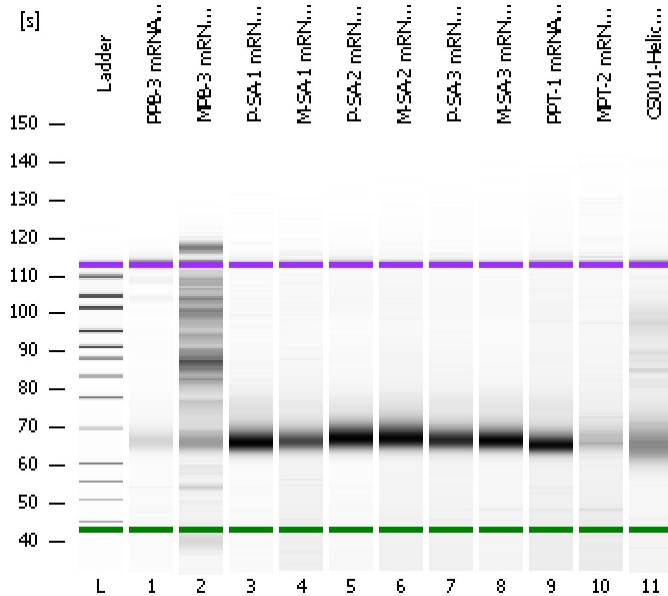


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-11\2013-06-11_005.xad

Created: 6/11/2013 12:07:35 PM
Modified: 6/11/2013 12:52:25 PM

Electrophoresis File Run Summary



Instrument Information:

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

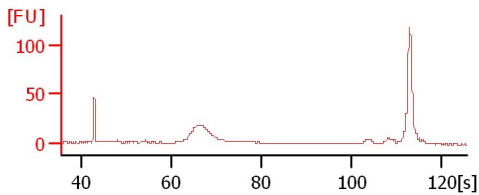
Assay Information:

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

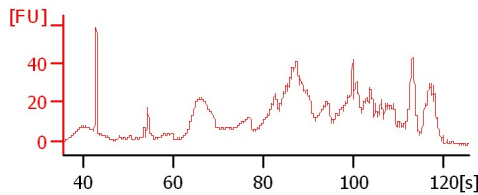
Chip Information:

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

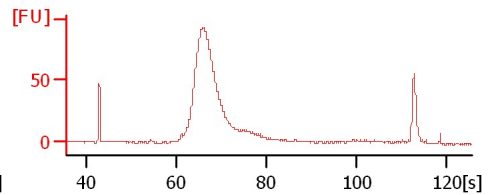
PPB-3 mRNA Lib



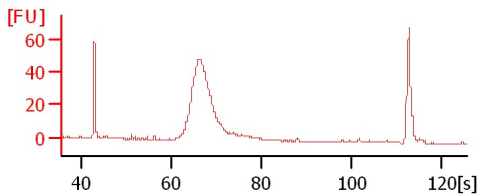
MPB-3 mRNA Lib



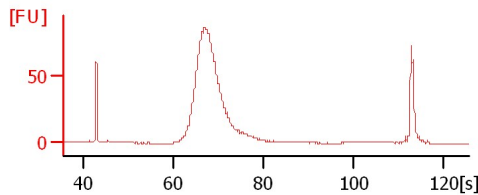
P-SA-1 mRNA Lib



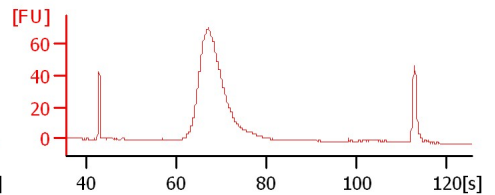
M-SA-1 mRNA Lib 1:2



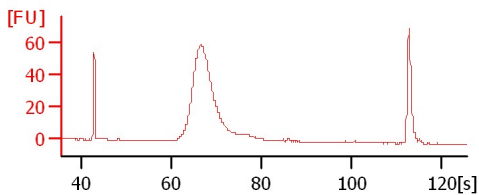
P-SA-2 mRNA Lib 1:2



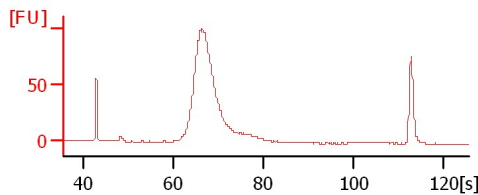
M-SA-2 mRNA Lib 1:2



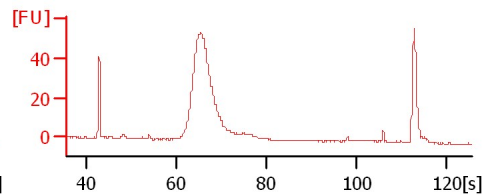
P-SA-3 mRNA Lib 1:2



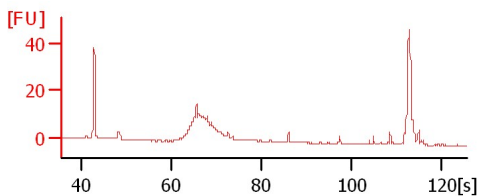
M-SA-3 mRNA Lib



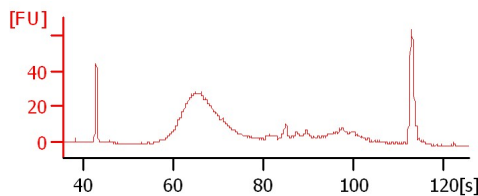
PPT-1 mRNA Lib (Rerun)



MPT-2 mRNA Lib (Rerun)



CS001-Heliconia 1:2



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-11\2013-06-11_005.xad

Created: 6/11/2013 12:07:35 PM
 Modified: 6/11/2013 12:52:25 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
PPB-3 mRNA Lib		<input type="checkbox"/>	✓			
MPB-3 mRNA Lib		<input type="checkbox"/>	✓			
P-SA-1 mRNA Lib		<input type="checkbox"/>	✓			
M-SA-1 mRNA Lib 1:2		<input type="checkbox"/>	✓			
P-SA-2 mRNA Lib 1:2		<input type="checkbox"/>	✓			
M-SA-2 mRNA Lib 1:2		<input type="checkbox"/>	✓			
P-SA-3 mRNA Lib 1:2		<input type="checkbox"/>	✓			
M-SA-3 mRNA Lib		<input type="checkbox"/>	✓			
PPT-1 mRNA Lib (Rerun)		<input type="checkbox"/>	✓			
MPT-2 mRNA Lib (Rerun)		<input type="checkbox"/>	✓			
CS001-Heliconia 1:2		<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\2013-06-11\2013-06-11_005.xad

