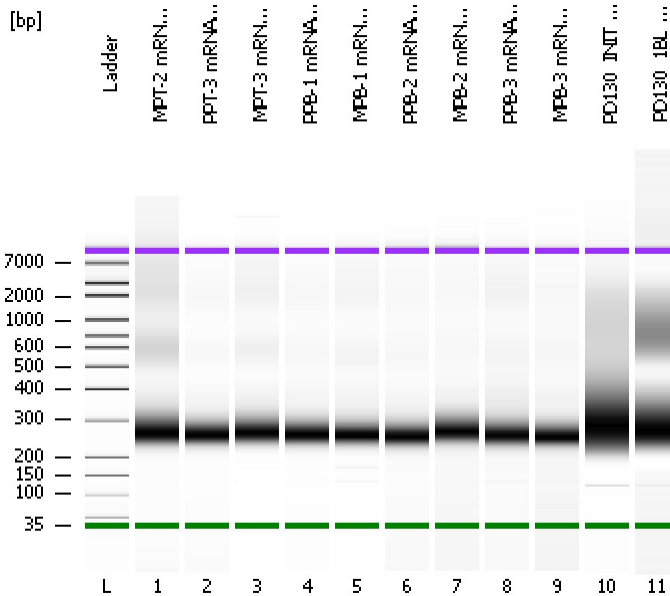


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-19\2013-07-19_003.xad

Created: 7/19/2013 2:01:17 PM
Modified: 7/19/2013 2:44:41 PM

Electrophoresis File Run Summary



Instrument Information:

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

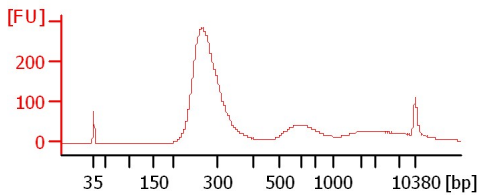
Assay Information:

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

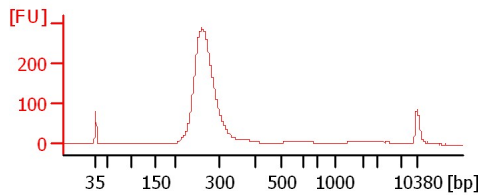
Chip Information:

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

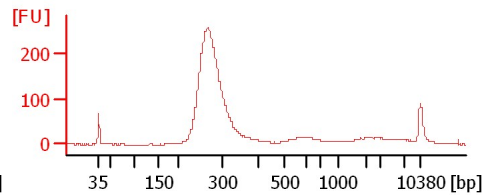
MPT-2 mRNA Lib



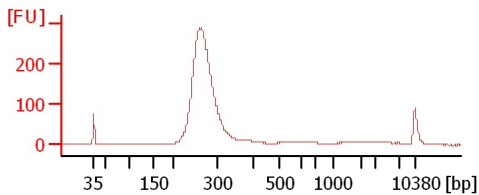
PPT-3 mRNA Lib



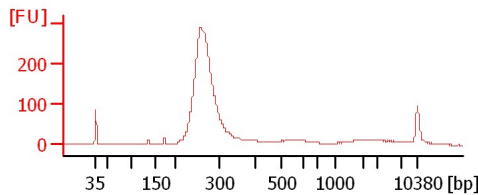
MPT-3 mRNA Lib



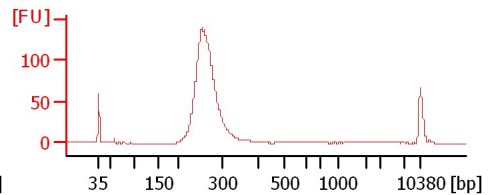
PPB-1 mRNA Lib



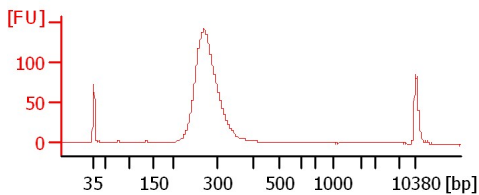
MPB-1 mRNA Lib



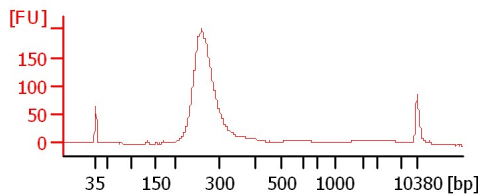
PPB-2 mRNA Lib



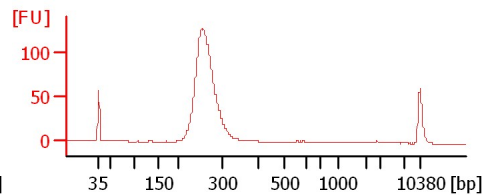
MPB-2 mRNA Lib



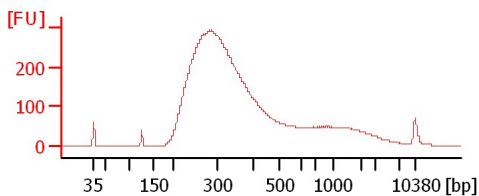
PPB-3 mRNA Lib



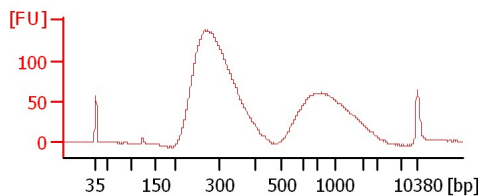
MPB-3 mRNA Lib



PD130_INIT AL 1:2



PD130_1BL 1:3



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-19\2013-07-19_003.xad

Created: 7/19/2013 2:01:17 PM
 Modified: 7/19/2013 2:44:41 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
MPT-2 mRNA Lib		<input type="checkbox"/>	✓			
PPT-3 mRNA Lib		<input type="checkbox"/>	✓			
MPT-3 mRNA Lib		<input type="checkbox"/>	✓			
PPB-1 mRNA Lib		<input type="checkbox"/>	✓			
MPB-1 mRNA Lib		<input type="checkbox"/>	✓			
PPB-2 mRNA Lib		<input type="checkbox"/>	✓			
MPB-2 mRNA Lib		<input type="checkbox"/>	✓			
PPB-3 mRNA Lib		<input type="checkbox"/>	✓			
MPB-3 mRNA Lib		<input type="checkbox"/>	✓			
PD130_INIT AL 1:2		<input type="checkbox"/>	✓			
PD130_1BL 1:3		<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\2013-07-19\2013-07-19_003.xad

