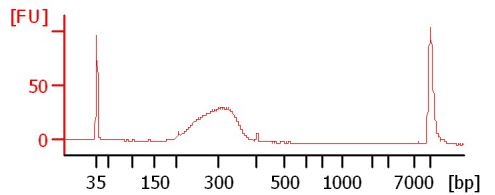
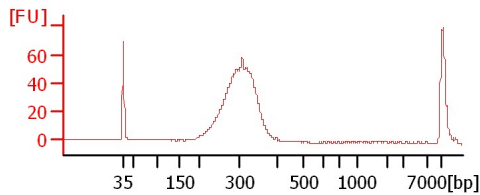
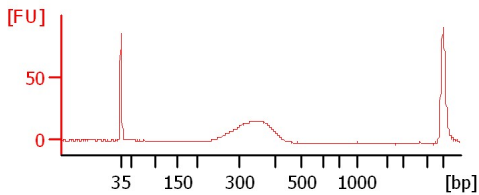
Chip Information:

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

S-8

S-10

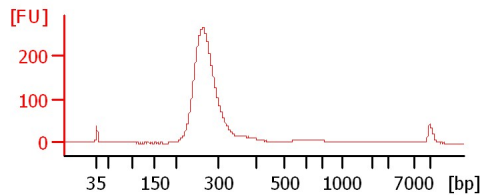
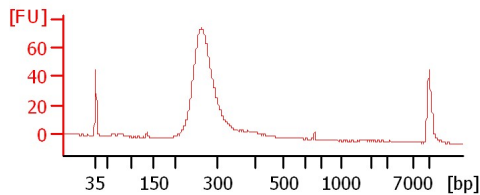
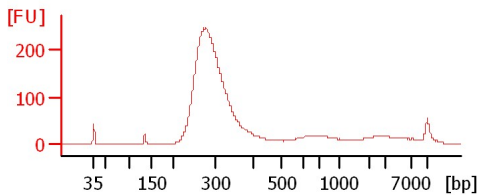
S-11



Hm-13 cDNA Lib

Hm-14 cDNA Lib

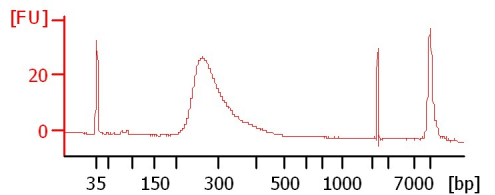
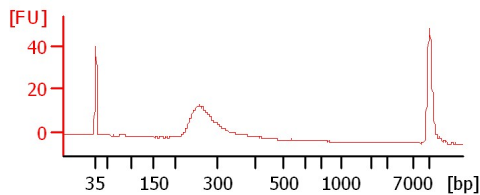
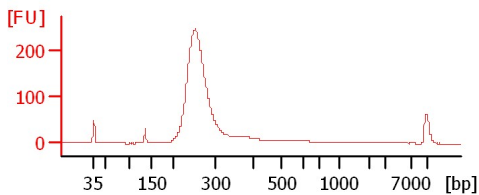
Hm-15 cDNA Lib



Hm-16 cDNA Lib

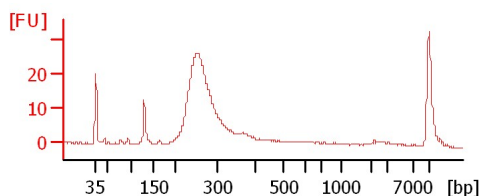
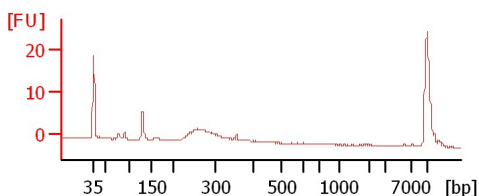
P-Root-1 mRNA Lib