Created: 6/11/2013 12:07:35 PM
Modified: 6/11/2013 12:52:25 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

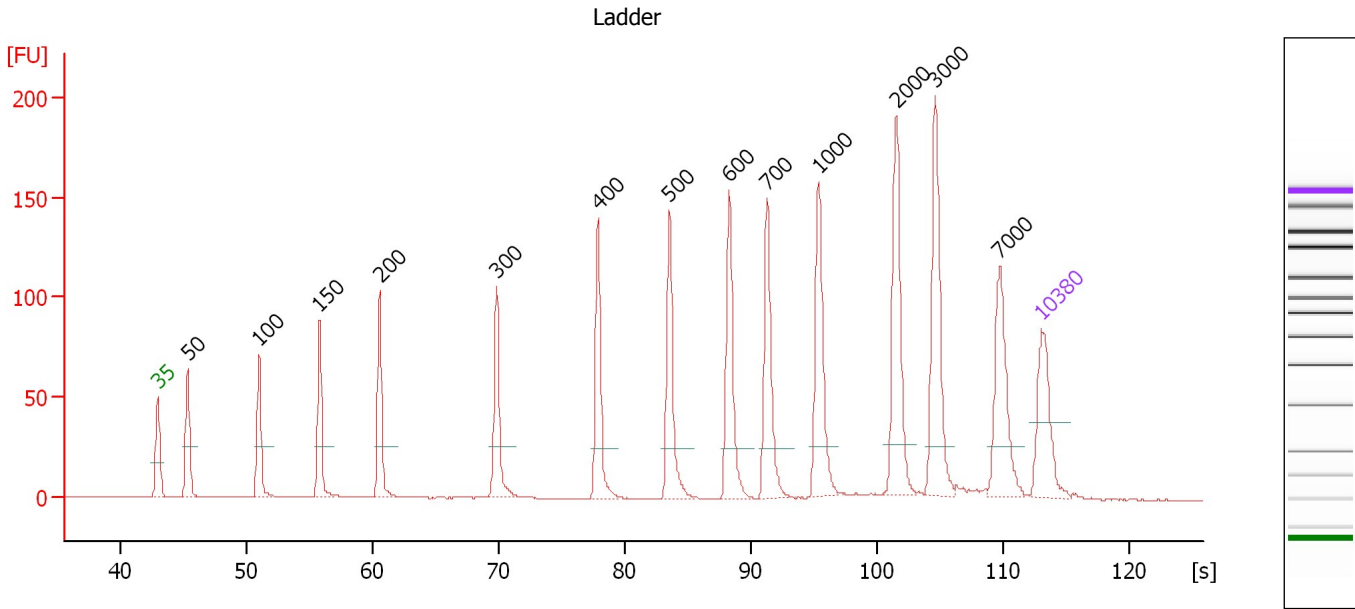
Ladder

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\2013-06-11\2013-06-11_005.xad

Created: 6/11/2013 12:07:35 PM
 Modified: 6/11/2013 12:52:25 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

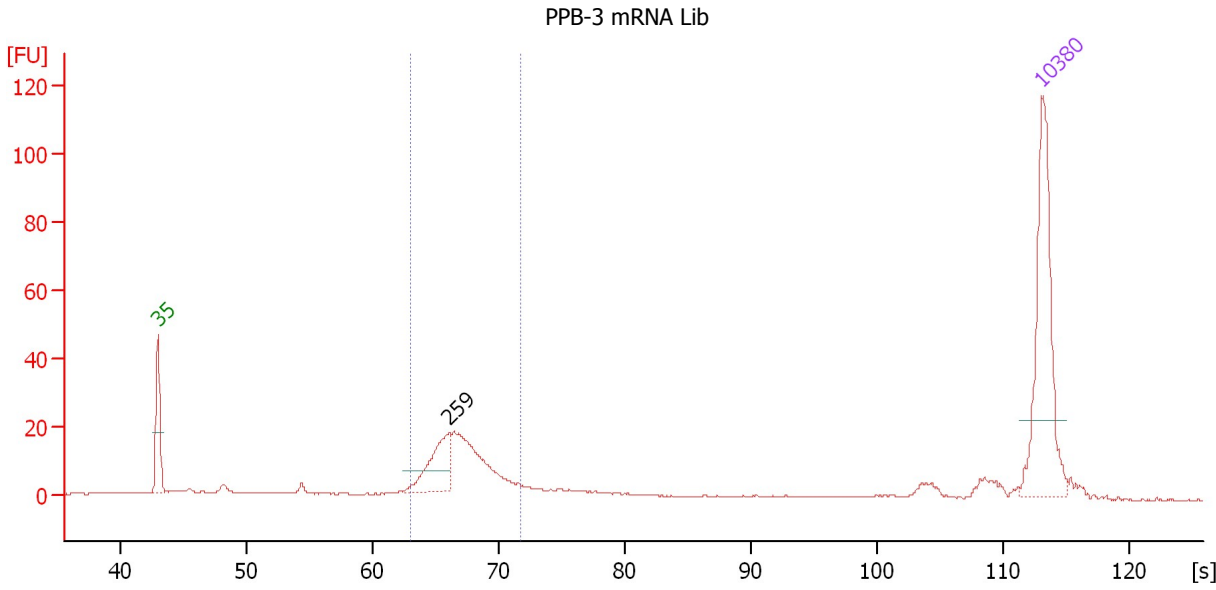
Peak table for Ladder

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\2013-06-11\2013-06-11_005.xad

Created: 6/11/2013 12:07:35 PM
 Modified: 6/11/2013 12:52:25 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 1 : PPB-3 mRNA Lib

Height Threshold [FU] : 6

Overall Results for sample 1 : PPB-3 mRNA Lib

Number of peaks found: 1 Corr. Area 1: 144.8
 Noise: 0.2

Peak table for sample 1 : PPB-3 mRNA Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	259	42.85	250.7	
3	10,380	75.00	10.9	Upper Marker