Created: 7/19/2013 2:01:17 PM
Modified: 7/19/2013 2:44:41 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

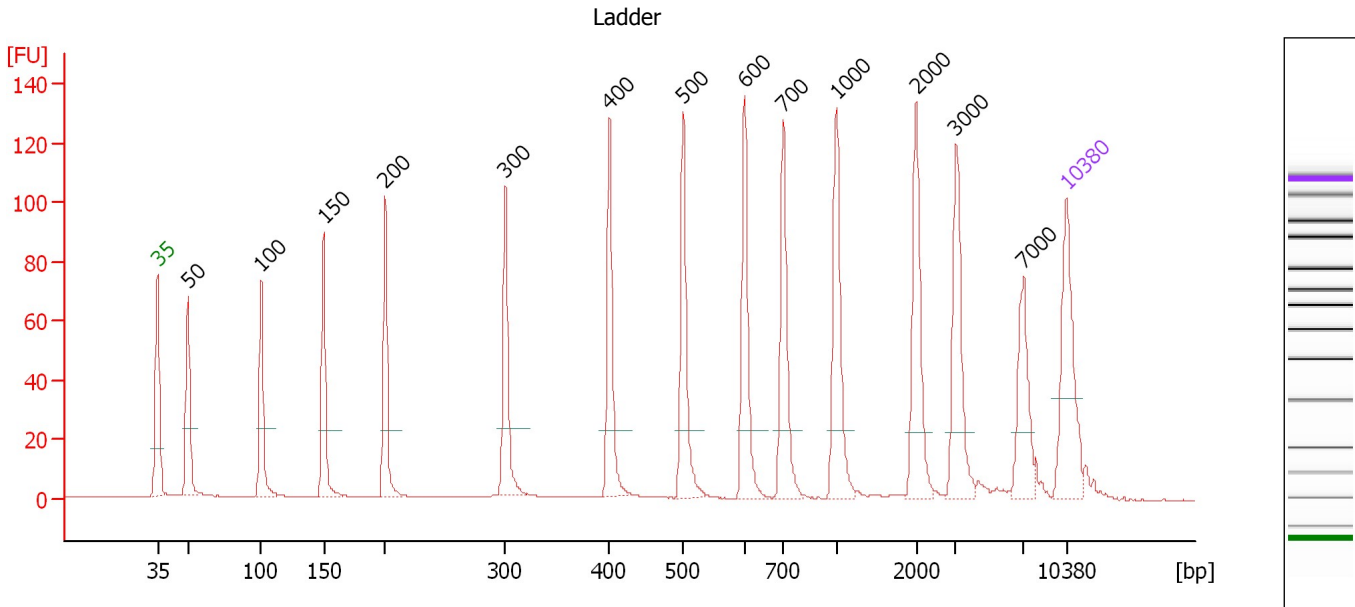
Ladder

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\2013-07-19\2013-07-19_003.xad

Created: 7/19/2013 2:01:17 PM
 Modified: 7/19/2013 2:44:41 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

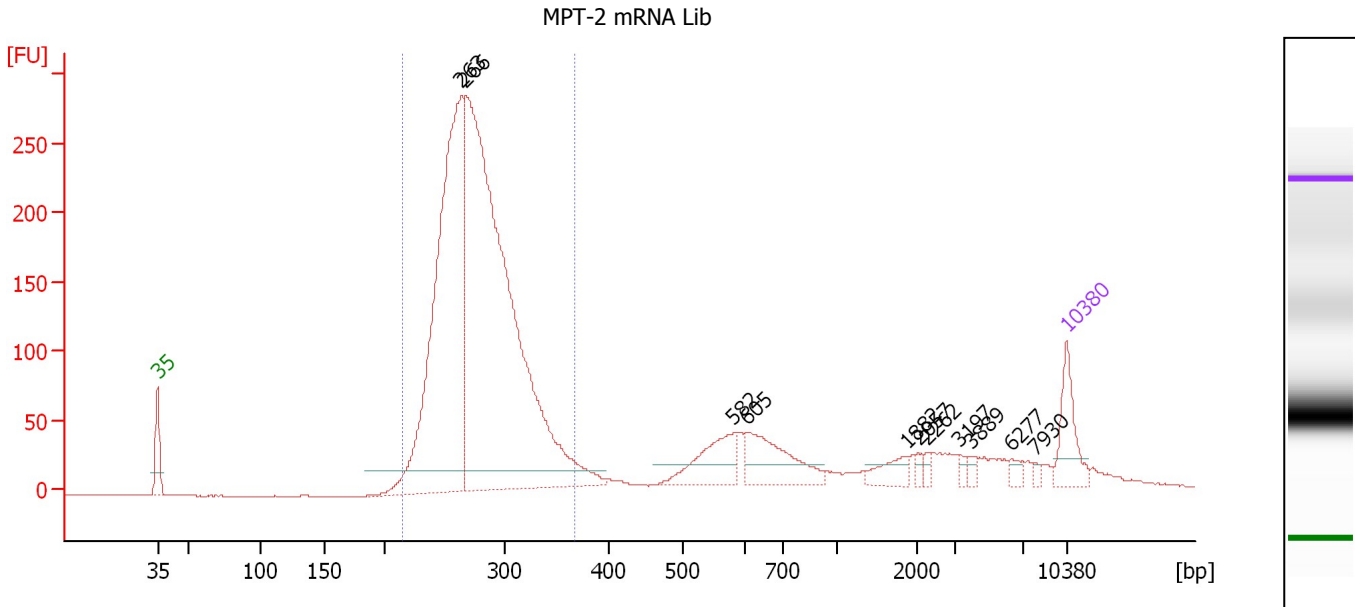
Peak table for Ladder

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\2013-07-19\2013-07-19_003.xad

Created: 7/19/2013 2:01:17 PM
 Modified: 7/19/2013 2:44:41 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 1 : MPT-2 mRNA Lib

Height Threshold [FU] : 15

Overall Results for sample 1 : MPT-2 mRNA Lib

Number of peaks found: 11 Corr. Area 1: 2,725.2
 Noise: 0.2

Peak table for sample 1 : MPT-2 mRNA Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	263	1,215.20	7,001.7	
3	266	1,912.20	10,876.1	
4	582	122.42	318.6	
5	605	147.08	368.4	
6	1,882	39.43	31.7	
7	2,057	10.16	7.5	
8	2,262	10.43	7.0	
9	3,197	8.57	4.1	
10	3,889	10.27	4.0	
11	6,277	14.59	3.5	
12	7,930	6.66	1.3	
13	10,380	75.00	10.9	Upper Marker