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

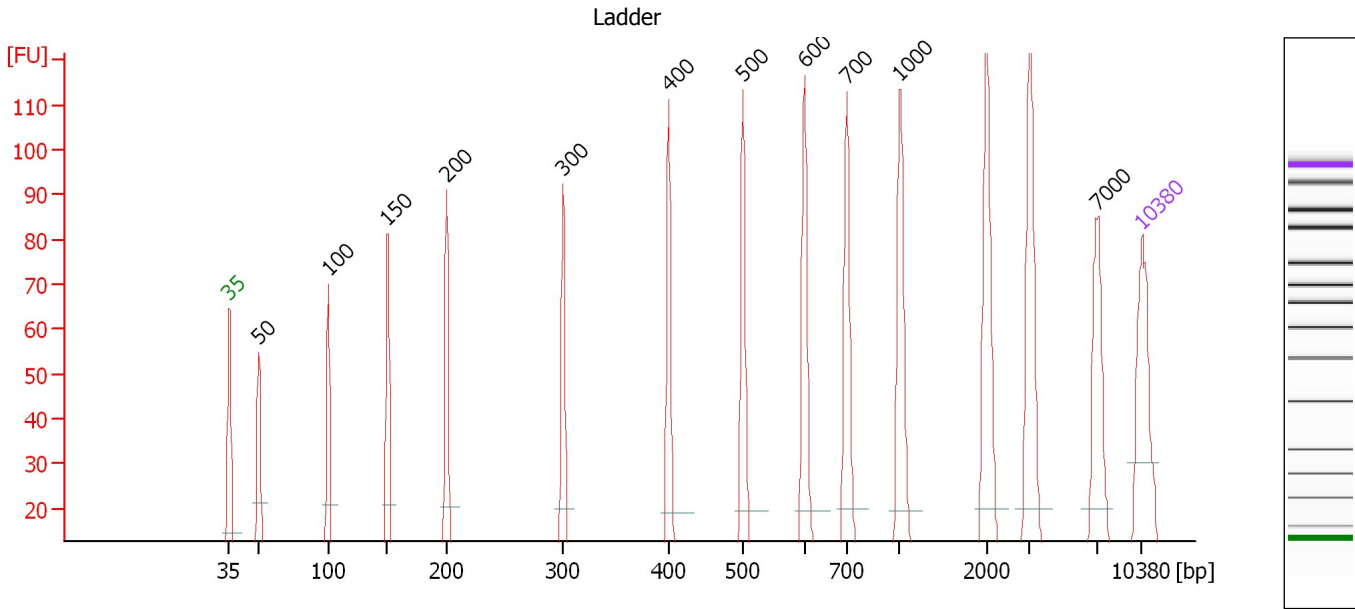
Ladder

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
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Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

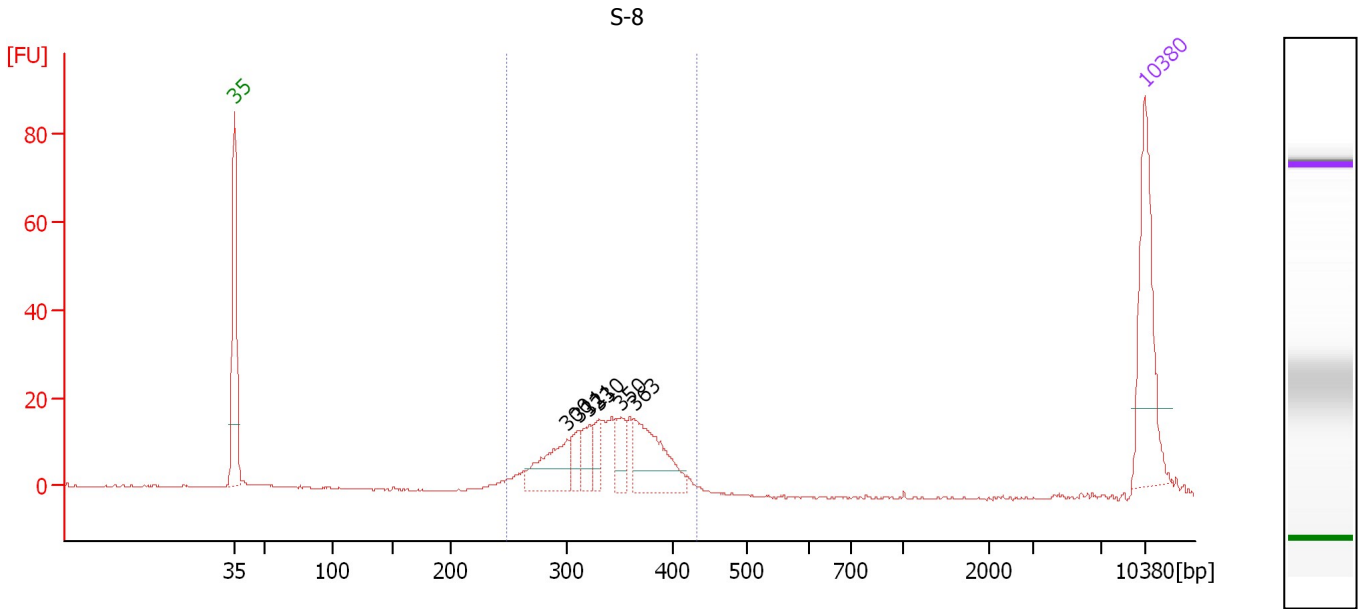
Peak table for Ladder

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
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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