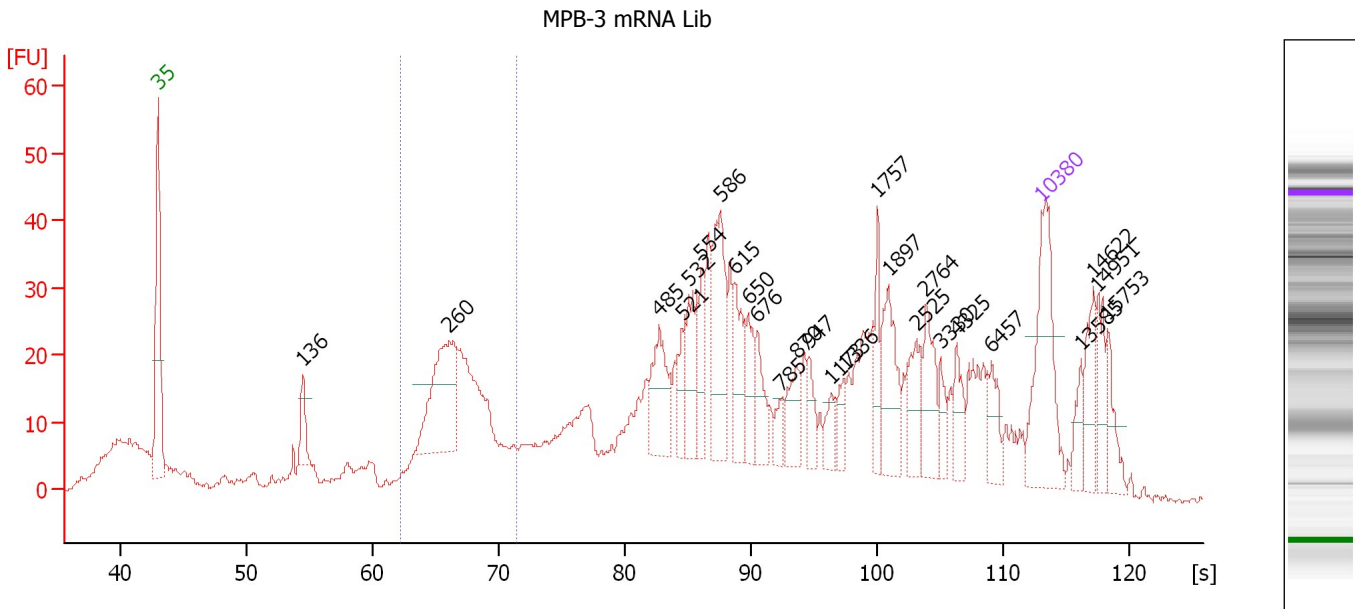
Region table for sample 1 : PPB-3 mRNA Lib

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area % of Total	Size distribution in CV [%]	Color	
62.96	71.75	270	708.8	125.62	144.8	55	8.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-11\2013-06-11_005.xad

Created: 6/11/2013 12:07:35 PM
 Modified: 6/11/2013 12:52:25 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 2 : MPB-3 mRNA Lib

Height Threshold [FU] : 10

Overall Results for sample 2 : MPB-3 mRNA Lib

Number of peaks found: 26 Corr. Area 1: 189.9
 Noise: 0.6

Peak table for sample 2 : MPB-3 mRNA Lib


Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	136	25.96	288.8	
3	260	118.74	693.1	
4	485	57.32	179.0	
5	521	21.29	61.9	
6	532	41.86	119.3	
7	554	34.94	95.5	
8	586	76.44	197.6	
9	615	39.17	96.5	
10	650	29.36	68.4	
11	676	27.27	61.1	
12	785	13.18	25.4	
13	870	27.61	48.1	
14	947	15.64	25.0	
15	1,173	14.55	18.8	
16	1,336	12.56	14.2	
17	1,757	23.42	20.2	
18	1,897	44.62	35.6	
19	2,525	29.15	17.5	
20	2,764	33.12	18.2	
21	3,330	12.93	5.9	
22	4,325	19.60	6.9	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-11\2013-06-11_005.xad


Created: 6/11/2013 12:07:35 PM
 Modified: 6/11/2013 12:52:25 PM

Electropherogram Summary Continued ...

... Peak table for sample 2 : MPB-3 mRNA Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
23	6,457	19.73	4.6	
24	 10,380	75.00	10.9	Upper Marker
25	13,585	0.00	0.0	
26	14,622	0.00	0.0	
27	14,951	0.00	0.0	
28	15,753	0.00	0.0	

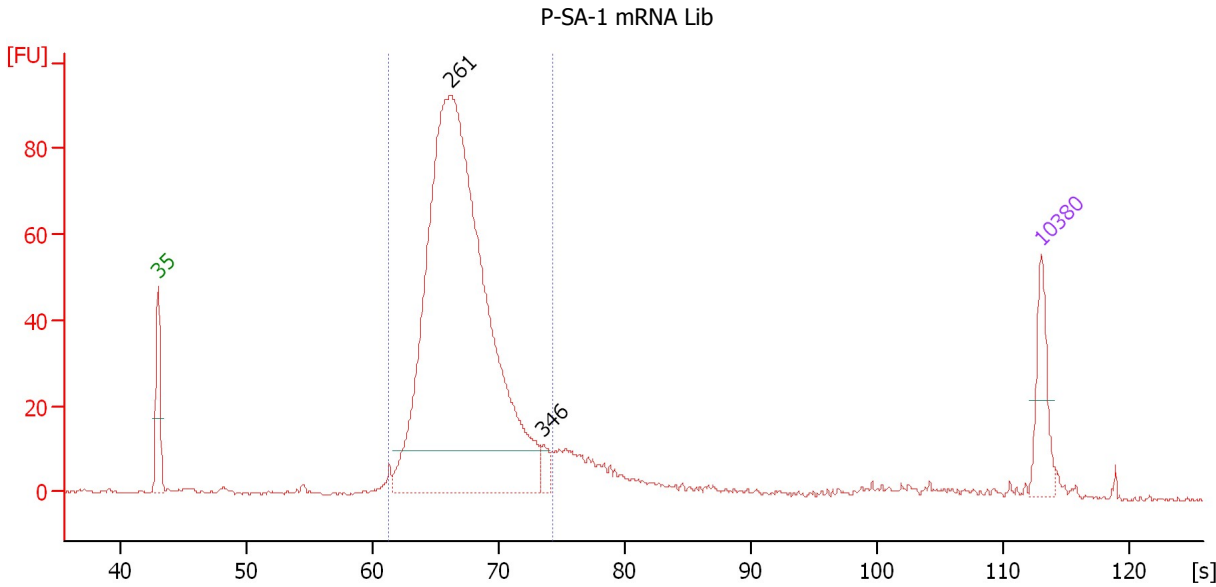
Region table for sample 2 : MPB-3 mRNA Lib