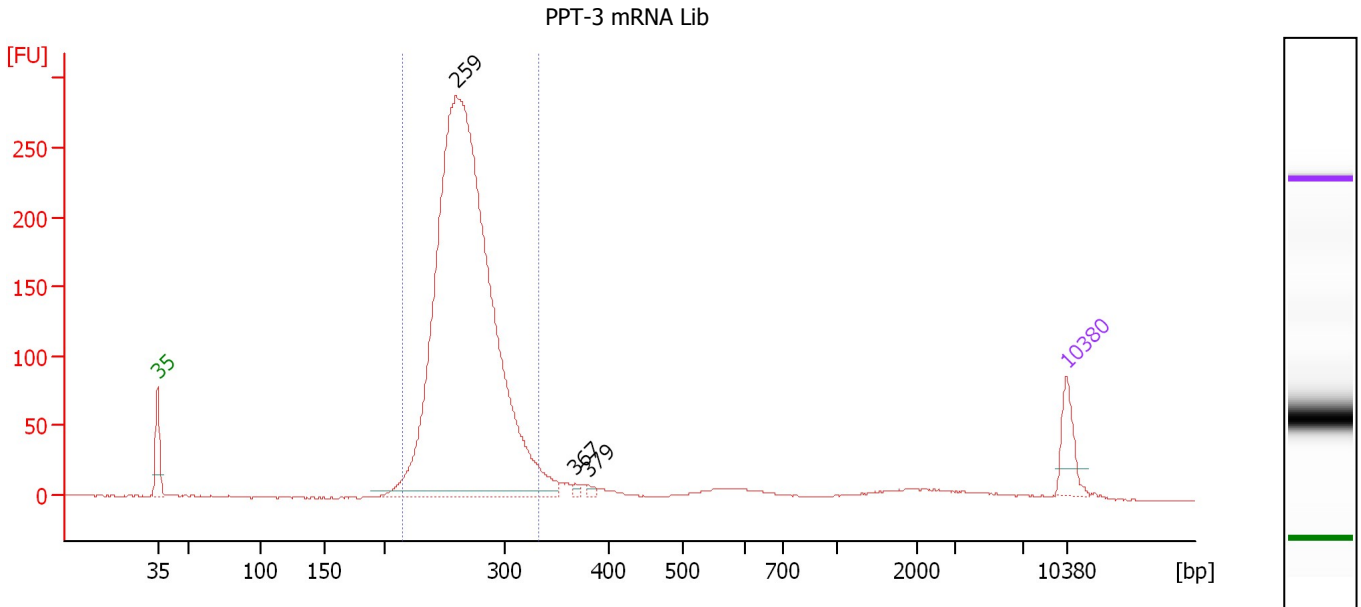
Region table for sample 1 : MPT-2 mRNA Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
214	366	278	16,219.0	2,943.84	2,725.2	77	10.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-19\2013-07-19_003.xad

Created: 7/19/2013 2:01:17 PM
 Modified: 7/19/2013 2:44:41 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : PPT-3 mRNA Lib

Number of peaks found: 3 Corr. Area 1: 2,202.9
 Noise: 0.4

Peak table for sample 2 : PPT-3 mRNA Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	259	3,450.37	20,194.6	
3	367	9.39	38.7	
4	379	10.28	41.1	
5	10,380	75.00	10.9	Upper Marker

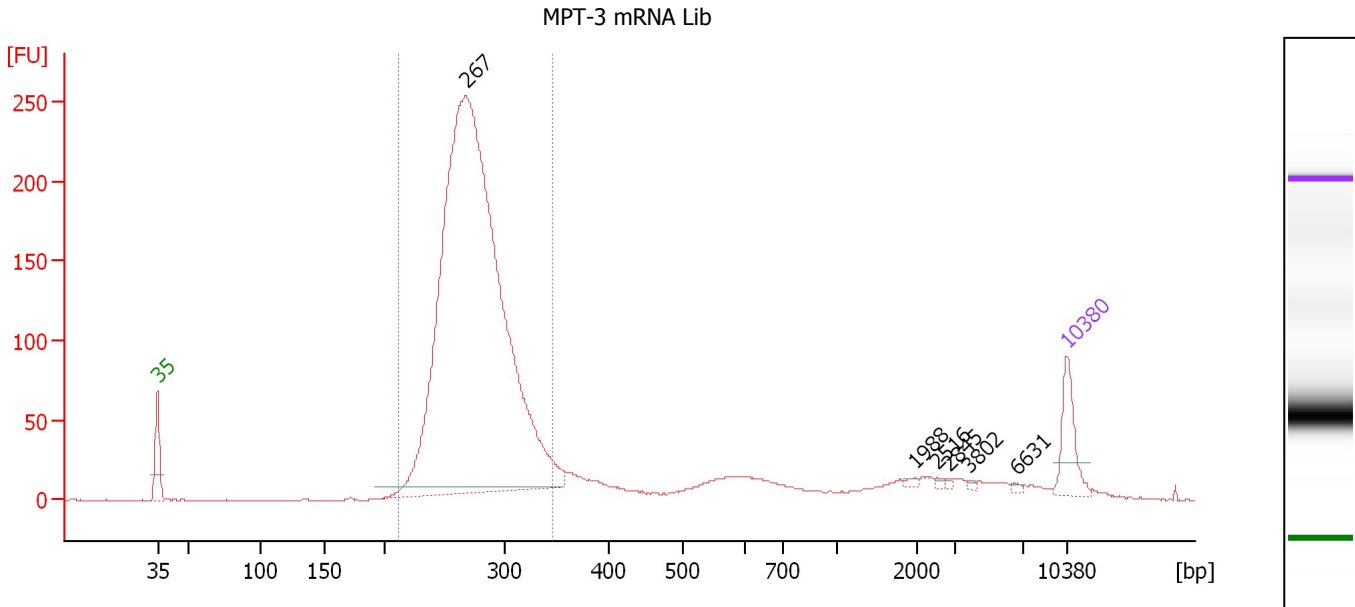
Region table for sample 2 : PPT-3 mRNA Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
214	333	267	18,796.6	3,303.86	2,202.9	90	8.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-19\2013-07-19_003.xad

Created: 7/19/2013 2:01:17 PM
 Modified: 7/19/2013 2:44:41 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : MPT-3 mRNA Lib

