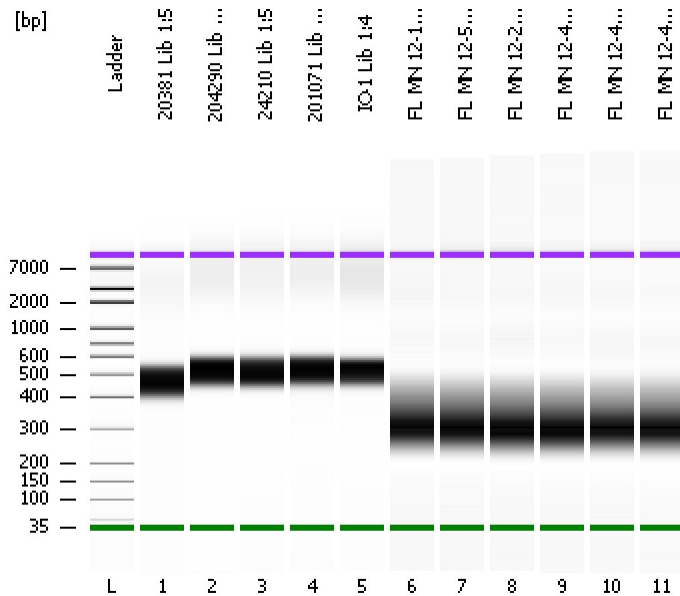


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-03-12\2013-03-12_002.xad

Created: 3/12/2013 4:44:34 PM
Modified: 3/14/2013 4:58:28 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

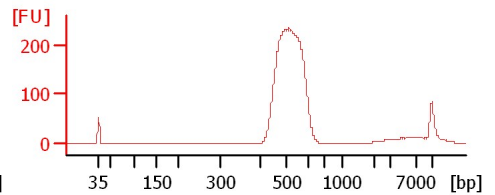
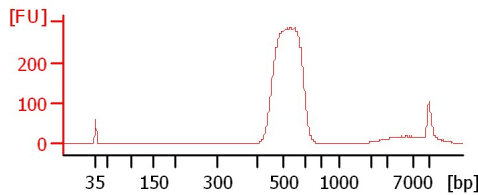
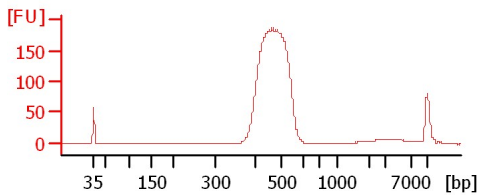
Chip Information:

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

20381 Lib 1:5

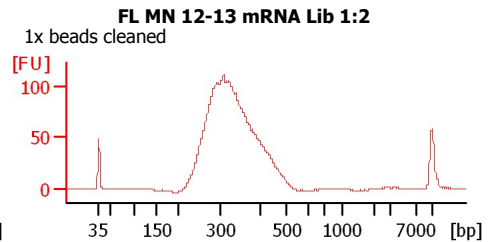
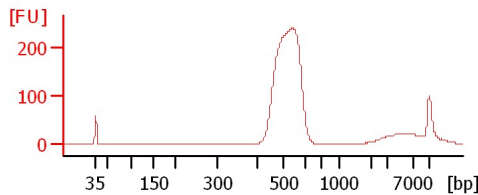
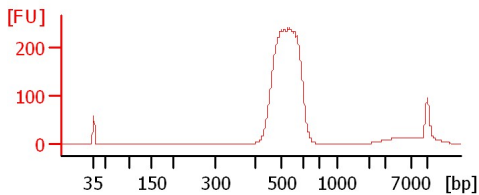
204290 Lib 1:3

24210 Lib 1:5



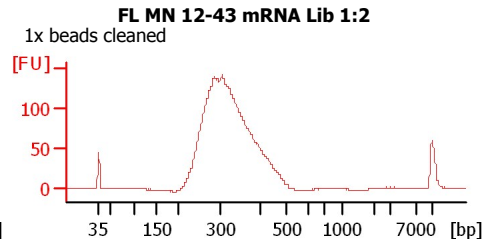
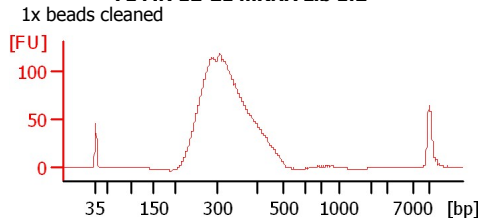
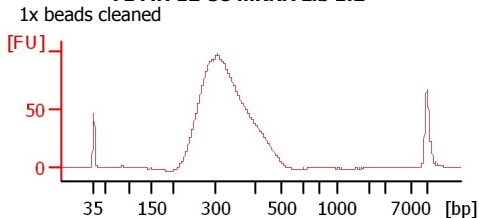
201071 Lib 1:4

IO-1 Lib 1:4



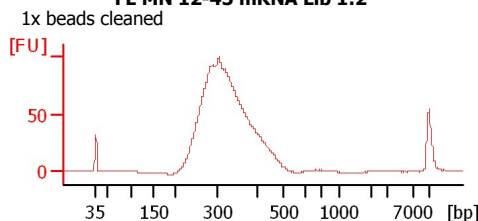
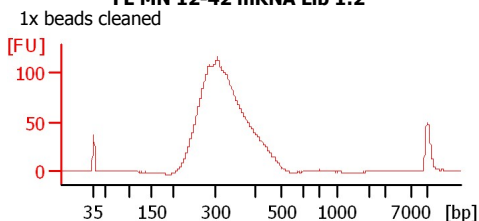
FL MN 12-58 mRNA Lib 1:2

FL MN 12-21 mRNA Lib 1:2



FL MN 12-42 mRNA Lib 1:2

FL MN 12-45 mRNA Lib 1:2



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-03-12\2013-03-12_002.xad

Created: 3/12/2013 4:44:34 PM
 Modified: 3/14/2013 4:58:28 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
20381 Lib 1:5		<input type="checkbox"/>	✓			
204290 Lib 1:3		<input type="checkbox"/>	✓			
24210 Lib 1:5		<input type="checkbox"/>	✓			
201071 Lib 1:4		<input type="checkbox"/>	✓			
IO-1 Lib 1:4		<input type="checkbox"/>	✓			
FL MN 12-13 mRNA Lib 1:2	1x beads cleaned	<input type="checkbox"/>	✓			
FL MN 12-58 mRNA Lib 1:2	1x beads cleaned	<input type="checkbox"/>	✓			
FL MN 12-21 mRNA Lib 1:2	1x beads cleaned	<input type="checkbox"/>	✓			
FL MN 12-43 mRNA Lib 1:2	1x beads cleaned	<input type="checkbox"/>	✓			
FL MN 12-42 mRNA Lib 1:2	1x beads cleaned	<input type="checkbox"/>	✓			
FL MN 12-45 mRNA Lib 1:2	1x beads cleaned	<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\2013-03-12\2013-03-12_002.xad