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area % of Total	Size distribution in CV [%]	Color
62.23	71.39	268	2,198.7	386.97	189.9	15	8.4 

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-11\2013-06-11_005.xad

Created: 6/11/2013 12:07:35 PM
 Modified: 6/11/2013 12:52:25 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 3 : P-SA-1 mRNA Lib

Height Threshold [FU] : 10

Overall Results for sample 3 : P-SA-1 mRNA Lib

Number of peaks found: 2 Corr. Area 1: 793.4
 Noise: 0.3

Peak table for sample 3 : P-SA-1 mRNA Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	261	2,009.81	11,687.9	
3	346	26.45	115.8	
4	10,380	75.00	10.9	Upper Marker

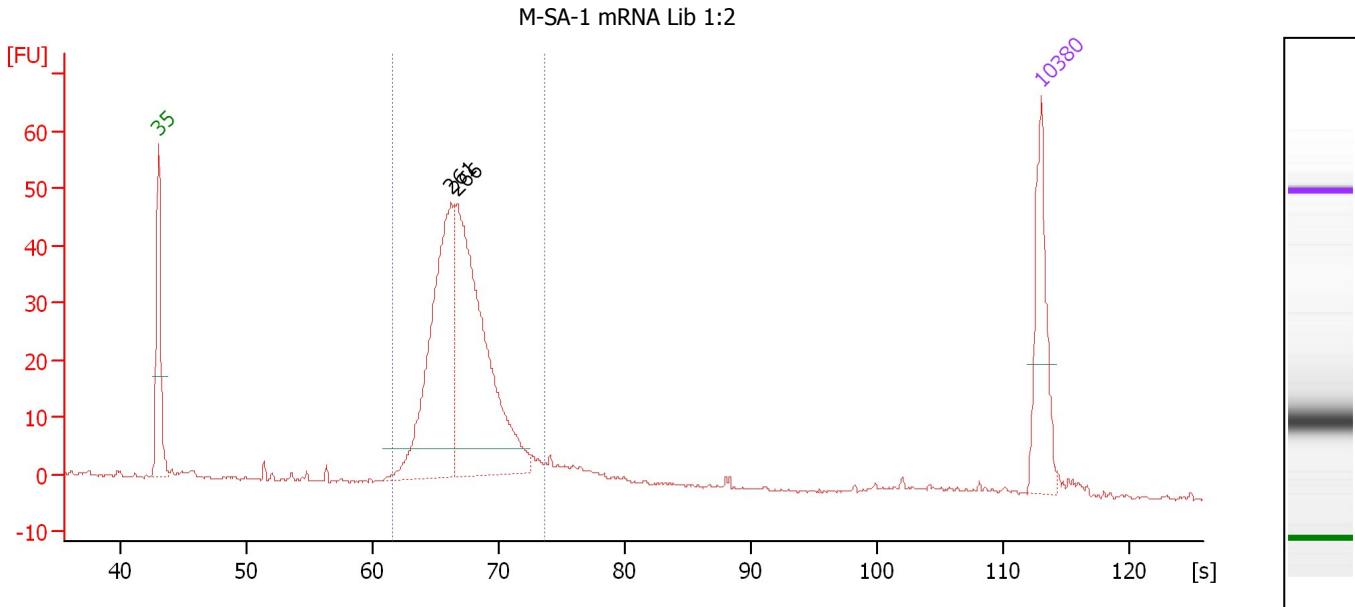
Region table for sample 3 : P-SA-1 mRNA Lib

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area % of Total	Size distribution in CV [%]	Color
61.23	74.29	271	11,148.2	1,974.83	793.4 88	10.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-11\2013-06-11_005.xad

Created: 6/11/2013 12:07:35 PM
 Modified: 6/11/2013 12:52:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : M-SA-1 mRNA Lib 1:2

Number of peaks found: 2 Corr. Area 1: 383.4
 Noise: 0.2

Peak table for sample 4 : M-SA-1 mRNA Lib 1:2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	261	309.83	1,798.5	
3	266	400.85	2,286.1	
4	10,380	75.00	10.9	Upper Marker

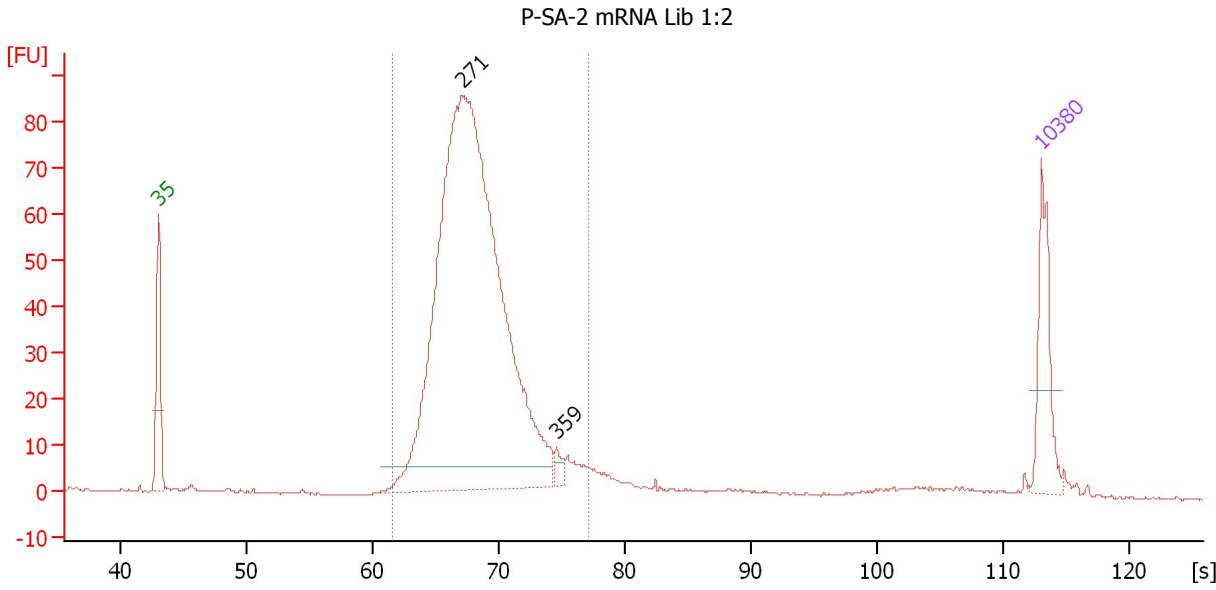
Region table for sample 4 : M-SA-1 mRNA Lib 1:2