Number of peaks found: 6 Corr. Area 1: 2,111.0
 Noise: 0.2

Peak table for sample 3 : MPT-3 mRNA Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	267	2,957.94	16,787.3	
3	1,988	5.04	3.8	
4	2,516	4.08	2.5	
5	2,845	3.56	1.9	
6	3,802	3.58	1.4	
7	6,631	3.90	0.9	
8	10,380	75.00	10.9	Upper Marker

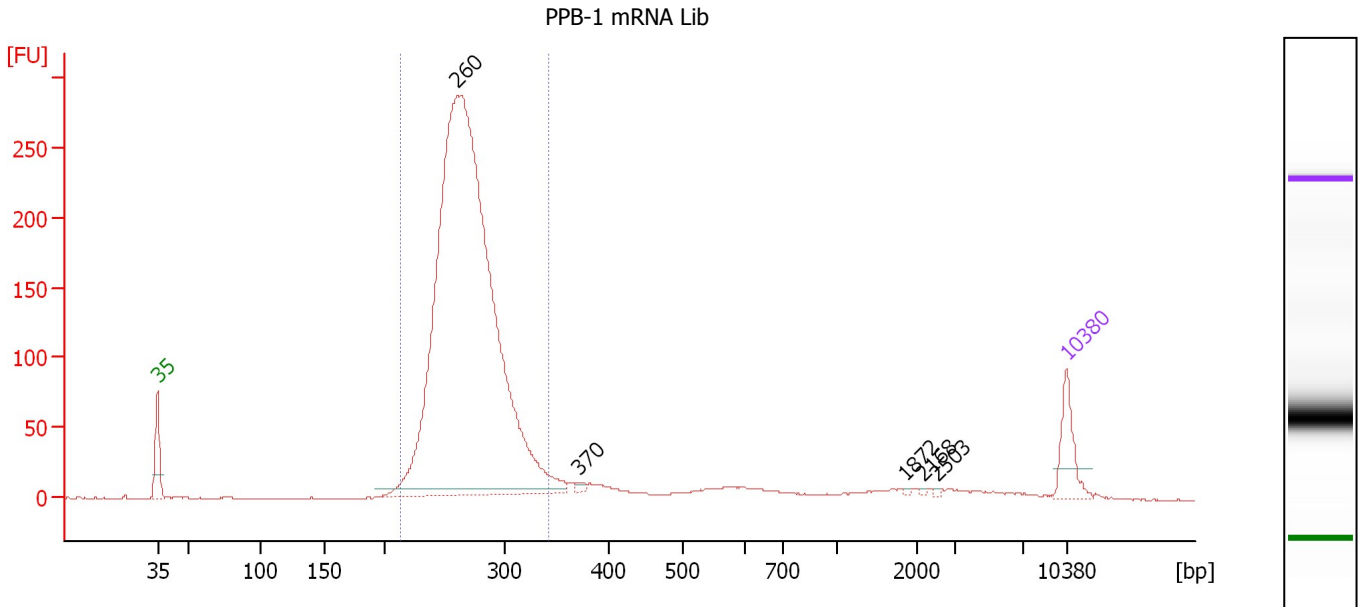
Region table for sample 3 : MPT-3 mRNA Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
212	345	274	16,542.0	2,977.43	2,111.0	83	9.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-19\2013-07-19_003.xad

Created: 7/19/2013 2:01:17 PM
 Modified: 7/19/2013 2:44:41 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : PPB-1 mRNA Lib

Number of peaks found: 5 Corr. Area 1: 2,225.4
 Noise: 0.2

Peak table for sample 4 : PPB-1 mRNA Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	260	3,218.09	18,769.9	
3	370	10.34	42.3	
4	1,872	2.77	2.2	
5	2,168	3.01	2.1	
6	2,503	2.69	1.6	
7	10,380	75.00	10.9	Upper Marker

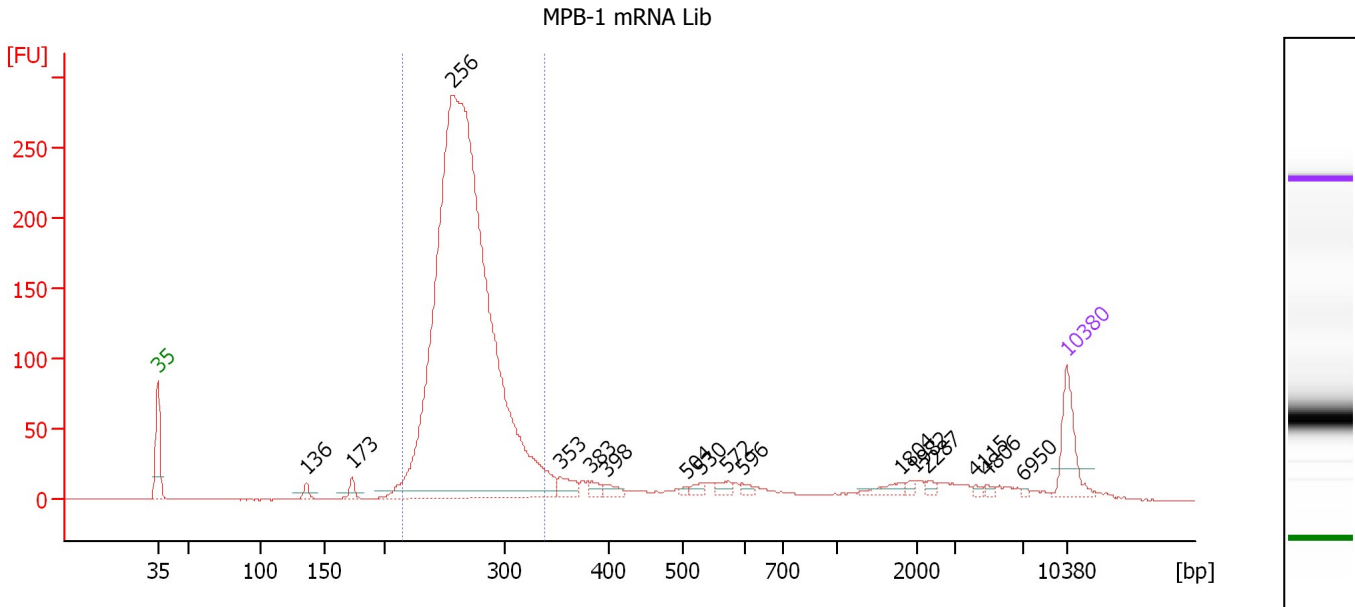
Region table for sample 4 : PPB-1 mRNA Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
213	342	269	18,054.0	3,188.11	2,225.4	87	8.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-19\2013-07-19_003.xad