Created: 3/12/2013 4:44:34 PM
Modified: 3/14/2013 4:58:28 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/ μ l] : 1950
Uses Standard Area for Ladder Fragments
Lower Marker Concentration [pg/ μ l] : 125
Upper Marker Concentration [pg/ μ l] : 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

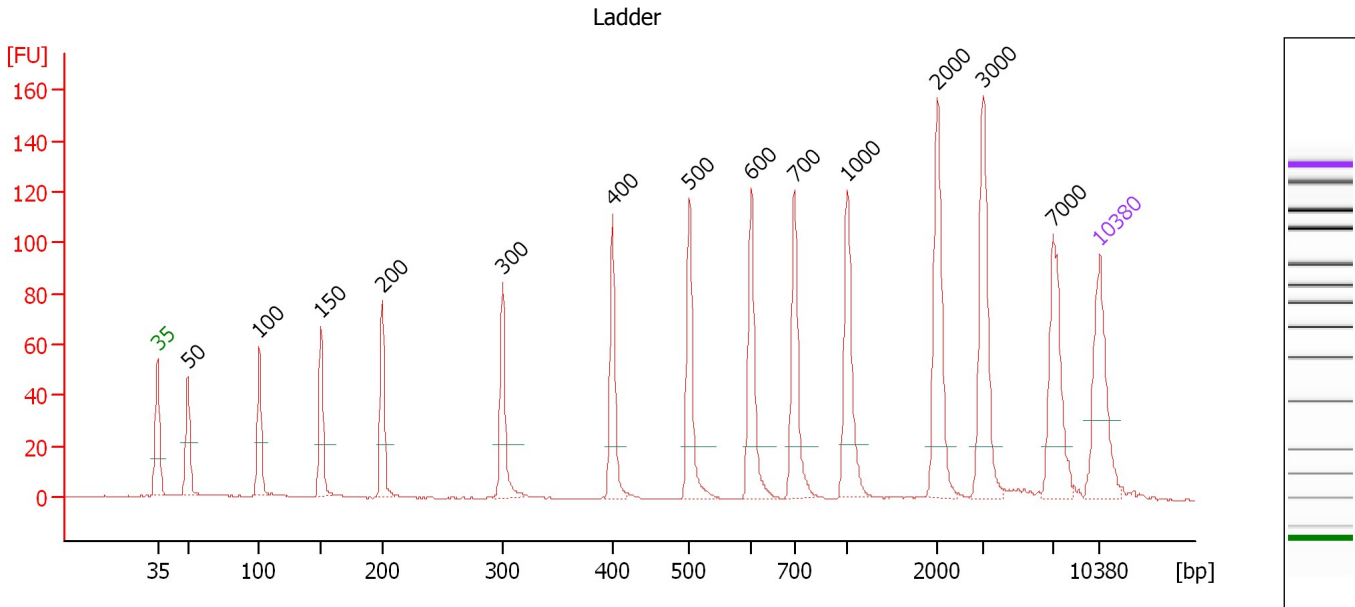
Ladder

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\2013-03-12\2013-03-12_002.xad

Created: 3/12/2013 4:44:34 PM
 Modified: 3/14/2013 4:58:28 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

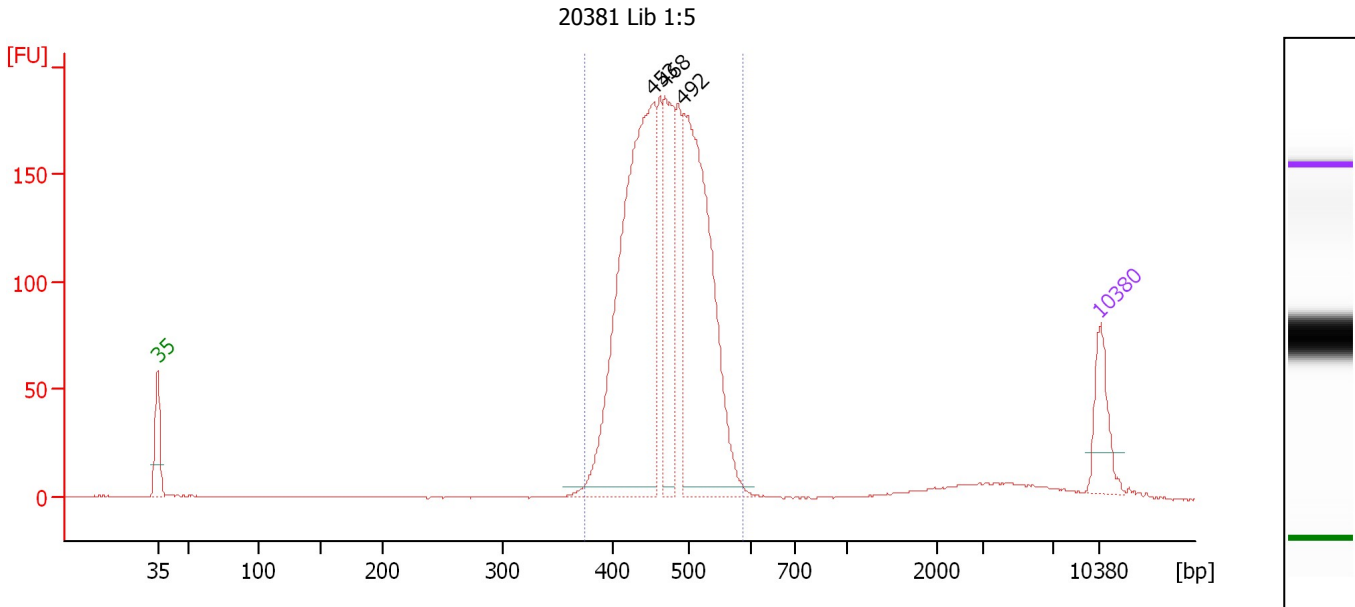
Peak table for Ladder

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\2013-03-12\2013-03-12_002.xad