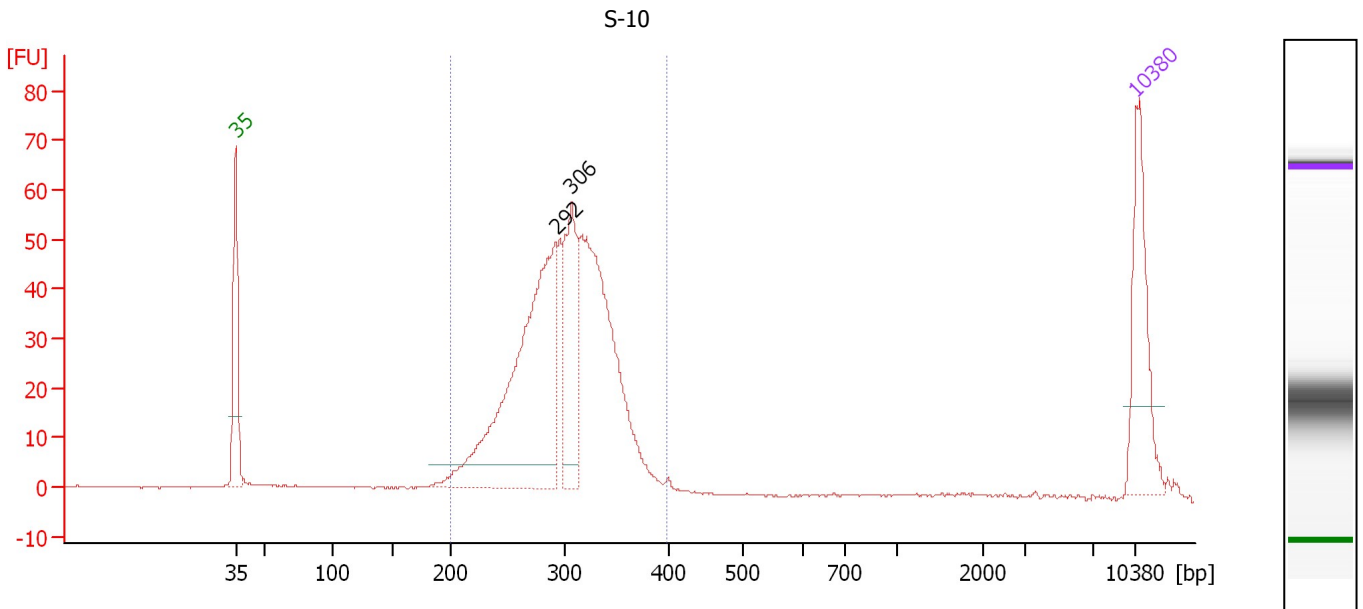
Region table for sample 1 : S-8

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
247	432	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