Created: 7/19/2013 2:01:17 PM
 Modified: 7/19/2013 2:44:41 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : MPB-1 mRNA Lib

Number of peaks found: 16 Corr. Area 1: 2,106.8
 Noise: 0.1

Peak table for sample 5 : MPB-1 mRNA Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	136	18.01	200.3	
3	173	20.52	179.9	
4	256	2,924.11	17,297.3	
5	353	33.89	145.5	
6	383	16.47	65.2	
7	398	17.22	65.6	
8	504	5.86	17.6	
9	530	12.42	35.5	
10	572	15.64	41.4	
11	596	9.48	24.1	
12	1,804	17.81	15.0	
13	1,982	6.81	5.2	
14	2,287	7.76	5.1	
15	4,115	4.72	1.7	
16	4,806	5.29	1.7	
17	6,950	2.72	0.6	
18	10,380	75.00	10.9	Upper Marker

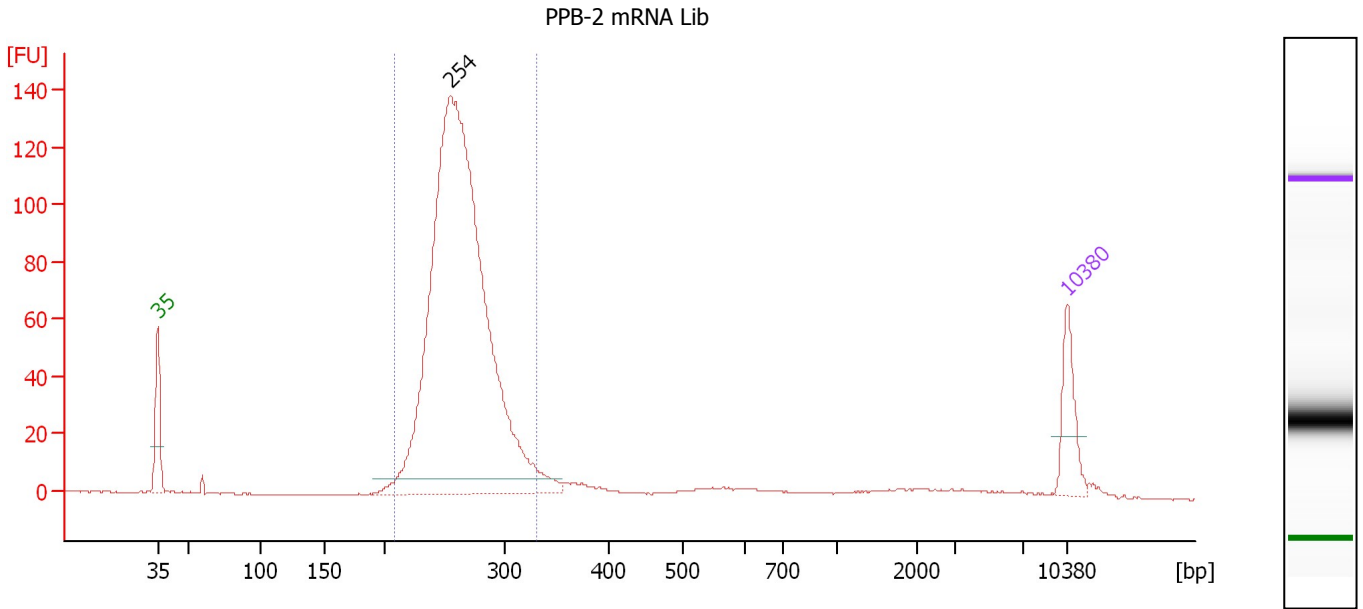
Region table for sample 5 : MPB-1 mRNA Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
214	338	267	16,075.9	2,821.30	2,106.8	83	8.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-19\2013-07-19_003.xad

Created: 7/19/2013 2:01:17 PM
 Modified: 7/19/2013 2:44:41 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : PPB-2 mRNA Lib

Number of peaks found: 1 Corr. Area 1: 1,019.6
 Noise: 0.3

Peak table for sample 6 : PPB-2 mRNA Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	254	2,058.32	12,277.6	
3	10,380	75.00	10.9	Upper Marker

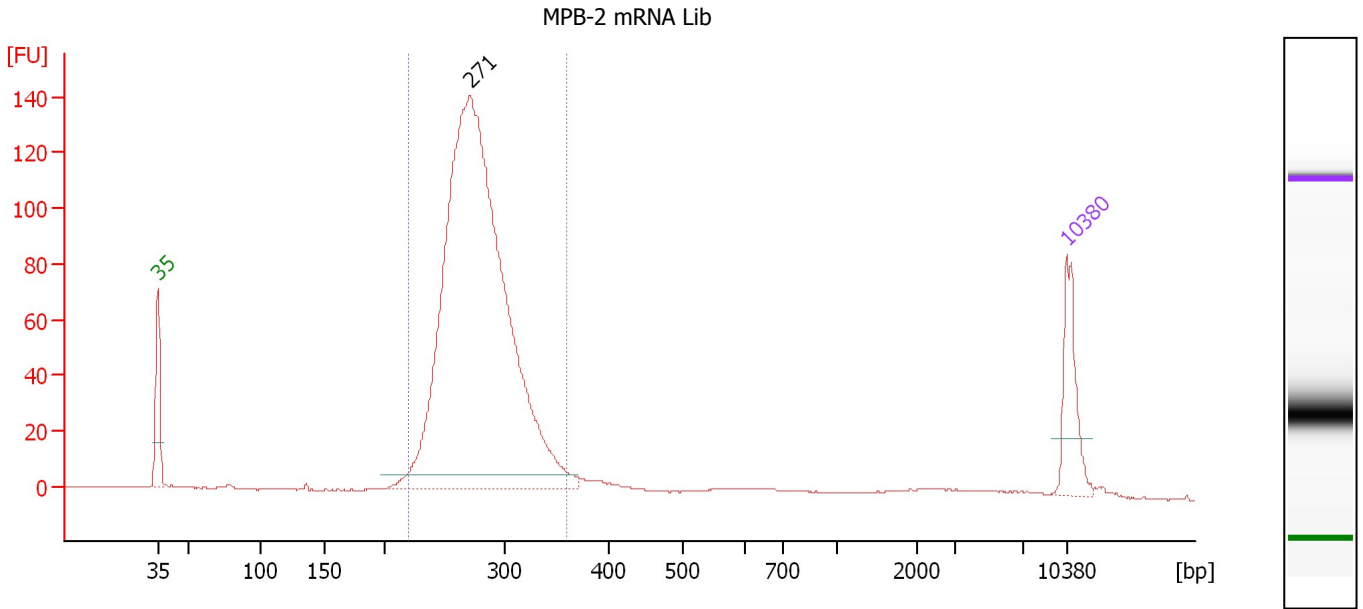
Region table for sample 6 : PPB-2 mRNA Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
207	330	263	11,420.6	1,974.36	1,019.6	90	8.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-19\2013-07-19_003.xad