Created: 3/12/2013 4:44:34 PM
 Modified: 3/14/2013 4:58:28 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : 20381 Lib 1:5

Number of peaks found: 3 Corr. Area 1: 1,745.5
 Noise: 0.1

Peak table for sample 1 : 20381 Lib 1:5

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	453	942.27	3,151.3	
3	468	277.53	898.2	
4	492	727.14	2,239.4	
5	10,380	75.00	10.9	Upper Marker

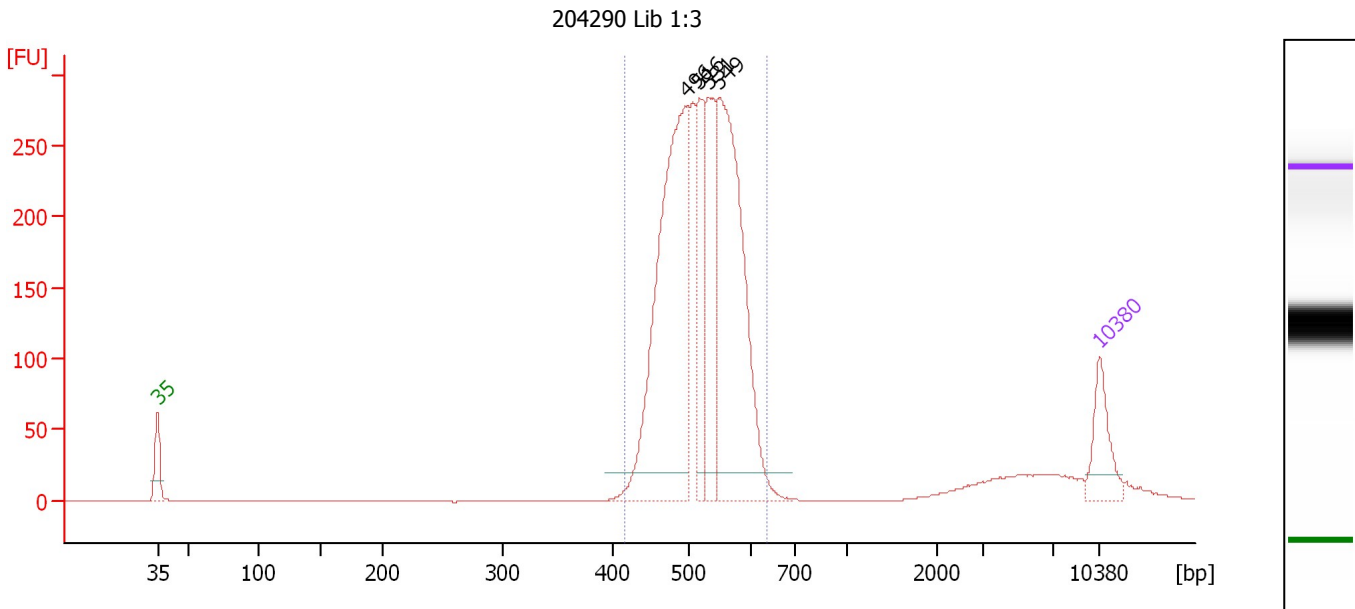
Region table for sample 1 : 20381 Lib 1:5

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
374	585	470	7,343.9	2,257.95	1,745.5	94	9.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-03-12\2013-03-12_002.xad

Created: 3/12/2013 4:44:34 PM
 Modified: 3/14/2013 4:58:28 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 2 : 204290 Lib 1:3

Height Threshold [FU] : 20

Overall Results for sample 2 : 204290 Lib 1:3

Number of peaks found: 4 Corr. Area 1: 2,408.6
 Noise: 0.1

Peak table for sample 2 : 204290 Lib 1:3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	496	776.34	2,369.8	
3	516	188.98	555.2	
4	531	251.00	716.4	
5	549	635.72	1,754.3	
6	10,380	75.00	10.9	Upper Marker

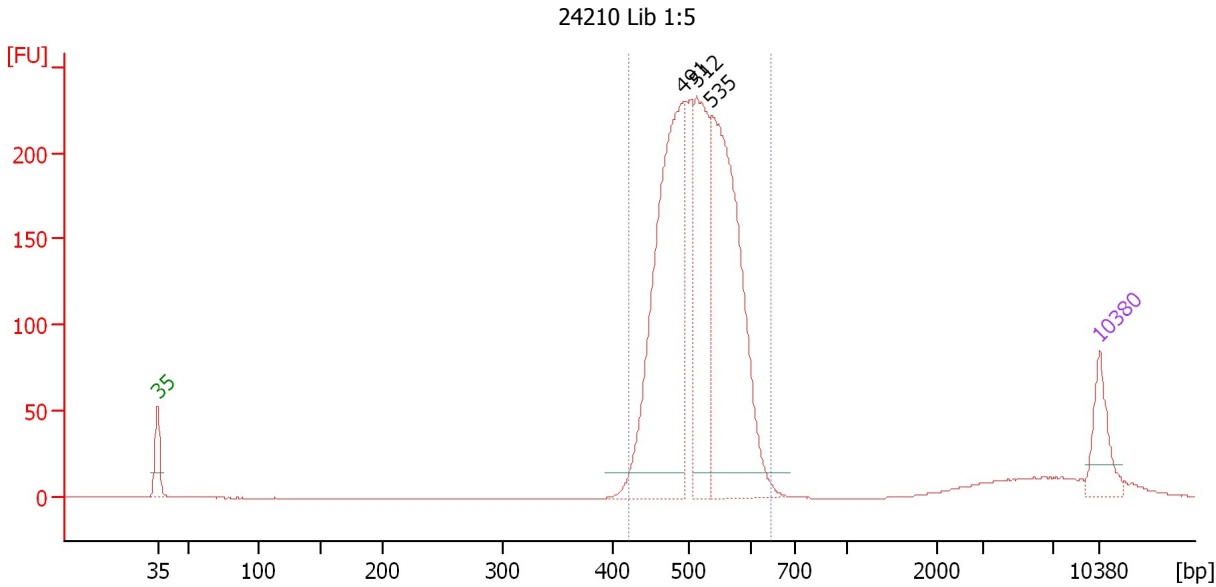
Region table for sample 2 : 204290 Lib 1:3

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
416	638	520	5,840.6	1,987.70	2,408.6	91	8.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-03-12\2013-03-12_002.xad