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
61.56	73.55	271	4,245.9	755.37	383.4	83	9.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-11\2013-06-11_005.xad

Created: 6/11/2013 12:07:35 PM
 Modified: 6/11/2013 12:52:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : P-SA-2 mRNA Lib 1:2

Number of peaks found: 2 Corr. Area 1: 789.7
 Noise: 0.2

Peak table for sample 5 : P-SA-2 mRNA Lib 1:2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	271	1,433.04	8,012.1	
3	359	13.22	55.7	
4	10,380	75.00	10.9	Upper Marker

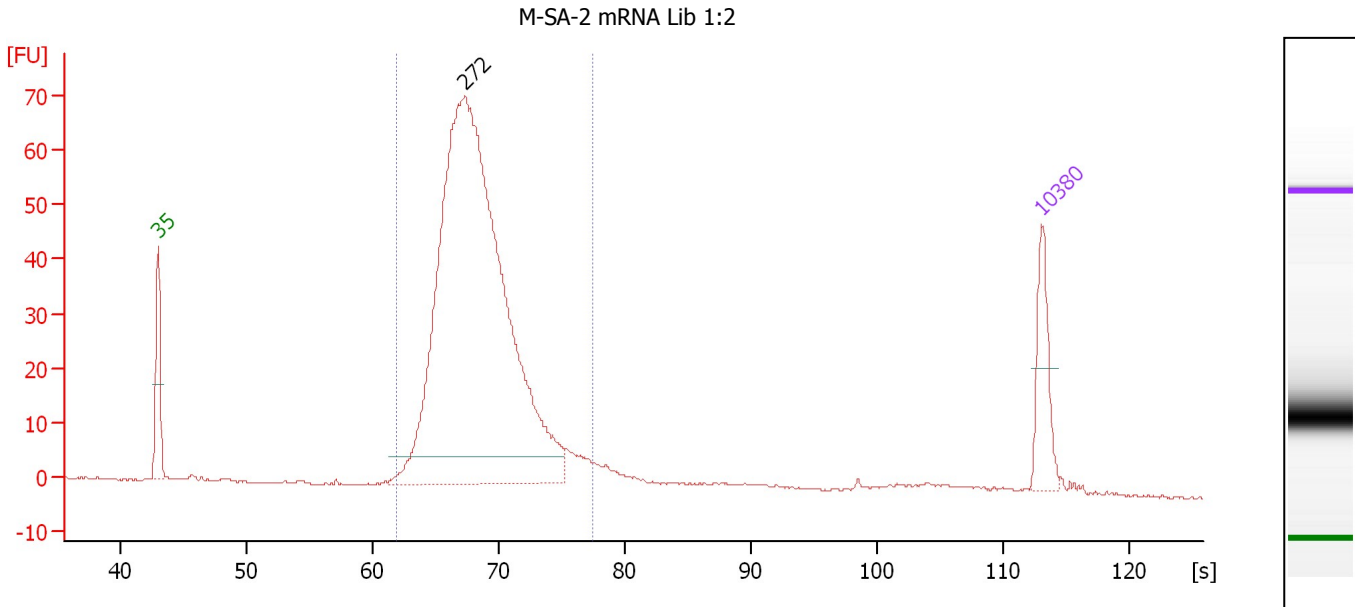
Region table for sample 5 : P-SA-2 mRNA Lib 1:2

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area % of Total	Size distribution in CV [%]	Color
61.62	77.13	284	8,011.9	1,481.21	789.7 91	11.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-11\2013-06-11_005.xad

Created: 6/11/2013 12:07:35 PM
 Modified: 6/11/2013 12:52:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : M-SA-2 mRNA Lib 1:2

Number of peaks found: 1 Corr. Area 1: 654.5
 Noise: 0.2

Peak table for sample 6 : M-SA-2 mRNA Lib 1:2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	272	1,719.45	9,572.6	
3	10,380	75.00	10.9	Upper Marker

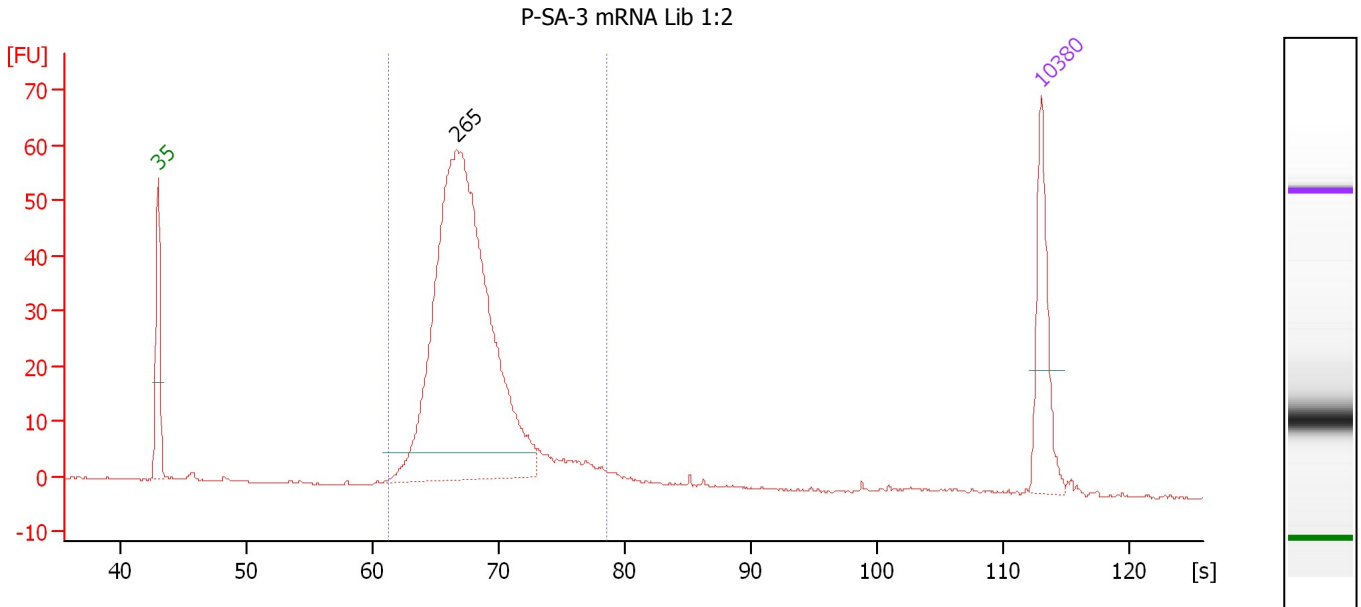
Region table for sample 6 : M-SA-2 mRNA Lib 1:2