Created: 7/19/2013 2:01:17 PM
 Modified: 7/19/2013 2:44:41 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : MPB-2 mRNA Lib

Number of peaks found: 1 Corr. Area 1: 1,159.3
 Noise: 0.2

Peak table for sample 7 : MPB-2 mRNA Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	271	1,717.23	9,618.2	
3	10,380	75.00	10.9	Upper Marker

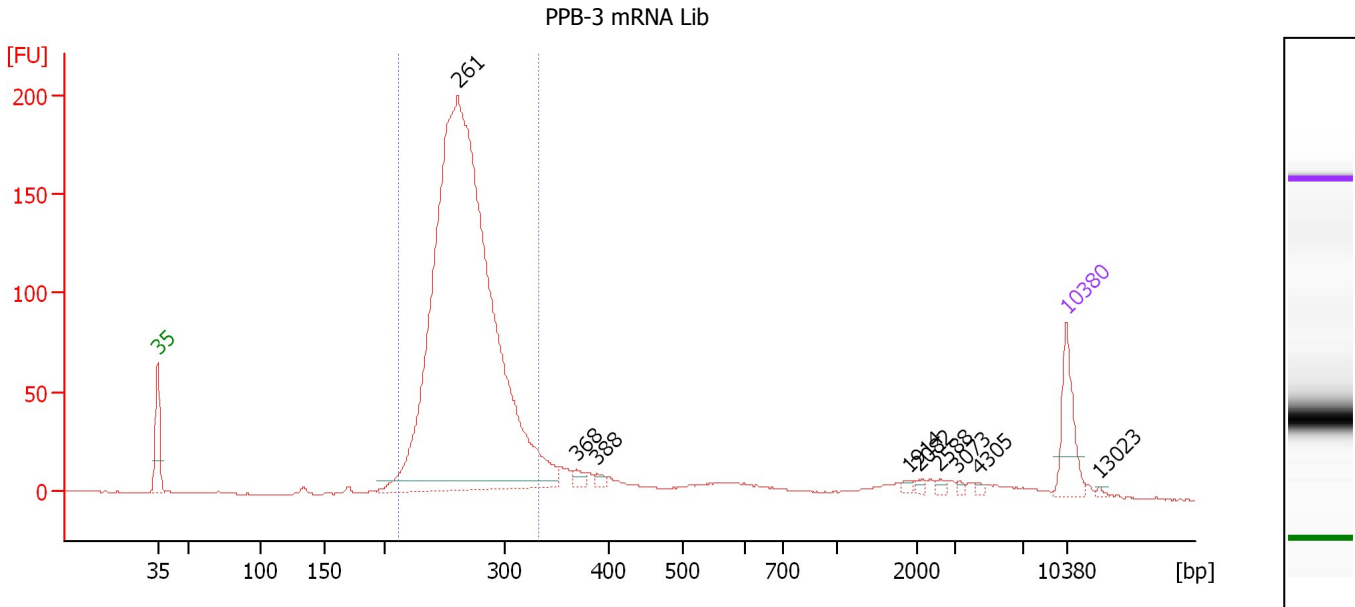
Region table for sample 7 : MPB-2 mRNA Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
219	358	278	9,290.6	1,690.94	1,159.3	92	9.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-19\2013-07-19_003.xad

Created: 7/19/2013 2:01:17 PM
 Modified: 7/19/2013 2:44:41 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : PPB-3 mRNA Lib

Number of peaks found: 9 Corr. Area 1: 1,550.3
 Noise: 0.2

Peak table for sample 8 : PPB-3 mRNA Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	261	2,489.74	14,469.6	
3	368	14.91	61.4	
4	388	9.18	35.8	
5	1,914	5.59	4.4	
6	2,082	5.38	3.9	
7	2,588	6.42	3.8	
8	3,073	4.04	2.0	
9	4,305	4.40	1.6	
10	10,380	75.00	10.9	Upper Marker
11	13,023	0.00	0.0	

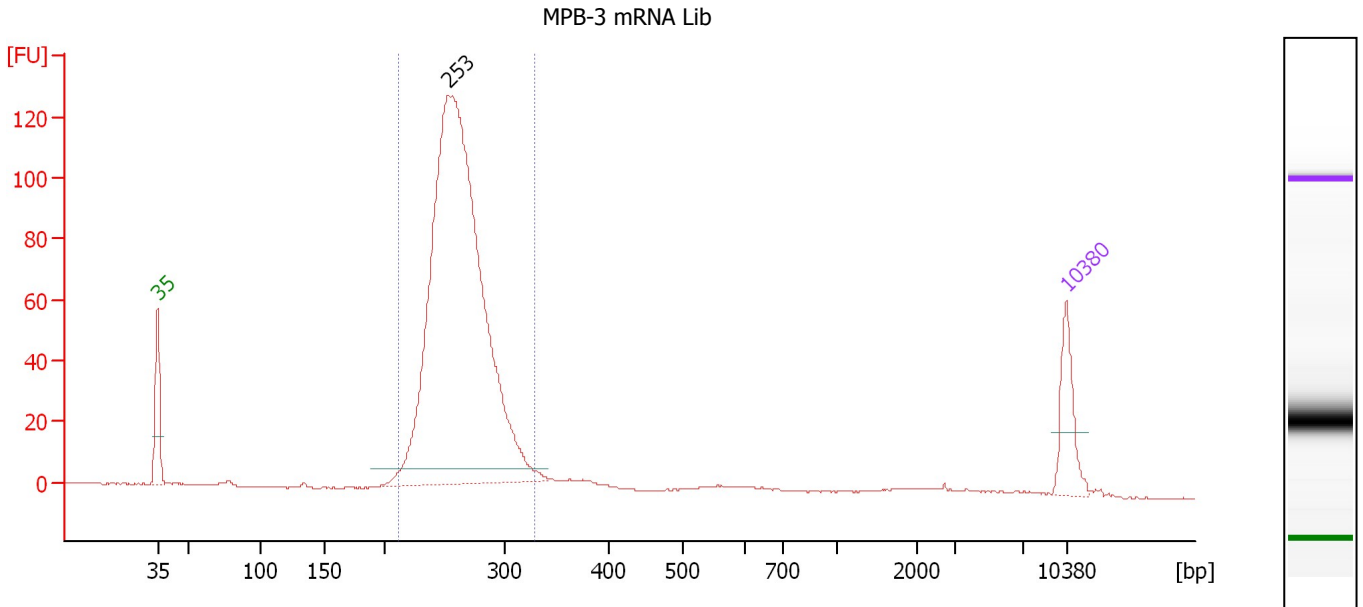
Region table for sample 8 : PPB-3 mRNA Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
211	332	267	13,974.2	2,448.32	1,550.3	83	8.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-19\2013-07-19_003.xad