Created: 3/12/2013 4:44:34 PM
 Modified: 3/14/2013 4:58:28 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 3 : 24210 Lib 1:5

Height Threshold [FU] : 15

Overall Results for sample 3 : 24210 Lib 1:5

Number of peaks found: 3 Corr. Area 1: 1,957.5
 Noise: 0.2

Peak table for sample 3 : 24210 Lib 1:5

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	491	809.66	2,498.1	
3	512	388.31	1,150.2	
4	535	739.45	2,093.4	
5	10,380	75.00	10.9	Upper Marker

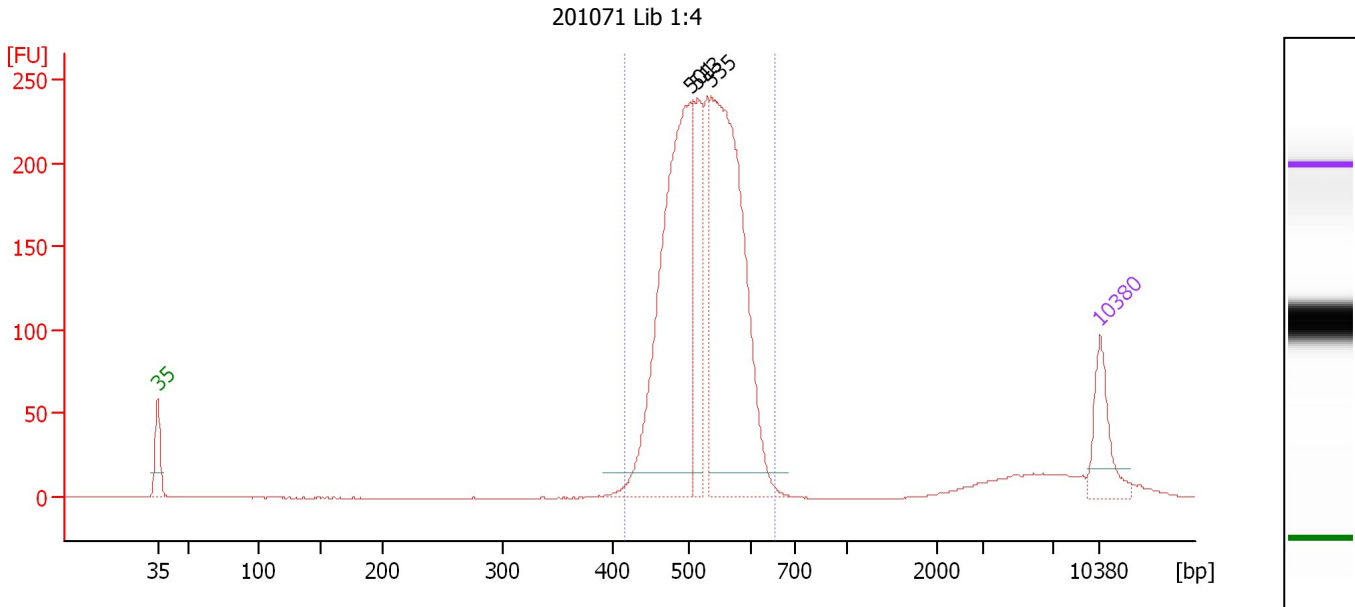
Region table for sample 3 : 24210 Lib 1:5

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
422	646	516	6,207.1	2,095.57	1,957.5	92	8.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-03-12\2013-03-12_002.xad

Created: 3/12/2013 4:44:34 PM
 Modified: 3/14/2013 4:58:28 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 4 : 201071 Lib 1:4

Height Threshold [FU] : 15

Overall Results for sample 4 : 201071 Lib 1:4

Number of peaks found: 3 Corr. Area 1: 1,996.5
 Noise: 0.2

Peak table for sample 4 : 201071 Lib 1:4

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	501	739.18	2,233.4	
3	513	177.84	525.2	
4	535	757.24	2,143.9	
5	10,380	75.00	10.9	Upper Marker

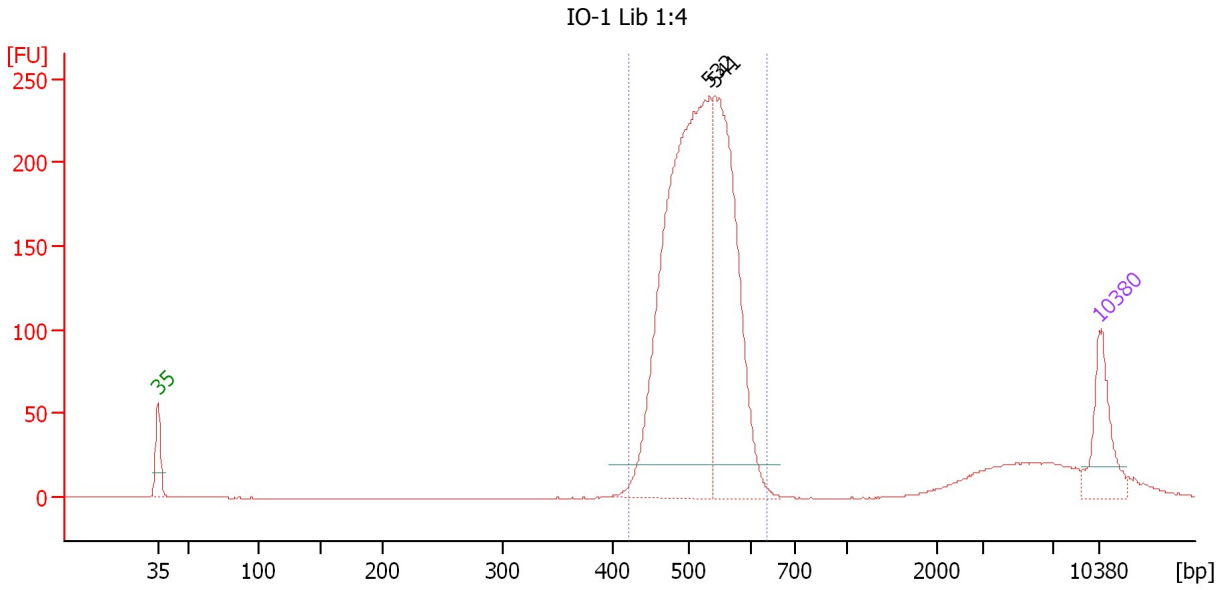
Region table for sample 4 : 201071 Lib 1:4