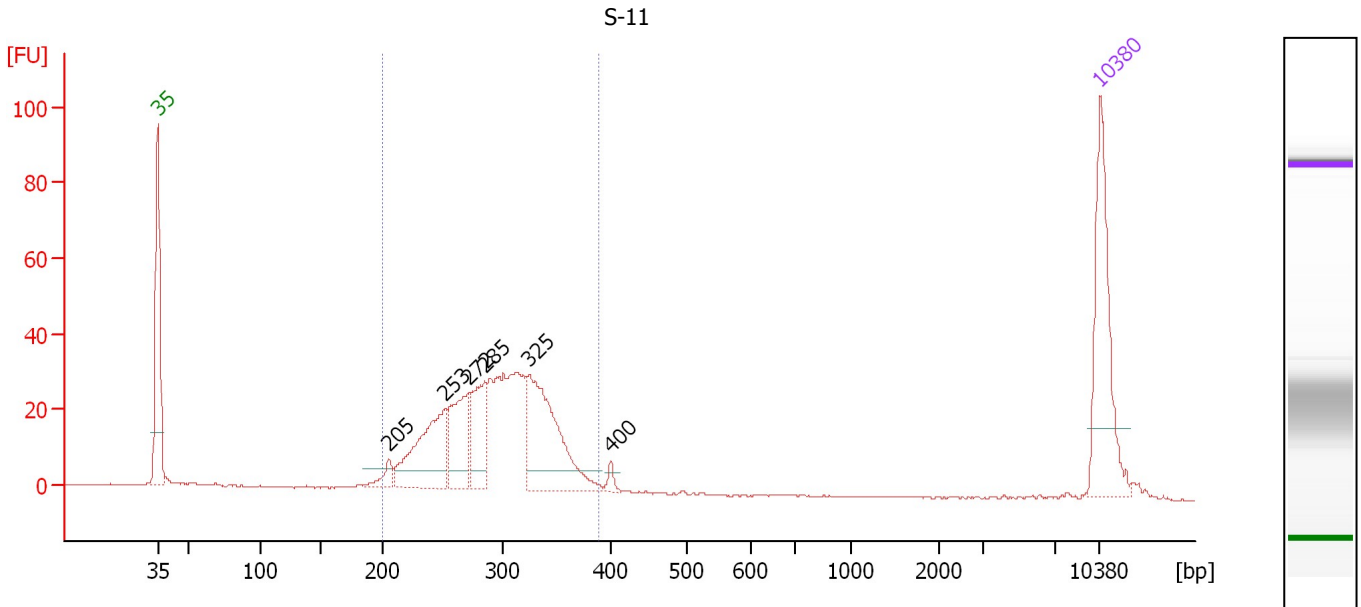
Region table for sample 2 : S-10

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	397	300	4,617.9	897.22	679.0	95	12.5	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 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

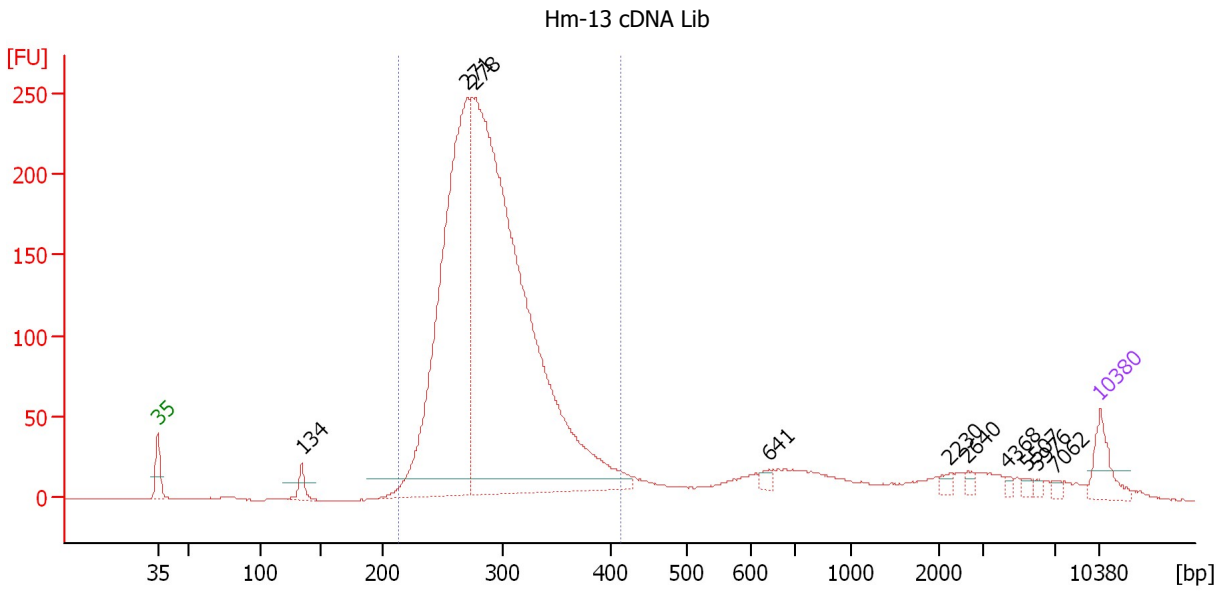
Region table for sample 3 : S-11

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	388	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