Created: 7/19/2013 2:01:17 PM
 Modified: 7/19/2013 2:44:41 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : MPB-3 mRNA Lib

Number of peaks found: 1 Corr. Area 1: 910.8
 Noise: 0.2

Peak table for sample 9 : MPB-3 mRNA Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	253	1,842.34	11,037.5	
3	10,380	75.00	10.9	Upper Marker

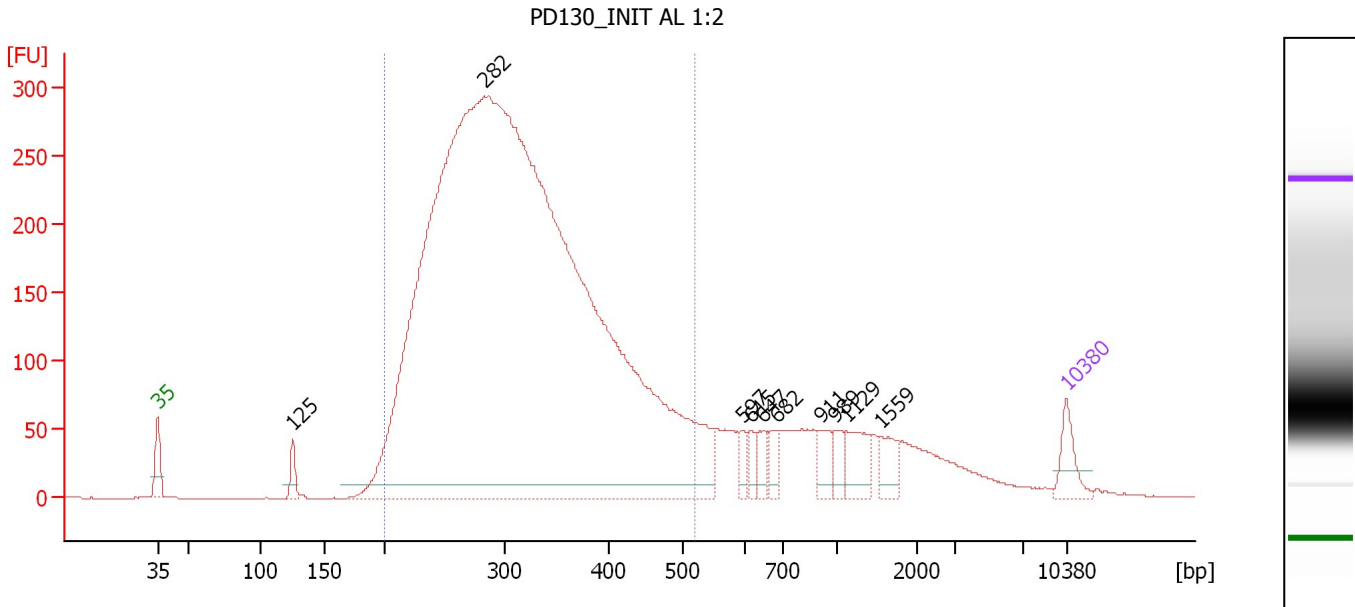
Region table for sample 9 : MPB-3 mRNA Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
211	328	262	10,677.3	1,840.44	910.8	92	8.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-19\2013-07-19_003.xad

Created: 7/19/2013 2:01:17 PM
 Modified: 7/19/2013 2:44:41 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 10 : PD130_INIT AL 1:2

Height Threshold [FU] : 10

Overall Results for sample 10 : PD130_INIT AL 1:2

Number of peaks found: 10 Corr. Area 1: 5,829.9
 Noise: 0.2

Peak table for sample 10 : PD130_INIT AL 1:2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	125	69.07	835.0	
3	282	9,786.82	52,500.1	
4	597	45.22	114.8	
5	615	44.92	110.6	
6	647	59.09	138.4	
7	682	59.77	132.7	
8	911	72.18	120.0	
9	989	47.72	73.1	
10	1,129	115.14	154.5	
11	1,559	71.31	69.3	
12	10,380	75.00	10.9	Upper Marker

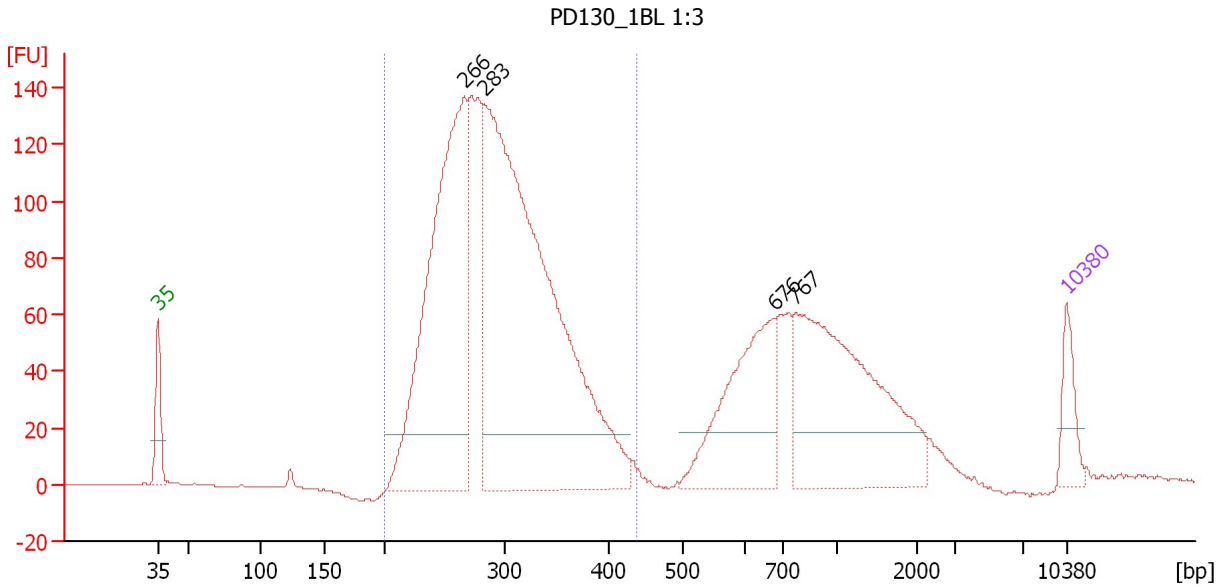
Region table for sample 10 : PD130_INIT AL 1:2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	518	317	45,372.8	8,942.09	5,829.9	83	22.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-19\2013-07-19_003.xad