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
416	656	524	5,199.1	1,780.30	1,996.5	91	8.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-03-12\2013-03-12_002.xad

Created: 3/12/2013 4:44:34 PM
 Modified: 3/14/2013 4:58:28 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 5 : IO-1 Lib 1:4

Height Threshold [FU] : 20

Overall Results for sample 5 : IO-1 Lib 1:4

Number of peaks found: 2 Corr. Area 1: 1,805.4
 Noise: 0.1

Peak table for sample 5 : IO-1 Lib 1:4

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	532	906.71	2,582.1	
3	541	492.84	1,381.3	
4	10,380	75.00	10.9	Upper Marker

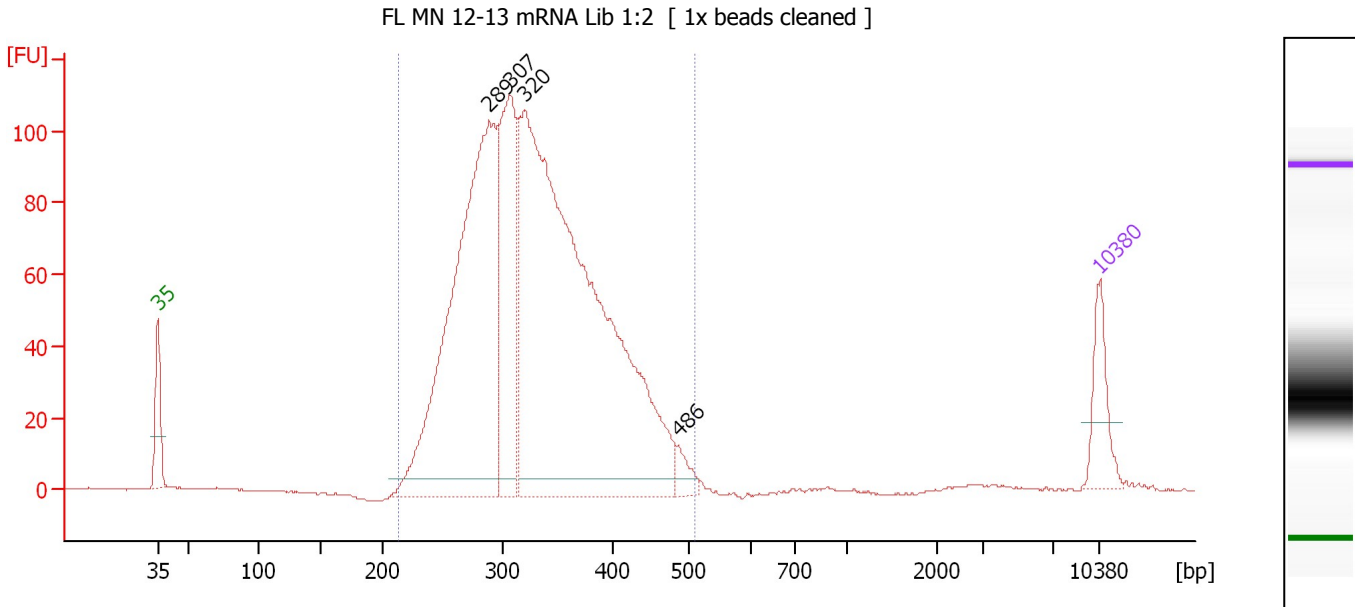
Region table for sample 5 : IO-1 Lib 1:4

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
420	638	519	4,206.6	1,428.80	1,805.4	88	8.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-03-12\2013-03-12_002.xad

Created: 3/12/2013 4:44:34 PM
 Modified: 3/14/2013 4:58:28 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : FL MN 12-13 mRNA Lib 1:2

Number of peaks found: 4 Corr. Area 1: 1,735.5
 Noise: 0.2

Peak table for sample 6 : FL MN 12-13 mRNA Lib 1:2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	289	1,187.35	6,224.0	
3	307	445.30	2,198.9	
4	320	1,911.52	9,062.4	
5	486	35.70	111.2	
6	10,380	75.00	10.9	Upper Marker

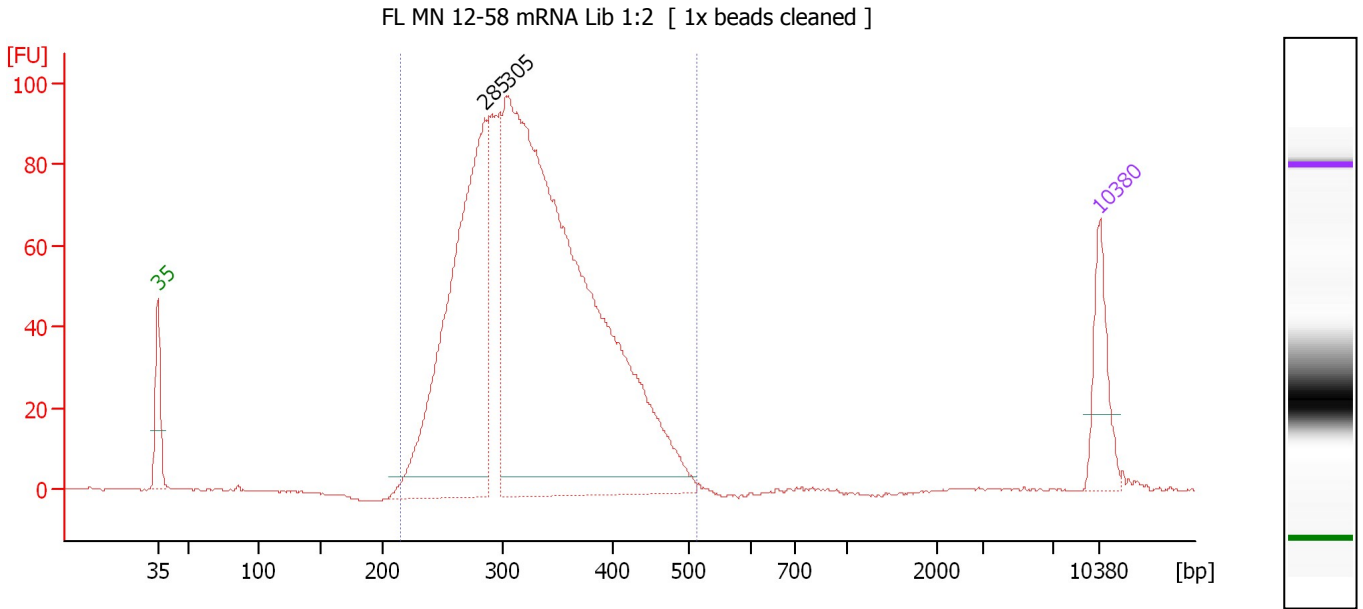
Region table for sample 6 : FL MN 12-13 mRNA Lib 1:2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
214	507	331	15,864.0	3,333.25	1,735.5	99	17.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-03-12\2013-03-12_002.xad