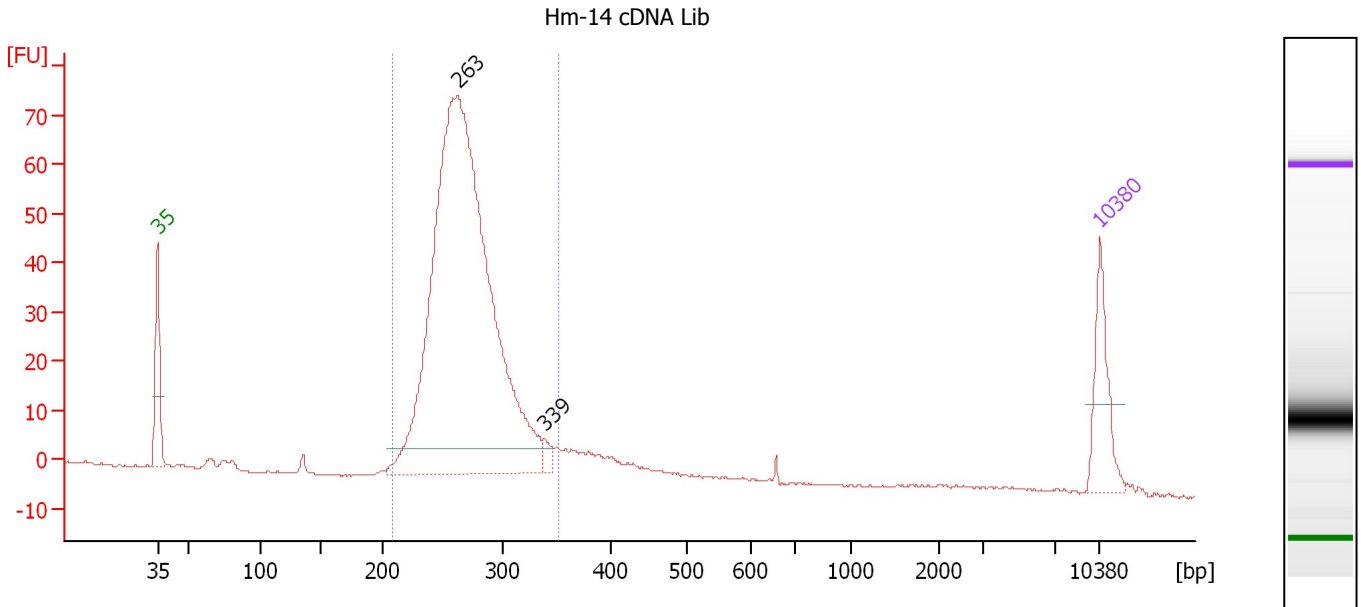
Region table for sample 4 : Hm-13 cDNA Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
214	411	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

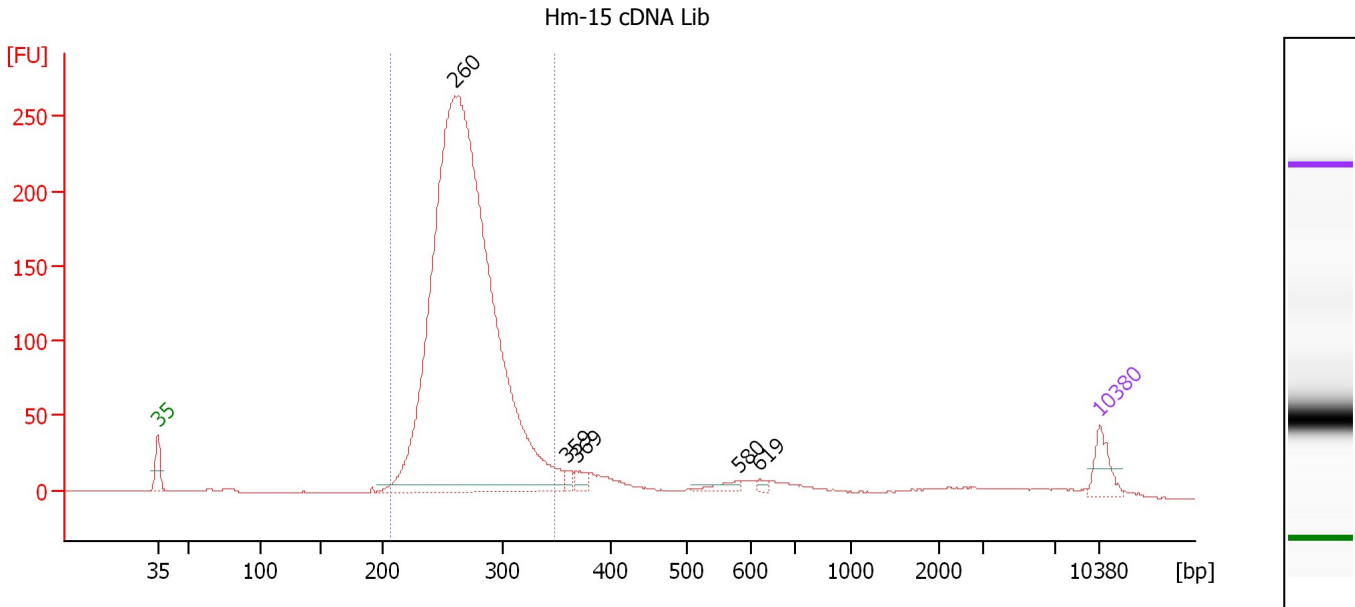
Region table for sample 5 : Hm-14 cDNA Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
209	351	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