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
61.91	77.40	286	9,260.4	1,724.45	654.5	92	11.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-11\2013-06-11_005.xad

Created: 6/11/2013 12:07:35 PM
 Modified: 6/11/2013 12:52:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : P-SA-3 mRNA Lib 1:2

Number of peaks found: 1 Corr. Area 1: 507.8
 Noise: 0.2

Peak table for sample 7 : P-SA-3 mRNA Lib 1:2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	265	885.58	5,054.7	
3	10,380	75.00	10.9	Upper Marker

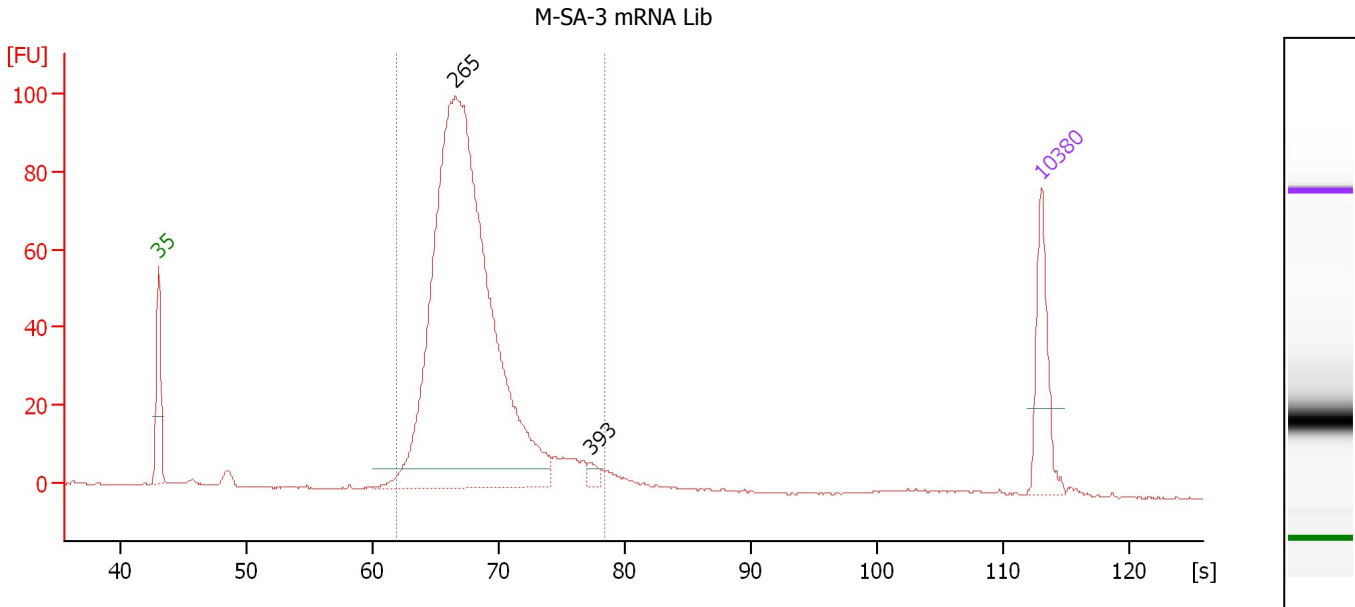
Region table for sample 7 : P-SA-3 mRNA Lib 1:2

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
61.27	78.56	281	5,258.8	960.43	507.8	93	12.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-11\2013-06-11_005.xad

Created: 6/11/2013 12:07:35 PM
 Modified: 6/11/2013 12:52:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : M-SA-3 mRNA Lib

Number of peaks found: 2 Corr. Area 1: 834.9
 Noise: 0.1

Peak table for sample 8 : M-SA-3 mRNA Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	265	1,359.98	7,777.3	
3	393	10.52	40.6	
4	10,380	75.00	10.9	Upper Marker

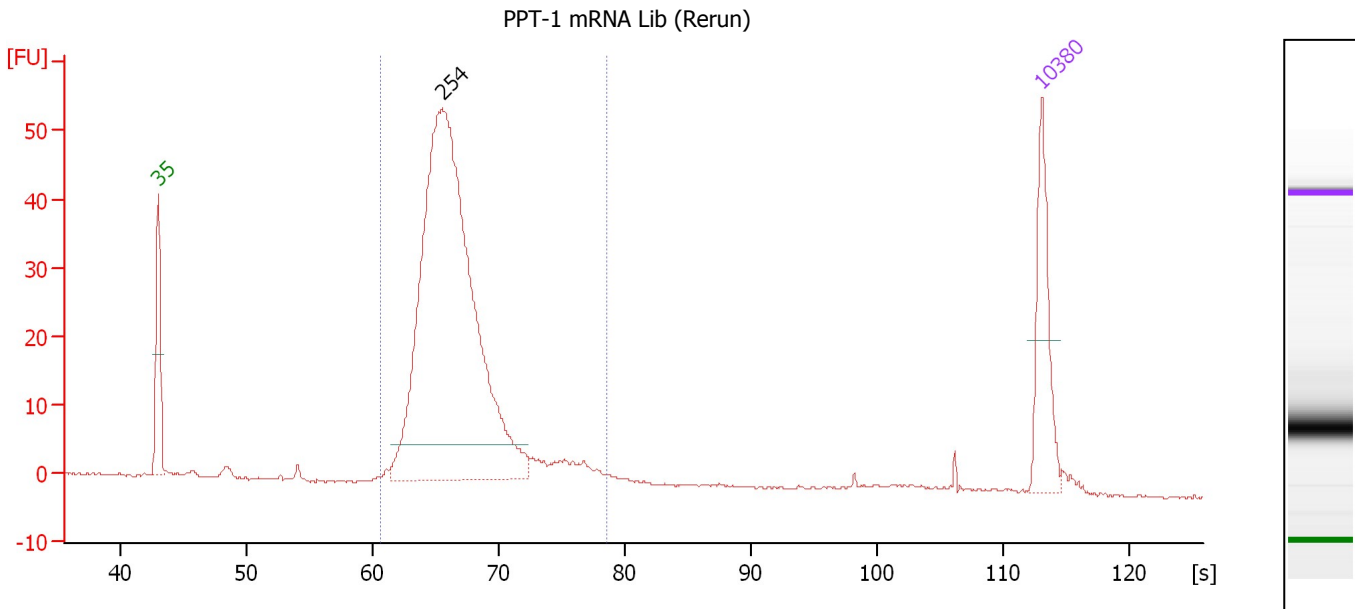
Region table for sample 8 : M-SA-3 mRNA Lib