Created: 3/12/2013 4:44:34 PM
 Modified: 3/14/2013 4:58:28 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : FL MN 12-58 mRNA Lib 1:2

Number of peaks found: 2 Corr. Area 1: 1,515.5
 Noise: 0.2

Peak table for sample 7 : FL MN 12-58 mRNA Lib 1:2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	285	792.38	4,209.2	
3	305	1,767.75	8,792.7	
4	10,380	75.00	10.9	Upper Marker

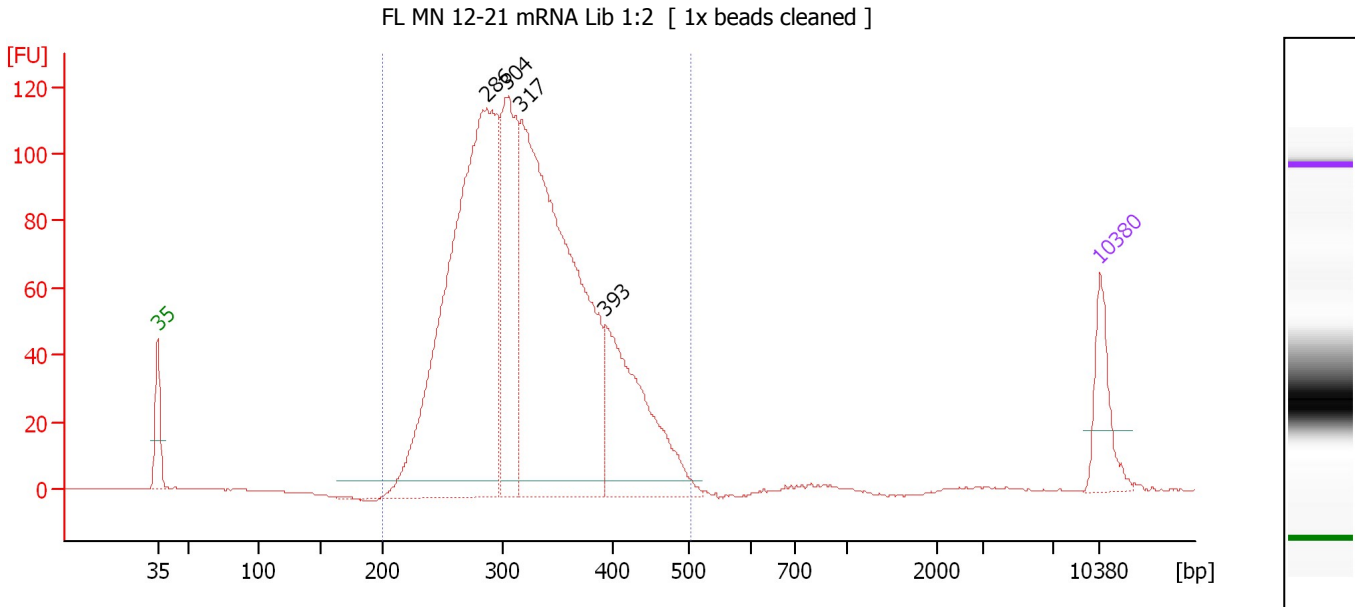
Region table for sample 7 : FL MN 12-58 mRNA Lib 1:2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
215	512	328	12,214.3	2,543.23	1,515.5	100	17.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-03-12\2013-03-12_002.xad

Created: 3/12/2013 4:44:34 PM
 Modified: 3/14/2013 4:58:28 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : FL MN 12-21 mRNA Lib 1:2

Number of peaks found: 4 Corr. Area 1: 1,867.6
 Noise: 0.2

Peak table for sample 8 : FL MN 12-21 mRNA Lib 1:2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	286	1,238.50	6,560.5	
3	304	390.80	1,949.3	
4	317	1,169.42	5,584.7	
5	393	360.36	1,387.8	
6	10,380	75.00	10.9	Upper Marker

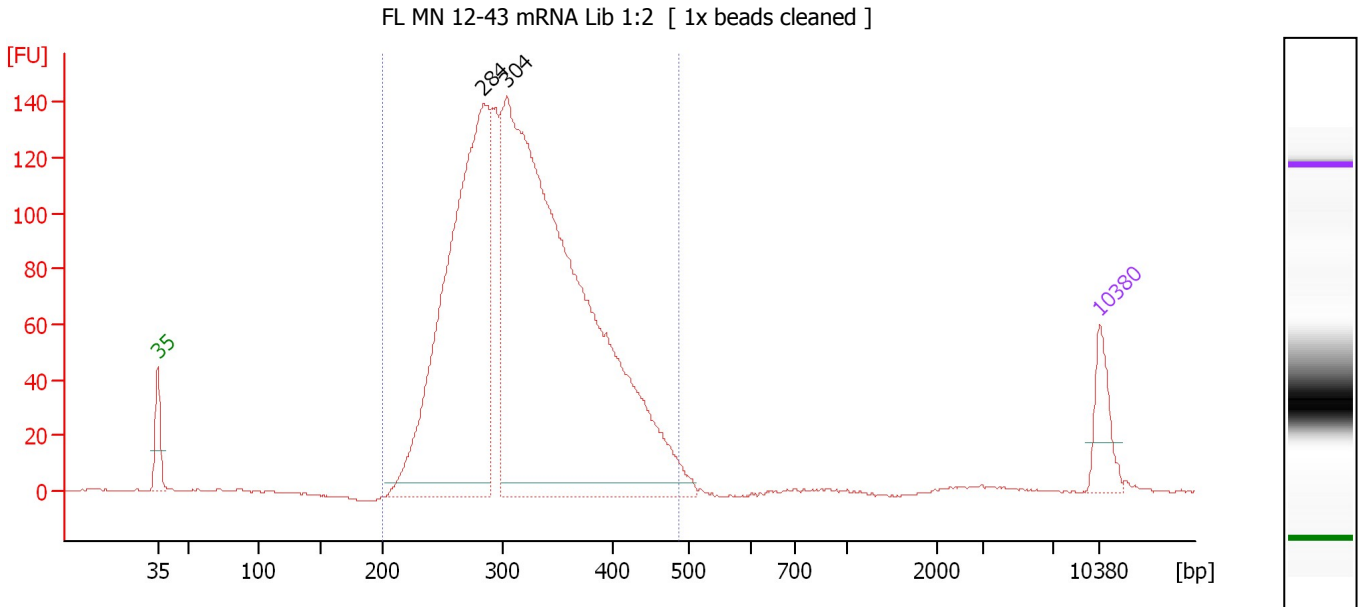
Region table for sample 8 : FL MN 12-21 mRNA Lib 1:2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	503	324	14,764.5	3,039.28	1,867.6	99	17.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-03-12\2013-03-12_002.xad