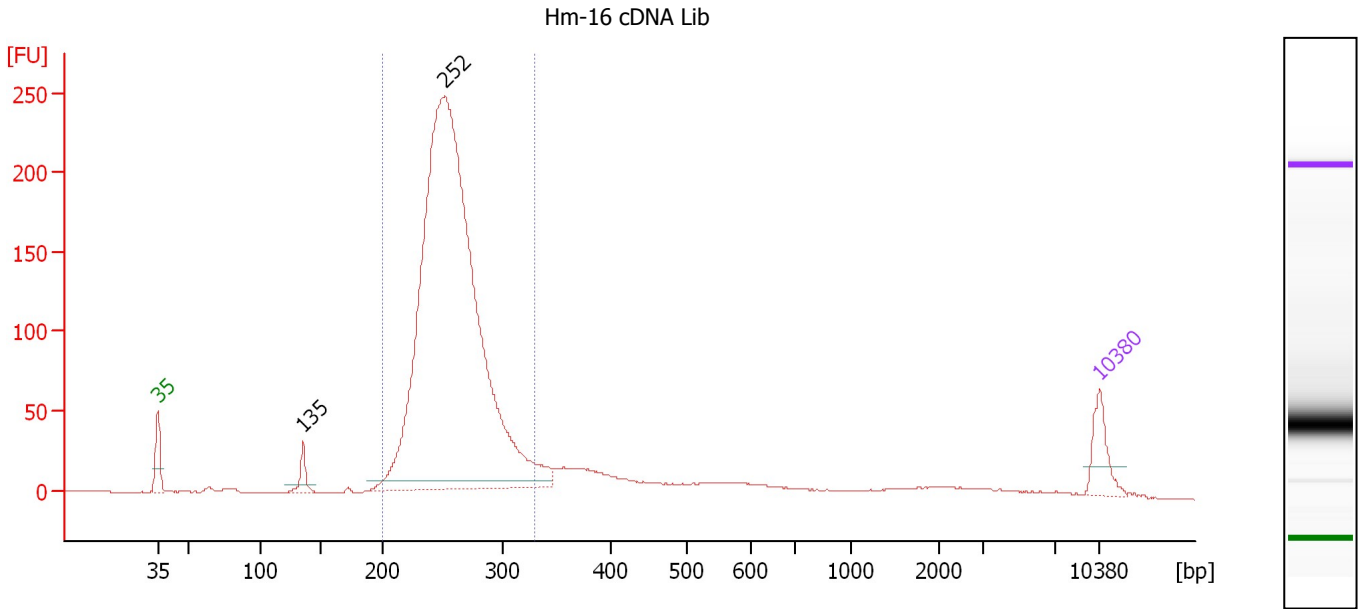
Region table for sample 6 : Hm-15 cDNA Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
207	349	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

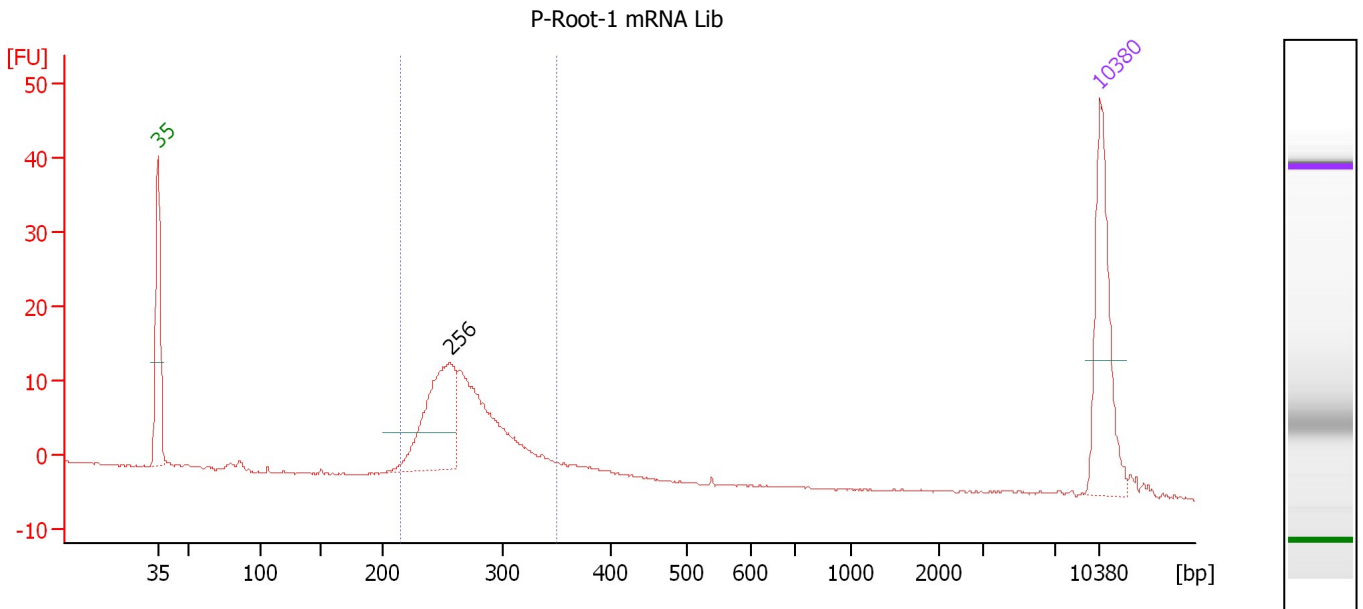
Region table for sample 7 : Hm-16 cDNA Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	329	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
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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