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area % of Total	Size distribution in CV [%]	Color
61.92	78.42	280	7,677.1	1,397.86	834.9 94	12.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-11\2013-06-11_005.xad

Created: 6/11/2013 12:07:35 PM
 Modified: 6/11/2013 12:52:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : PPT-1 mRNA Lib (Rerun)

Number of peaks found: 1 Corr. Area 1: 421.9
 Noise: 0.2

Peak table for sample 9 : PPT-1 mRNA Lib (Rerun)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	254	904.39	5,400.2	
3	10,380	75.00	10.9	Upper Marker

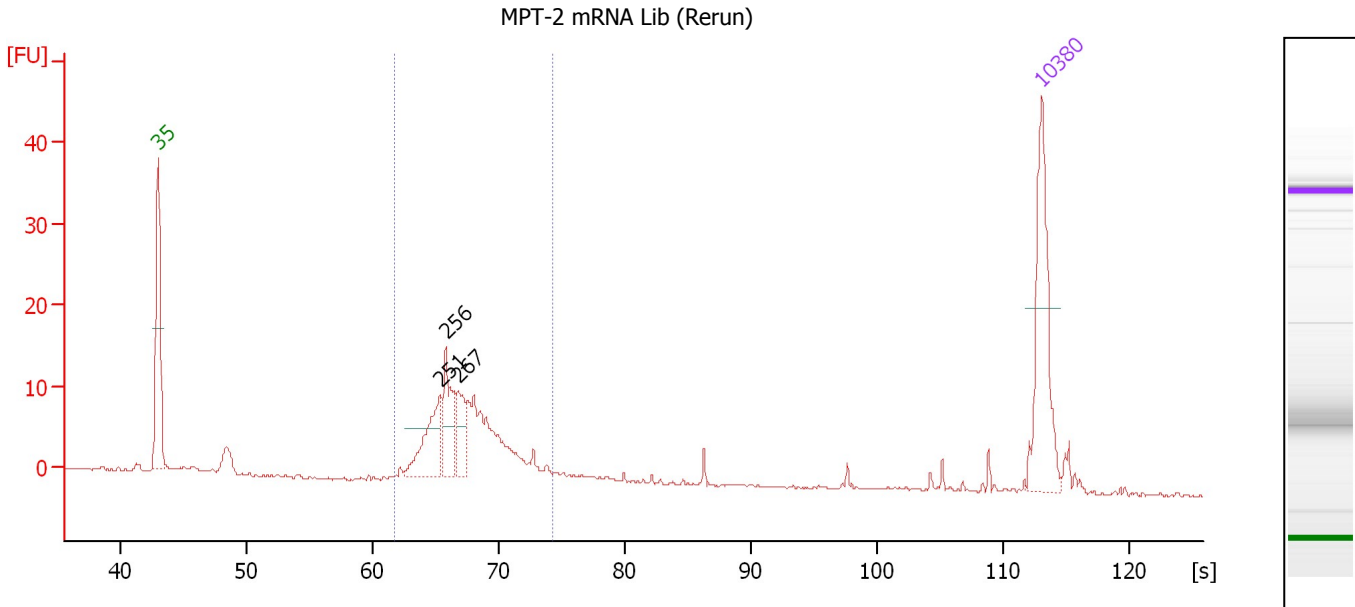
Region table for sample 9 : PPT-1 mRNA Lib (Rerun)

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
60.56	78.53	268	5,498.4	958.62	421.9	92	13.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-11\2013-06-11_005.xad

Created: 6/11/2013 12:07:35 PM
 Modified: 6/11/2013 12:52:25 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 10 : MPT-2 mRNA Lib (Rerun)

Height Threshold [FU] : 6

Overall Results for sample 10 : MPT-2 mRNA Lib (Rerun)

Number of peaks found: 3 Corr. Area 1: 96.7
 Noise: 0.1

Peak table for sample 10 : MPT-2 mRNA Lib (Rerun)

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	251	56.23	338.8	
3	256	47.12	278.4	
4	267	29.82	169.2	
5	10,380	75.00	10.9	Upper Marker

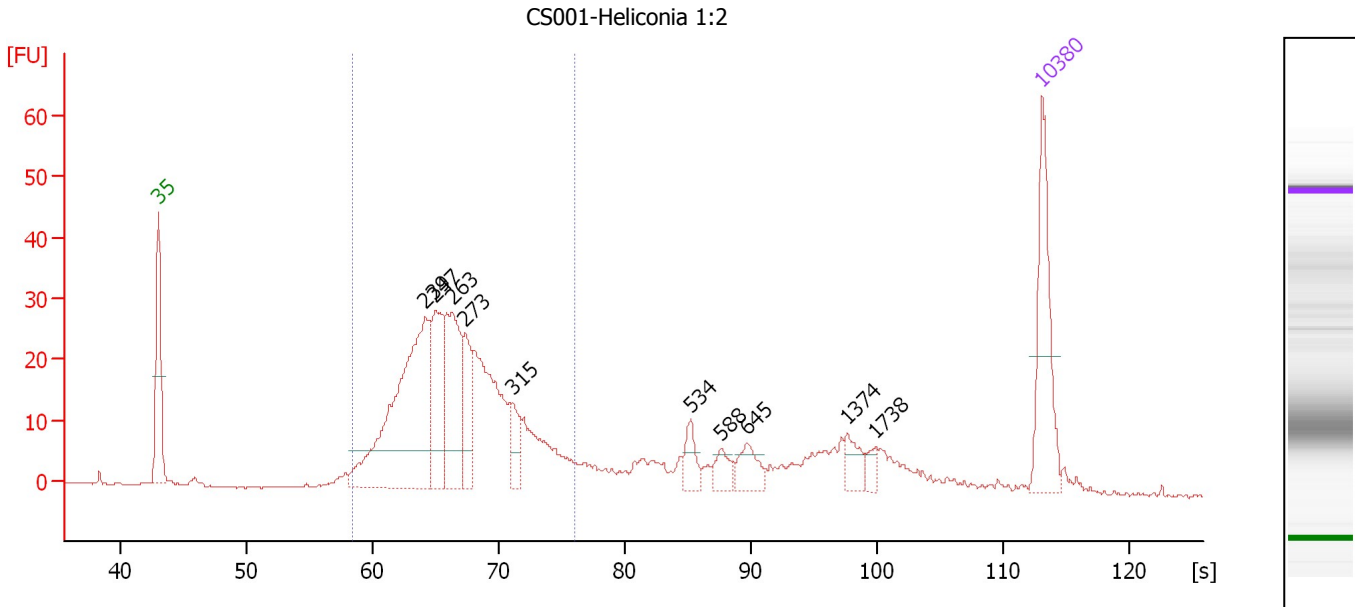
Region table for sample 10 : MPT-2 mRNA Lib (Rerun)