Created: 3/12/2013 4:44:34 PM
 Modified: 3/14/2013 4:58:28 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : FL MN 12-43 mRNA Lib 1:2

Number of peaks found: 2 Corr. Area 1: 2,215.9
 Noise: 0.2

Peak table for sample 9 : FL MN 12-43 mRNA Lib 1:2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	284	1,452.42	7,757.6	
3	304	2,575.20	12,843.1	
4	10,380	75.00	10.9	Upper Marker

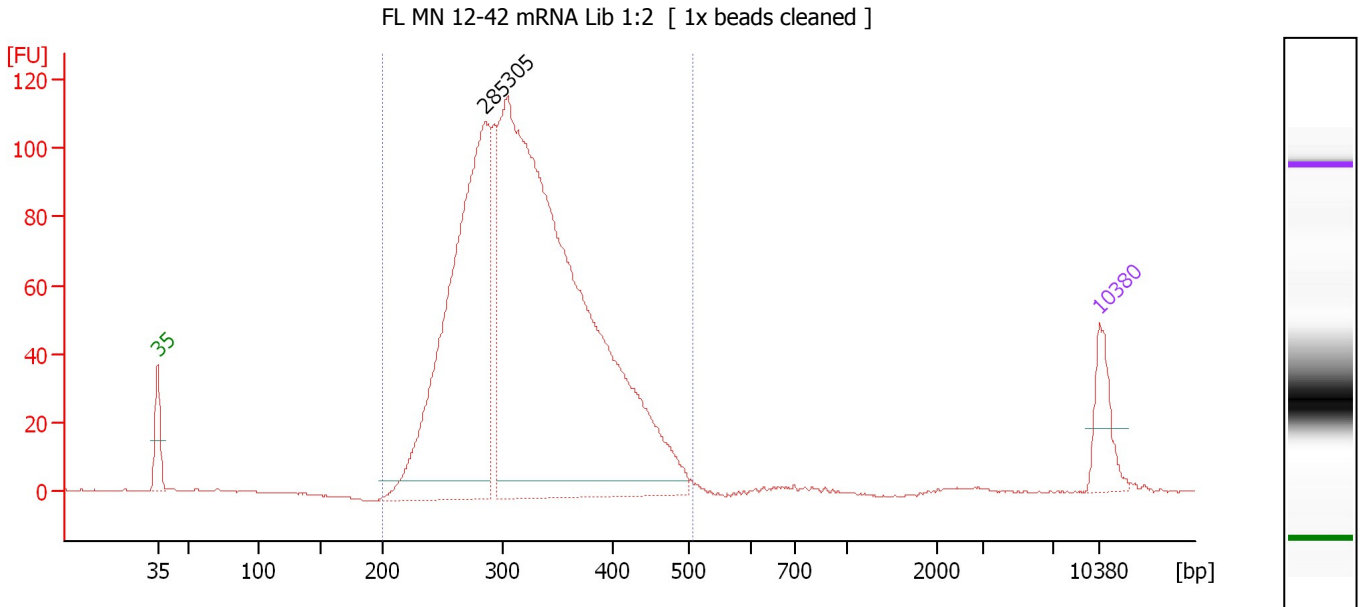
Region table for sample 9 : FL MN 12-43 mRNA Lib 1:2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	487	322	19,161.0	3,919.54	2,215.9	99	17.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-03-12\2013-03-12_002.xad

Created: 3/12/2013 4:44:34 PM
 Modified: 3/14/2013 4:58:28 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : FL MN 12-42 mRNA Lib 1:2

Number of peaks found: 2 Corr. Area 1: 1,703.5
 Noise: 0.2

Peak table for sample 10 : FL MN 12-42 mRNA Lib 1:2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	285	1,198.89	6,376.5	
3	305	2,405.32	11,963.1	
4	10,380	75.00	10.9	Upper Marker

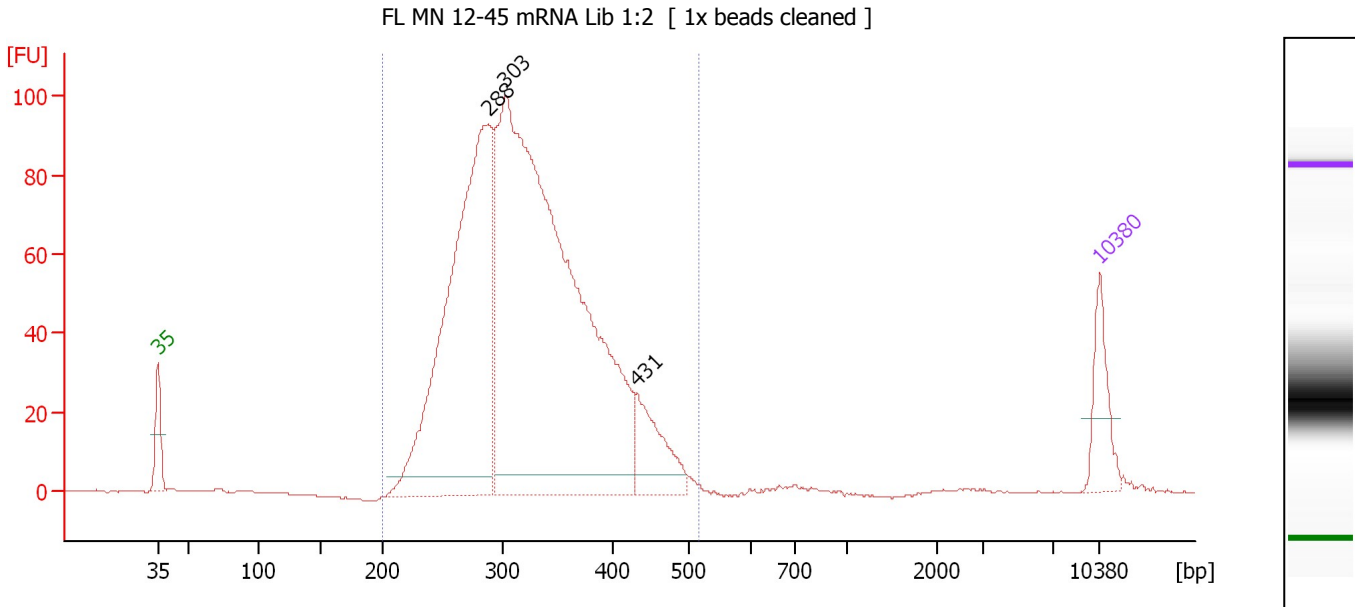
Region table for sample 10 : FL MN 12-42 mRNA Lib 1:2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	505	324	16,644.5	3,433.73	1,703.5	99	17.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-03-12\2013-03-12_002.xad