Created: 7/19/2013 2:01:17 PM
 Modified: 7/19/2013 2:44:41 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 11 : PD130_1BL 1:3

Height Threshold [FU] : 20

Overall Results for sample 11 : PD130_1BL 1:3

Number of peaks found: 4 Corr. Area 1: 1,937.3
 Noise: 0.2

Peak table for sample 11 : PD130_1BL 1:3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	266	1,423.89	8,101.0	
3	283	2,320.53	12,431.1	
4	676	467.69	1,048.2	
5	767	779.73	1,539.6	
6	10,380	75.00	10.9	Upper Marker

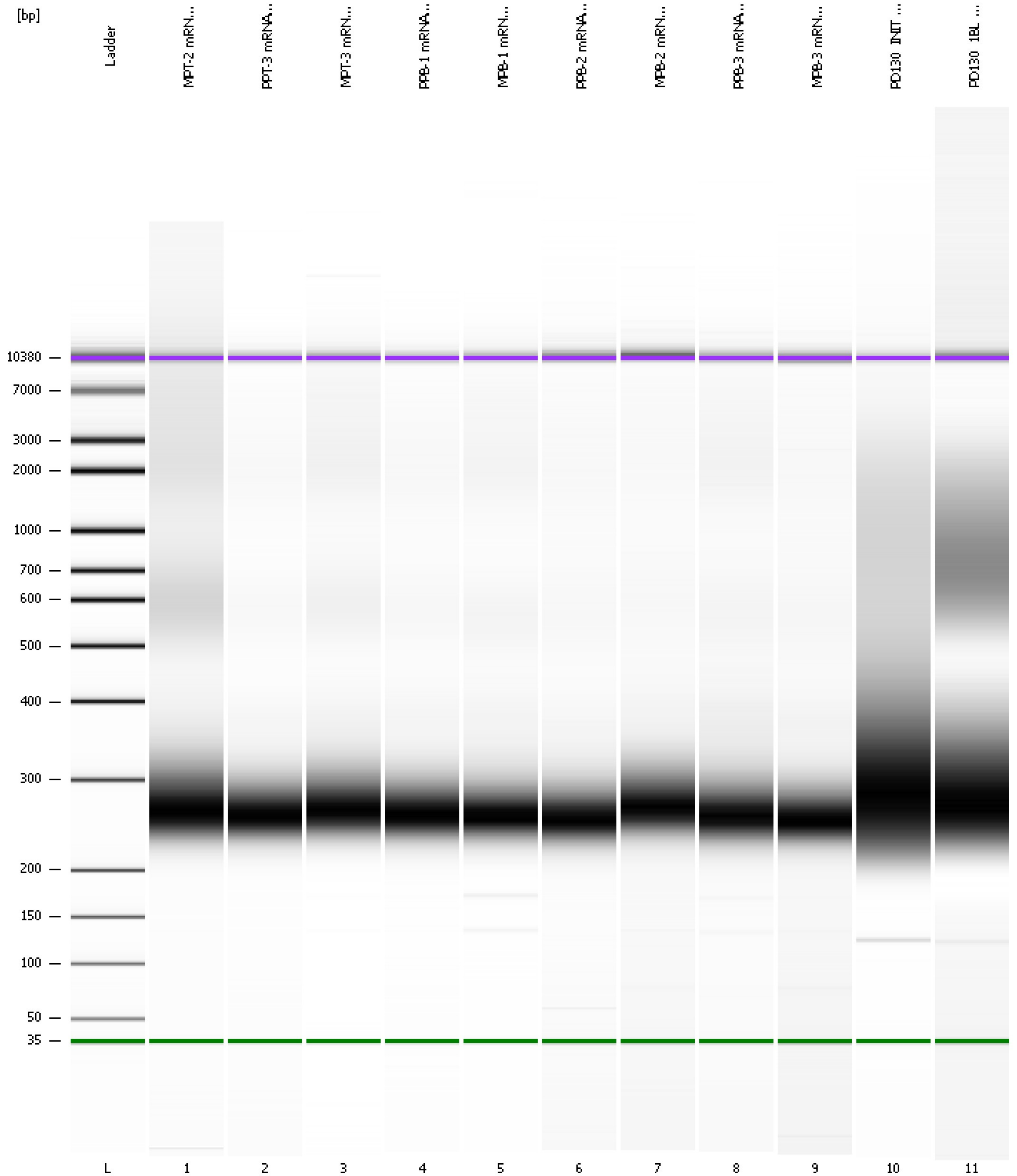
Region table for sample 11 : PD130_1BL 1:3

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	438	295	20,742.6	3,929.84	1,937.3	70	15.3	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-19\2013-07-19_003.xad

Created: 7/19/2013 2:01:17 PM
Modified: 7/19/2013 2:44:41 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-19\2013-07-19_003.xad

Created: 7/19/2013 2:01:17 PM
 Modified: 7/19/2013 2:44:41 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		7/19/2013 2:41:45 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-07-19\2013-07-19_003.xad)		Instrument	Run		7/19/2013 2:01:22 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		7/19/2013 2:01:22 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		7/19/2013 2:01:22 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		7/19/2013 2:01:22 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		7/19/2013 2:01:22 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		7/19/2013 2:01:22 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		7/19/2013 2:01:22 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1