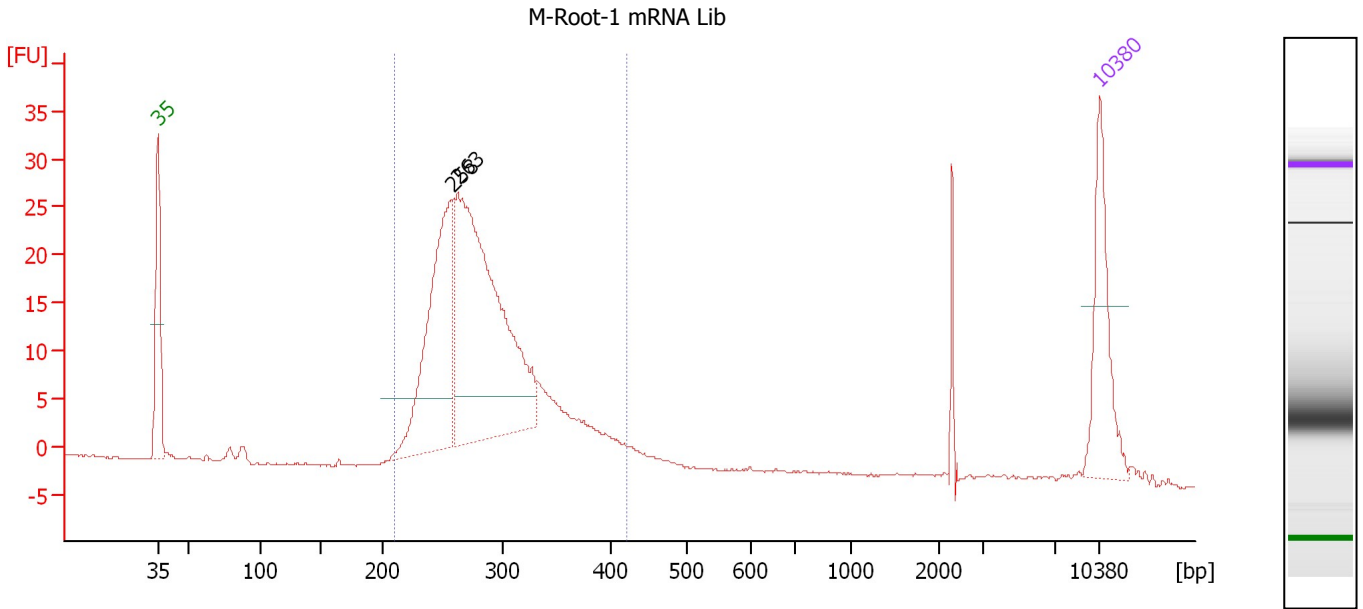
Region table for sample 8 : P-Root-1 mRNA Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
215	349	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
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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