Created: 3/12/2013 4:44:34 PM
 Modified: 3/14/2013 4:58:28 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : FL MN 12-45 mRNA Lib 1:2

Number of peaks found: 3 Corr. Area 1: 1,469.9
 Noise: 0.2

Peak table for sample 11 : FL MN 12-45 mRNA Lib 1:2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	288	1,094.60	5,766.4	
3	303	1,961.50	9,816.9	
4	431	138.26	486.0	
5	10,380	75.00	10.9	Upper Marker

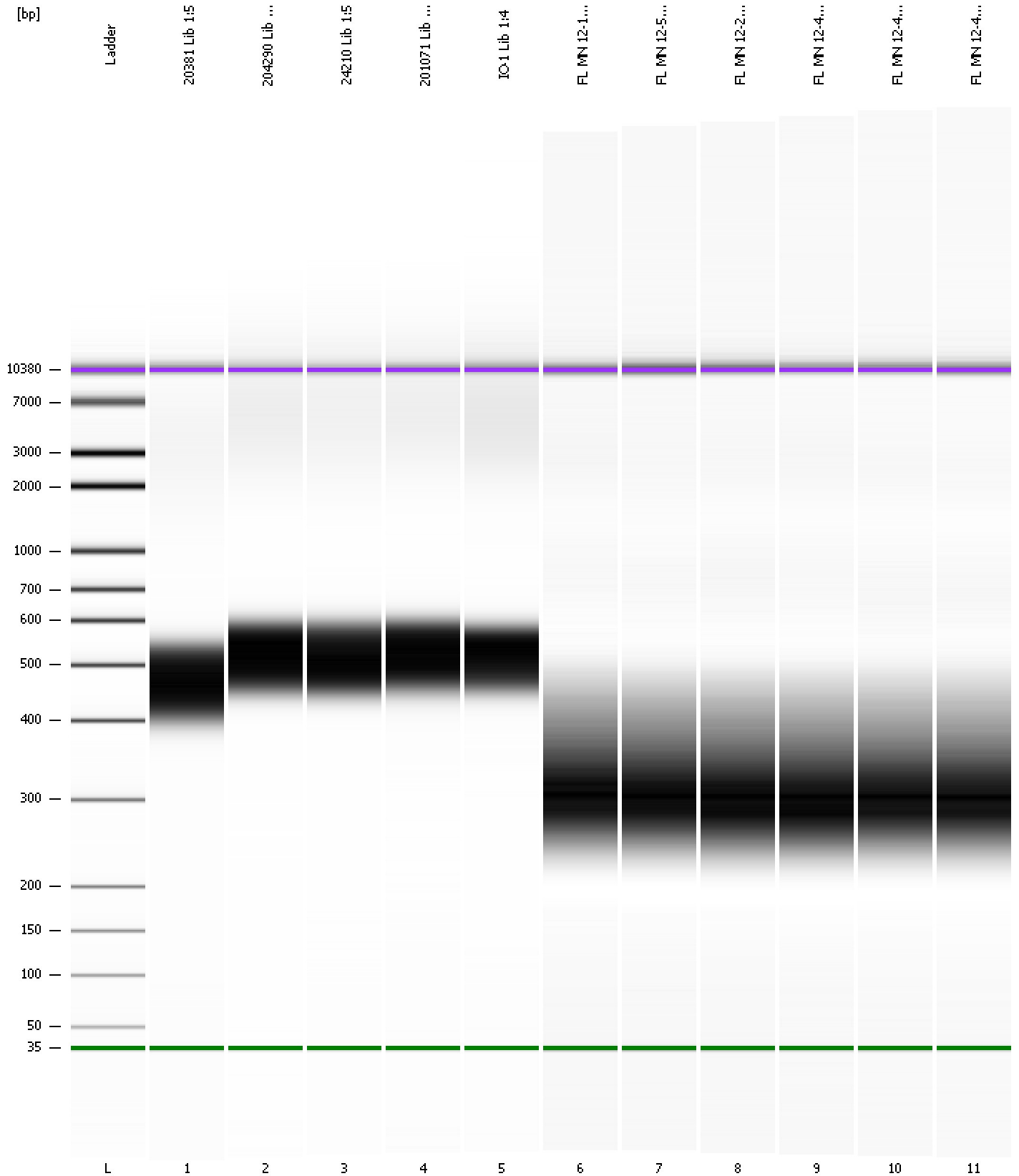
Region table for sample 11 : FL MN 12-45 mRNA Lib 1:2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	515	324	14,699.3	3,028.45	1,469.9	99	17.2	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-03-12\2013-03-12_002.xad

Created: 3/12/2013 4:44:34 PM
Modified: 3/14/2013 4:58:28 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-03-12\2013-03-12_002.xad

Created: 3/12/2013 4:44:34 PM
 Modified: 3/14/2013 4:58:28 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		3/12/2013 5:25:53 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-03-12\2013-03-12_002.xad)		Instrument	Run		3/12/2013 4:44:39 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		3/12/2013 4:44:39 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		3/12/2013 4:44:39 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		3/12/2013 4:44:39 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		3/12/2013 4:44:39 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		3/12/2013 4:44:39 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		3/12/2013 4:44:39 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1