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area % of Total	Size distribution in CV [%]	Color	
61.71	74.23	275	1,406.8	253.17	96.7	80	10.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-11\2013-06-11_005.xad

Created: 6/11/2013 12:07:35 PM
 Modified: 6/11/2013 12:52:25 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 11 : CS001-Heliconia 1:2

Height Threshold [FU] : 6

Overall Results for sample 11 : CS001-Heliconia 1:2

Number of peaks found: 10 Corr. Area 1: 401.9
 Noise: 0.2

Peak table for sample 11 : CS001-Heliconia 1:2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	239	275.20	1,746.3	
3	247	100.98	618.7	
4	263	115.46	666.2	
5	273	51.55	286.3	
6	315	28.70	138.0	
7	534	20.49	58.1	
8	588	16.17	41.7	
9	645	23.66	55.6	
10	1,374	17.36	19.1	
11	1,738	8.69	7.6	
12	10,380	75.00	10.9	Upper Marker

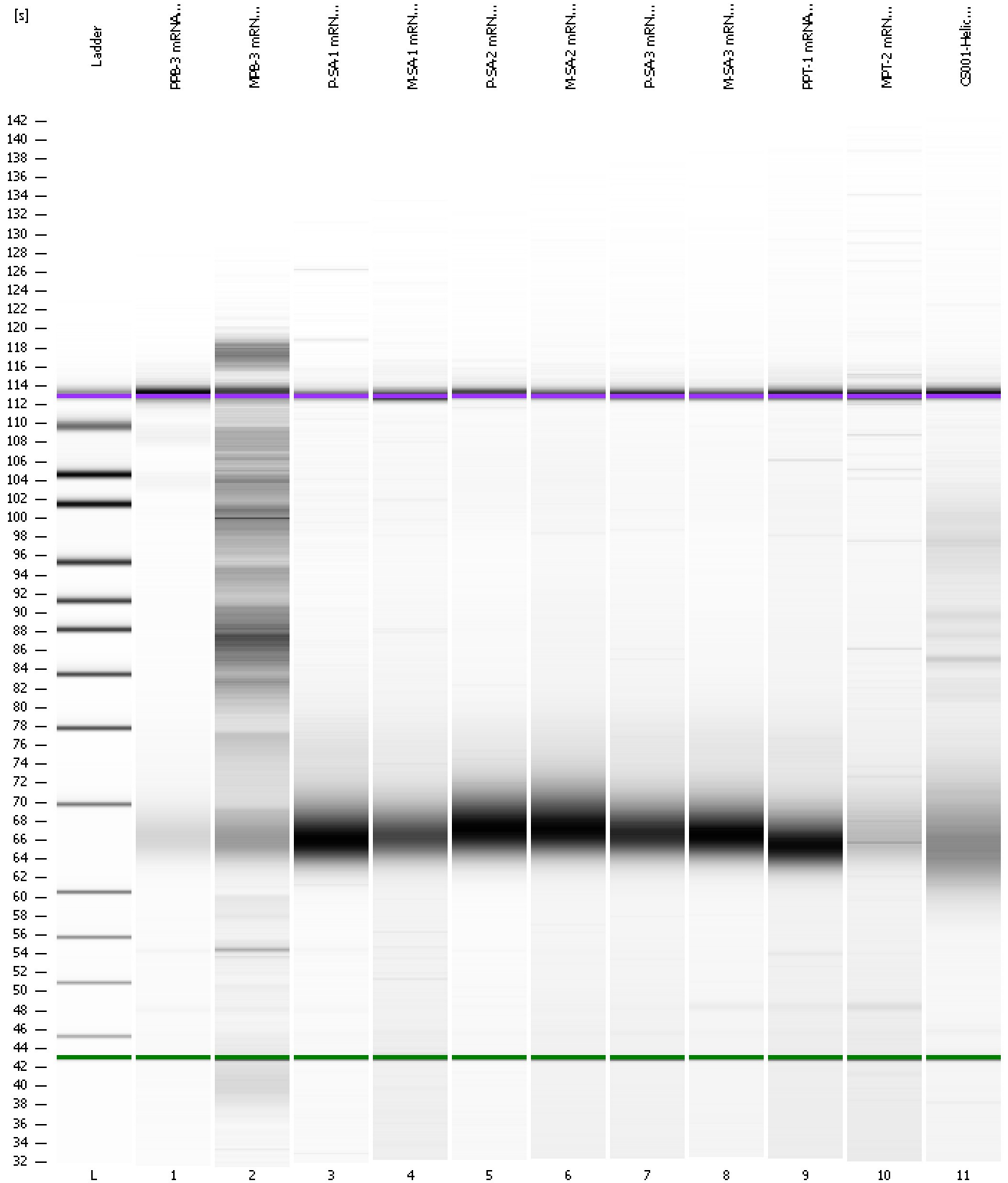
Region table for sample 11 : CS001-Heliconia 1:2

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area % of Total	Size distribution in CV [%]	Color
58.41	75.97	267	4,715.0	808.15	68	16.0	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-11\2013-06-11_005.xad

Created: 6/11/2013 12:07:35 PM
Modified: 6/11/2013 12:52:25 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-11\2013-06-11_005.xad

Created: 6/11/2013 12:07:35 PM
 Modified: 6/11/2013 12:52:25 PM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 12)		Instrument	Run		6/11/2013 12:48:48 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-06-11\2013-06-11_005.xad)		Instrument	Run		6/11/2013 12:07:35 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		6/11/2013 12:07:35 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		6/11/2013 12:07:35 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		6/11/2013 12:07:35 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		6/11/2013 12:07:35 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		6/11/2013 12:07:35 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		6/11/2013 12:07:35 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1