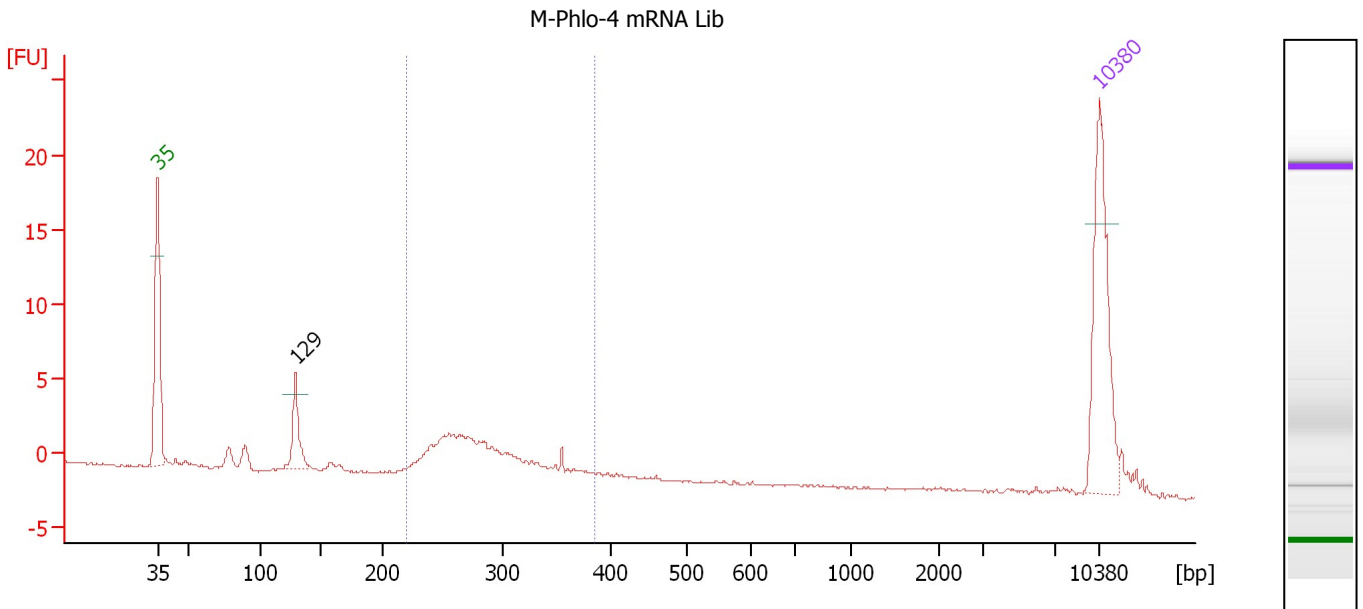
Region table for sample 9 : M-Root-1 mRNA Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
210	421	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

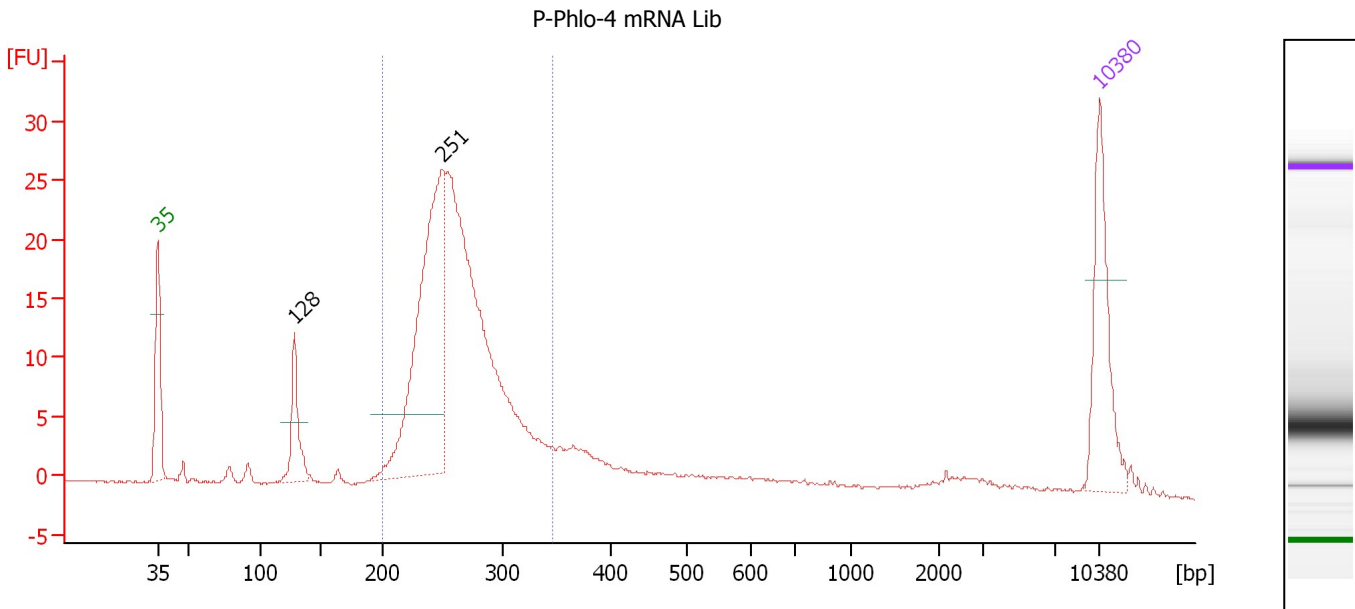
Region table for sample 10 : M-Phlo-4 mRNA Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
220	384	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 [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	346	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

